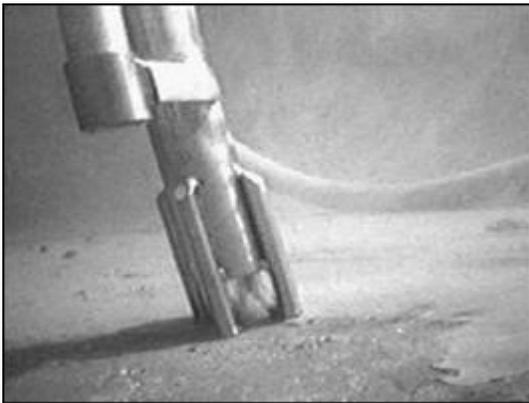


# SNF Stabilization and Disposition (RL-0012) Solid Waste Stabilization and Disposition (RL-0013, Sludge Treatment) Nuclear Facility Deactivation and Decommissioning (RL-0041)

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*K East Final Pass Rate Verification*



*Workers vacuuming  
sludge in K East Basin*



*Hose-in-Hose Booster  
Station*

## Overview

This section addresses work in Project Baseline Summaries (PBS) RL-0012, *Spent Nuclear Fuel (SNF) Stabilization and Disposition*, RL-0013, *Solid Waste Stabilization and Disposition*, and RL-0041, *Nuclear Facility Deactivation and Decommissioning*.

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

## Notable Accomplishments

### Overall KBC Project (PBS RL-0012, PBS RL-0013, & PBS RL-0041)

#### SNF Stabilization and Disposition (PBS RL-0012)

- **K East Containerization:** Completed workshop on final pass/post-transfer alternatives to improve schedule and completed planning package for additional debris removal from the basin.
- **K West Retrieval:** Completed Floor and Pit Sludge Removal (FPSR) Readiness Assessment (RA) and received approval to commence FPSR operations.
- **Hose-in-Hose (HIH) Transfer:** Transferred and estimated 1.5 cubic meters (m<sup>3</sup>) from SCS-CON-101 container and initiated sludge transfer from SCS-CON-102.
- **Legacy Fuel:** Completed Fuel Transfer System (FTS) shipment; all found fuel moved from K East to K West Basin.

#### Solid Waste Stabilization and Disposition (PBS RL-0013)

##### Sludge Treatment Project (STP):

- Initiated British Nuclear Group America (BNGA) Independent Design Review and FH parallel review for 100 percent design of the Corrosion System.
- Mobile Solidification System (MOSS) fabrication 52 percent complete.
- Initiated construction modifications at the Cold Vacuum Drying facility on November 13, 2006.

## Issues

### SNF Stabilization and Disposition (PBS RL-0012)

- HIH transfer progress has been slowed by realized risks associated with equipment operations. A combination of equipment repair, alteration, and/or adjustment has been required to increase the run-time of the system. Around-the-clock evaluation and recovery planning is being employed to improve transfer times and achieve progress in the movement of sludge from K East to K West Basin. Actions include:
  - Installation of line strainer devices and additional dilution line to alleviate tendency for clogging.
  - On-shift evaluation of operating parameters and incorporation of process and procedure adjustments to operating protocol.
  - Maintaining continuous engineering and senior supervisor presence during operations for performance monitoring and immediate response to issues/events.
  - Extending operations to additional shifts/overtime to lengthen transfer times and integration with other basin activities.
  - Maintaining spares inventory to facilitate continued quick repair cycle.

### Solid Waste Stabilization and Disposition (PBS RL-0013)

- Negative impact of RL withdrawal of early procurement authority
  - Actions In Progress:
    - o Early award of key components: MOSS fabrication approximately 52 percent complete; Assay System award projected December 22, 2006.
    - o Early procurement authority requests: Drum Handling (submitted October 30, 2006), Primary Transfer Pump (submitted November 13, 2006).
    - o Change to two-step Preliminary Documented Safety Analysis (PDSA) (Revision 0 – Contractor Stabilization and Packaging System [CSAPS] and Revision 1 Drum Handling and Retrieval and Transfer [R&T] Systems). Revision 0 approval expected by December 22, 2006.
    - o Continued engagement between FH and DOE Senior Management.
- Delay in CSAPS design completion driven by changes in Hazards Analysis/Control Decisions and their impacts on initiation of long lead procurements.
  - Actions In Progress:
    - o Preparation of Deviation Notice (DN) RL-S-06-019 and developing documentation on critical path delay to completion of CSAPS design and ~\$1.25M FY 2007 cost impact.
    - o Development of documentation addressing withdrawal of early procurement and PDSA directed change for RL use with DOE-HQ Change Board. Submittal on hold until DOE decision on Sludge Treatment Project (STP) FY 2008 funding.
    - o Continued engagement between FH and BNGA Senior Management.

