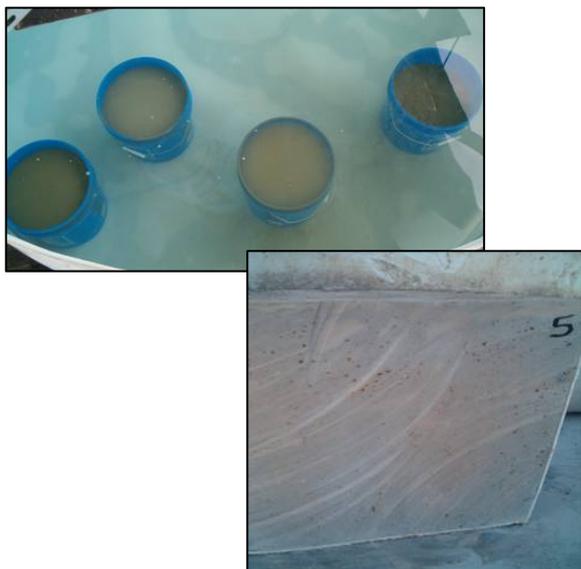


SNF Stabilization and Disposition (RL-0012)

M. W. Peres, Vice President of
K Basins Closure Project / (509) 373-4815
D. G. Ruscitto, Vice President of
Sludge Treatment Project / (509) 376-1998
R. E. Wilkinson, Vice President of
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*K Basins Closure Project –
“Splashing” baskets into K West
Basin using the empty basket grapple*



*Sludge Treatment Project –
Grout testing*

*K East D&D – Trucks with
grout (control density fill) to
be pumped into the K East
Basin*



Overview

This section addresses work in Project Baseline Summary (PBS) RL-0012, *Spent Nuclear Fuel (SNF) Stabilization and Disposition*. There are three major components to this work scope:

- K Basins Closure Project (KBC) [M. W. Peres].
- Sludge Treatment Project (STP) [D. G. Ruscitto].
- K East Basin Deactivation and Decommissioning (D&D) [R. E. Wilkinson].

NOTE: Unless otherwise noted, all information contained herein is as of the March 23, 2008.

Notable Accomplishments

K East D&D Project (D&D)

- K East Basin dewatering completed March 19, 2008.
- Completed control density fill (CDF) placement March 30, 2008; a total of 514 trucks and 5105 cubic yards of material were added to the Basin.
- All actions for K East Basin downgrade are complete.
- Removed spent ion exchange modules from transfer bay.
- Removed the large-diameter cask (LDC) containing sand media from transfer bay.

K Basins Closure Project – Hose-In-Hose Transfer System (HIH)

- Isolated/disconnected electrical power on the HIH system.
- Conducted glove bag training and mockup for disassembling HIH connections from K East and K West.

K Basins Closure Project – Legacy Fuel Removal

- Debris sorting in West Bay 72 percent complete (292 of 406 equivalent canisters).
- Completed shipment of training Multi-Canister Overpack (MCO) to/from K West, Cold Vacuum Drying Facility (CVDF), and the Canister Storage Building (CSB).
- Completed additional PAS-1 cask shipments/found fuel receipts from Washington Closure, Hanford.
- Achieved 90 percent completion of classroom training for MCO restart.

Sludge Treatment Project (STP)

- Completed Retrieval system general arrangement drawings, equipment calculations, supporting analysis, heat and material balance and sequence interlock definition document (SIDD).
- Completed Assay system above water (A/W) and under water (U/W) functions, and requirements, A/W system Process Flow Diagrams (PFDs), and A/W system analyses.
- Completed initial A/W and U/W Packaging system analyses, draft system description, and identified scope of packaging system testing.
- Procured/fabricated equipment for Settler Tank retrieval and percent solids meter testing.
- Completed preparations to assess rheology modifiers and procured enhanced sludge simulant test material.
- Completed preparations of grout testing plan and initiated procurements/assembly of grout test material.

Issues

K East D&D Project

- Service water isolation may be impacted due to frozen 12-inch valve.
 - Evaluating alternatives to resolve issue.

K Basins Closure Project

- Potential delays/repair turnaround timeframe for any major fuel processing equipment failures.
 - Maintaining key staff that have received training and attained qualification at K West and the CVDF.

STP

- Central Characterization Project (CCP) contracted with Waste Isolation Pilot Plant (WIPP); liaison impacts design (shifting Waste Acceptance Criteria [WAC] direction from DOE).
 - Addressing potential for new Remote-Handled Transuranic (RH-TRU) waste storage facility.

