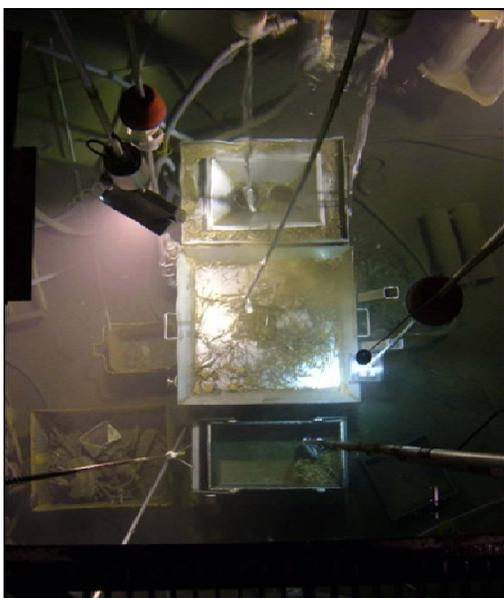


# SNF Stabilization and Disposition (RL-0012)

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*Debris sorting  
in K West Basin*



*D&D - K East  
Basin dewatering*



*Sludge Treatment Project  
(STP) settler tank  
retrieval hose reel/pump  
test setup*



## 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 end of February 2008.

## Notable Accomplishments

### K East Deactivation and Decommissioning (D&D) Project

- Continued training radiological control technicians (RCTs).
- Installed new bargaining unit mobilization trailer.
- Continued K East Basin dewatering.
- Completed first fixative application.
- Began preparations for control density fill (CDF) placement.

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

- Isolated/disconnected electrical power on HIH from K East Basin.
- Constructed mockup for hose disassembly glove bag training.

### K Basins Closure Project – Legacy Fuel Removal

- Returned Integrated Water Treatment System to service.
- Completed 92 percent of Canister Vacuum Drying Facility restart maintenance.
- Debris bin sorting in West Bay reached 53 percent complete (214 of 406) equivalent canisters.
- Completed connection of Tri-Nuc pump to new debris sorting table.
- Received one of three additional PAS-1 casks from Washington Closure Hanford (WCH).

### Sludge Treatment Project (STP)

- Completed preparations of the Grout Testing Statements of Work (SOWs).
- Completed preparation of the SOW for Knock Out Pot sampling design.
- Completed Functions and Requirements (F&Rs) documentation for the Drum Handling and Assay systems.
- Completed Studies and Alternatives analysis for the Packaging and Transfer systems.

## Issues

### K East D&D Project

- Dewatering is behind schedule due to weather and equipment-related challenges.
- Crews have gained proficiency and are increasing tanker production rates.

### K Basins Closure Project

- Equipment and training readiness are behind schedule due to prioritizing the completion of K West Final pass early in FY 2008.
- Training and Maintaining Multi-Canister Overpack (MCO) qualified personnel for the remainder of the project.

### 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	\$ 101.5	\$ 4.7

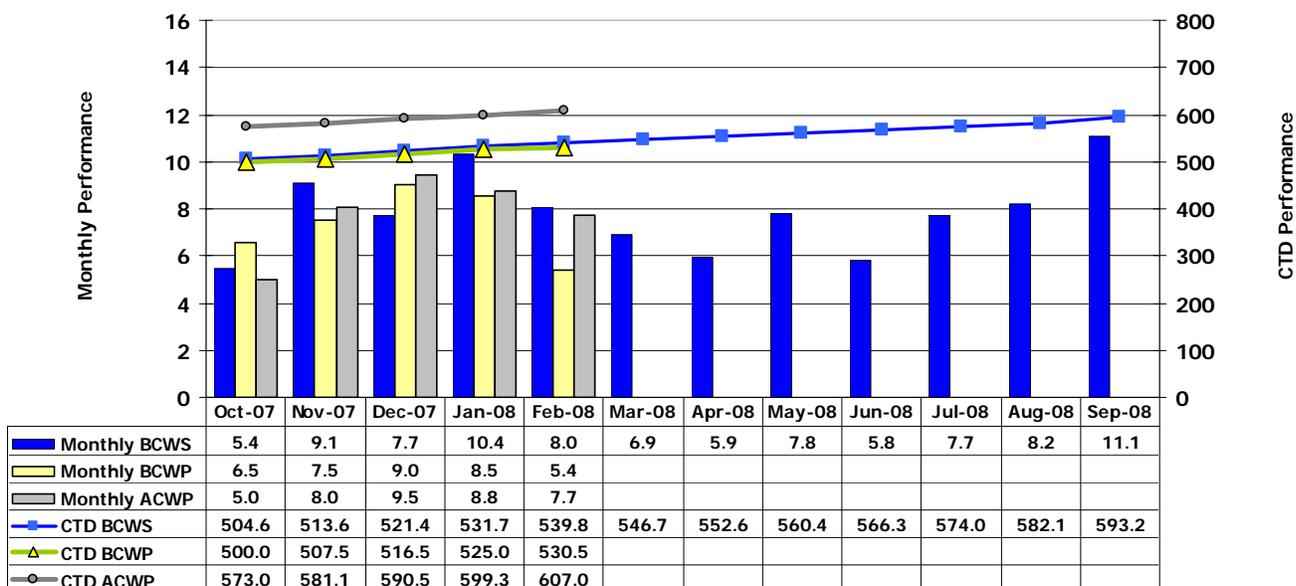
## Schedule/Cost Performance (\$M)

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)	\$8.0	\$5.4	\$7.7	-\$2.6	-32.7%	-\$2.3	-42.1%	\$94.1
Cumulative-to-Date (FY 2004 - Present)	\$539.8	\$530.5	\$607.0	-\$9.3	-1.7%	-\$76.5	-14.4%	\$593.2

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

- CTD Schedule Performance (-\$9.3M/-1.7%):** 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 dewatering and superstructure removal activities are delayed due to problems related to system installation. Delays in the STP due to realized risk of Mobile Solidification System (MOSS) not suitable, resulting in impact to design schedule and DOE directed funding reduction to fund K East D&D (will be addressed in pending Baseline Change Request [BCR]).
- CTD Cost Performance (-\$76.5M/-14.4%):** 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.

## 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, forecast dates are current working level schedules.