## FY 2007 Funds vs. Spend Forecast (\$M)

	Projected FY 2007 Funding	FY 2007 Fiscal Year Spend Forecast	Variance
RL-0012 SNF Stabilization & Disposition	\$ 79.9	\$ 79.9	\$ 0.0
RL-0013 Solid Waste Stabilization & Disposition	\$ 33.9	\$ 33.9	\$ 0.0
RL-0041 Nuclear Facility D&D, River Corridor Closure	\$ 12.9	\$ 7.7	\$ 5.2
<b>TOTAL</b>	<b>\$ 126.7</b>	<b>\$ 121.5</b>	<b>\$ 5.2</b>

## FY 2007 Schedule/Cost Performance (\$M)

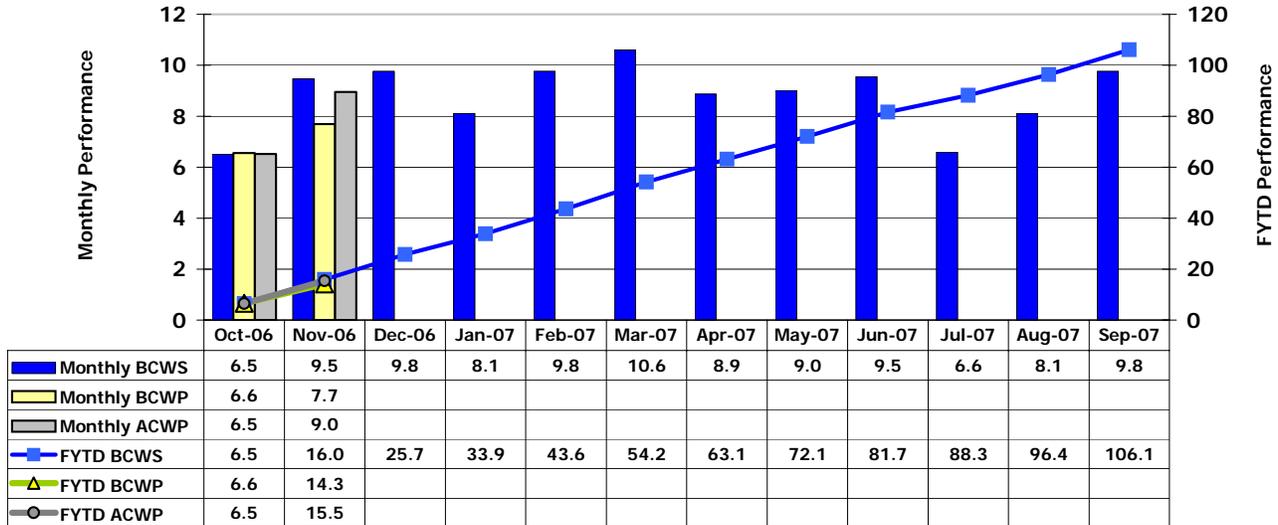
		Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-0012	SNF Stabilization & Disposition	\$9.5	\$9.4	\$10.8	-\$0.1	-0.9%	-\$1.4	-15.0%	\$66.0
RL-0013	Solid Waste Stabilization & Disp. - Treatment	\$5.3	\$4.0	\$4.4	-\$1.3	-24.4%	-\$0.4	-10.2%	\$28.4
RL-0041	Nuclear Facility D&D	\$1.2	\$0.8	\$0.2	-\$0.3	-29.2%	\$0.6	72.8%	\$11.7
<b>Total</b>		<b>\$16.0</b>	<b>\$14.3</b>	<b>\$15.5</b>	<b>-\$1.7</b>	<b>-10.8%</b>	<b>-\$1.2</b>	<b>-8.5%</b>	<b>\$106.1</b>

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

- **Schedule Performance (-\$1.7M/-10.8%):** Delays occurred in the following activities: Sludge Treatment design review and construction mobilization activities due to impact of change to DBA approach; HIH transfer due to system operation issues; and KE/KW sludge containerization due decision to perform additional debris removal activities.
- **Cost Performance (-\$1.2M/-8.5%):** Cost variance is within threshold.

## FY 2007 Schedule/Cost Performance (\$M), continued

### Performance Analysis FYTD and Monthly (\$M)



## Milestone Achievement

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 11d ahead of milestone
M-034-34 (S10-05-010)	Complete Removal of K East Sludge	TPA	05/31/07		04/09/07	Ahead of Schedule
DNFSB 120E (S10-05-015)	Complete K East Basin Containerized Sludge Removal	DNFSB	05/31/07		04/09/07	Ahead of Schedule
DNFSB 122E	K East Final Pass Sludge Removed	DNFSB	05/31/07		05/10/07	Ahead of Schedule
M-034-35a (S10-05-011)	Containerize K West Bulk Sludge	TPA	07/31/07		06/14/07	Ahead of Schedule
DNFSB 119W (S10-05-016)	Complete K West Bulk Sludge Containerization	DNFSB	07/31/07		06/14/07	Ahead of Schedule
M-034-35b (S10-05-011)	Complete K West Final Pass	TPA	01/31/08		11/12/07	Ahead of Schedule

\* DNFSB dates reflect Implementation Plan update, TPA dates reflect change package M-34-05-04, forecast dates are current working level schedules.