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

	Projected FY 2008 Funding	FY 2008 Fiscal Year Spending Forecast	Variance
SNF Stabilization & Disposition	\$ 106.2	\$ 103.5	\$ 2.7

Schedule/Cost Performance (\$M)

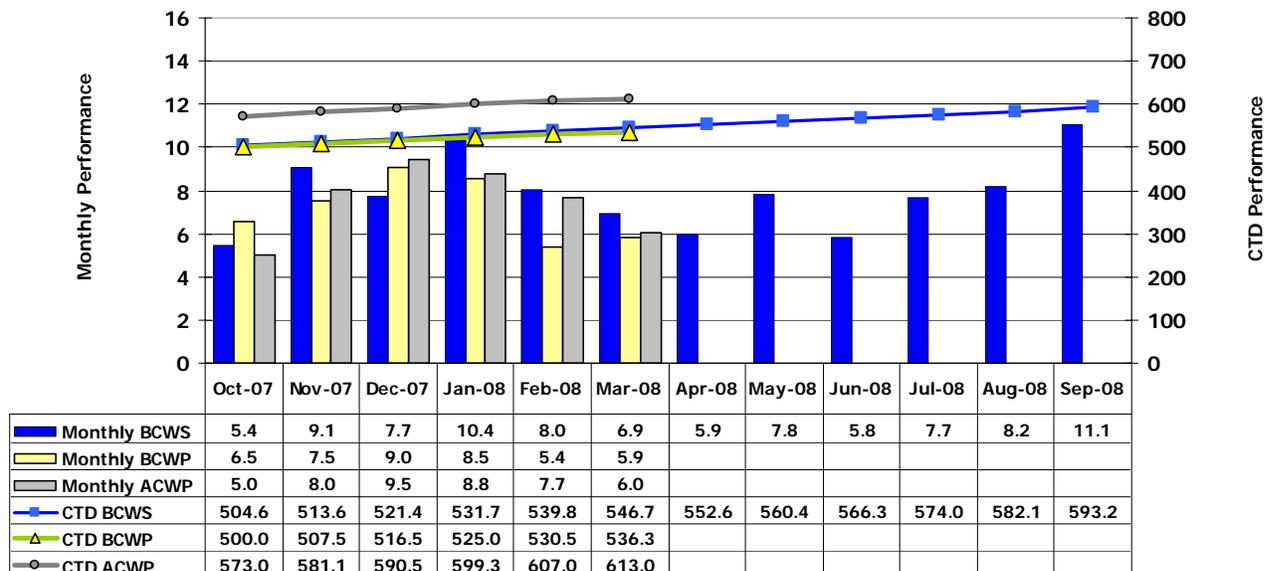
SNF Stabilization & Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY08/CTD)
Current Period (Month)	\$6.9	\$5.9	\$6.0	-\$1.0	-15.2%	-\$0.2	-3.3%	\$94.1
Cumulative-to-Date (FY 2004 - Present)	\$546.7	\$536.3	\$613.0	-\$10.4	-1.9%	-\$76.7	-14.3%	\$593.2

Numbers are rounded to the nearest \$0.1M and include the closure services allocation.

- **CTD Schedule Performance (-\$10.4M/-1.9%):** Delays in the STP due to the realized risk of the Mobile Solidification System (MOSS) not being suitable, resulting in impacts to the design schedule and the DOE directed funding reduction to fund K East D&D (will be addressed in pending Baseline Change Request [BCR]). Unfavorable SV is due to delays in Legacy Fuel work scope (equipment maintenance and systems readiness), and K East to K West Sludge Transfer System D&D, and also delays approving Authorization Basis changes and coordination with other D&D activities. K East D&D superstructure removal activities are delayed due to problems related to system installation.
- **CTD Cost Performance (-\$76.7M/-14.3%):** The unfavorable CV is primarily due to problems encountered in design, implementation, startup, and operation of spent fuel removal, sludge containerization, and transfer systems. System complexity and requirements were underestimated. Most of the cost variances were incurred prior to FY 2006.

Schedule/Cost Performance (\$M), continued

Performance Analysis CTD and Monthly (\$M)



Milestone Achievement

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones and Defense Nuclear Facilities Safety Board (DNFSB) commitments 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/DNFSB commitment 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	Milestone Title	Type (TPA/PI/DNFSB)	Due Date *	Actual Date	Forecast Date	Status / Comments
M-034-33B (S10-05-018)	Complete K East Sludge Containerization	TPA	03/01/05	10/20/06		Complete
DNFSB 119E (S10-05-014)	Complete K East Bulk Sludge Consolidation	DNFSB	10/31/06	10/20/06		Complete
M-034-34 (S10-05-010)	Complete Removal of K East Sludge	TPA	05/31/07	05/31/07		Complete
DNFSB 120E (S10-05-015)	Complete K East Basin Containerized Sludge Removal	DNFSB	05/31/07	05/31/07		Complete
DNFSB 122E	K East Final Pass Sludge Removed	DNFSB	05/31/07	05/31/07		Complete
M-034-35a (S10-05-011)	Containerize K West Bulk Sludge	TPA	07/31/07	07/03/07		Complete
DNFSB 119W (S10-05-016)	Complete K West Bulk Sludge Containerization	DNFSB	07/31/07	07/03/07		Complete
M-034-35b (S10-05-011)	Complete K West Final Pass	TPA	01/31/08	12/27/07		Complete

* DNFSB dates reflect Implementation Plan update, TPA dates reflect change package M-34-05-04.