

## SNF Stabilization and Disposition (RL-0012)

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### *Hose-in-Hose Startup*



### *Mobile Solidification System structural framework fabrication*



## Overview

This section addresses work in Project Baseline Summary (PBS) RL-0012, *Spent Nuclear Fuel Stabilization and Disposition*.

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

## Top FY 2006 Accomplishments

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

**K East Containerization:** As of September 30, 2006, K East Basin sludge vacuuming was 95 percent complete (7,756 of 8,192 cubic feet). Note: bulk sludge containerization was completed on October 20, 2006.

**K Basins Debris Removal:** Debris campaigns in K East and K West Basins were completed in FY 2006, removing over 300 tons of debris and preparing the way for sludge vacuuming of the basin floors and final deactivation and decontamination (D&D) of the basins.

**Hose-in-Hose (HIH) Project:** Construction and Installation of the HIH sludge transfer system was completed. In addition the Fluor Hanford (FH) contractor Operational Readiness Review (ORR) was completed with the DOE ORR scheduled to occur on October 2, 2006. Note: initiated sludge transfers on October 16, 2006.

Prior issues related to installation and tests were closed with the successful test and demonstration of the system. Focus now shifts to the operations phase and coordinating transfers with vacuuming operations in both the K East and K West basins.

**Sludge Treatment Project (STP):** Treatment systems design packages were completed or nearing completion as follows: Mobile Solidification System (MOSS) (100 percent); Assay System (99.5 percent); Drum Handling System (99.5 percent); Corrosion System (95.0 percent); and Retrieval and Transfer System (86.0 percent). In addition, the Assay System Early Procurement Request was transmitted to DOE for approval.

**Overall K Basins Closure Project:** The K Basins Closure Project successfully completed an External Independent Review (EIR) of the project baseline. All aspects of the project baseline technical, schedule, budget, as well as Basis of Estimates were reviewed by the independent review team. The review team recommended validation of the project baseline to DOE Headquarters.

## Issues

**Delays in the CSAPS design:** Driven by delayed completion of Hazards Analysis/Control Decisions, their impacts on British Nuclear Group America (BNGA) design, and the complexity of design. Mitigating actions taken included:

- Deviation Notice (DN) S-06-066 and BCR RL-012-014 documenting realization of identified risk approved and incorporated to FY 2007-2008 Baseline Update;
  - Continued focus on Integration of BNGA engineering and FH Safety Basis efforts;
  - Prompt design issue identification and resolution, and timely FH review of submittals consistent with FH STP design review plans;
  - Holding an FH/BNGA engineering focus alignment meeting; and
  - Continued engagement between FH and BNGA senior management.

## Issues, continued

**RL Risk Mitigation, withdrawal of early procurement authority:** Per direction from RL, FH took the following actions:

- Revised STP baseline addressing withdrawal of early procurement impacts implemented for contract extension per DOE direction. Baseline Change Request (BCR) RL-012-016 documenting impacts was also submitted to DOE.
- Minimize impacts through:
  - Submittal of early procurement requests for MOSS (approved), Assay System (approved), and Drum Handling and Transfer Pump (in preparation).
  - Early award of key components (MOSS fabrication ~20 percent complete, Assay System RFP issued October 16, 2006).
  - Change to two step Preliminary Design Safety Analysis (PDSA) (Revision 0 – Contractor Stabilization and Packaging System [CSAPS] – Submitted in September 2006, and Revision 1 Drum Handling and R&T Systems – December submittal).
  - Refined construction schedule.
- Continued engagement between FH and DOE Senior Management.

## FY 2006 Funds vs. Actuals (\$M)

		Projected FY 2006 Funding	FY 2006 Fiscal Year Spend Forecast	Variance
RL-0012	SNF Stabilization & Disposition	\$ 122.2	\$ 119.6	\$ 2.6
<b>Total</b>		<b>\$ 122.2</b>	<b>\$ 119.6</b>	<b>\$ 2.6</b>

## FY 2006 Schedule/Cost Performance (\$M)

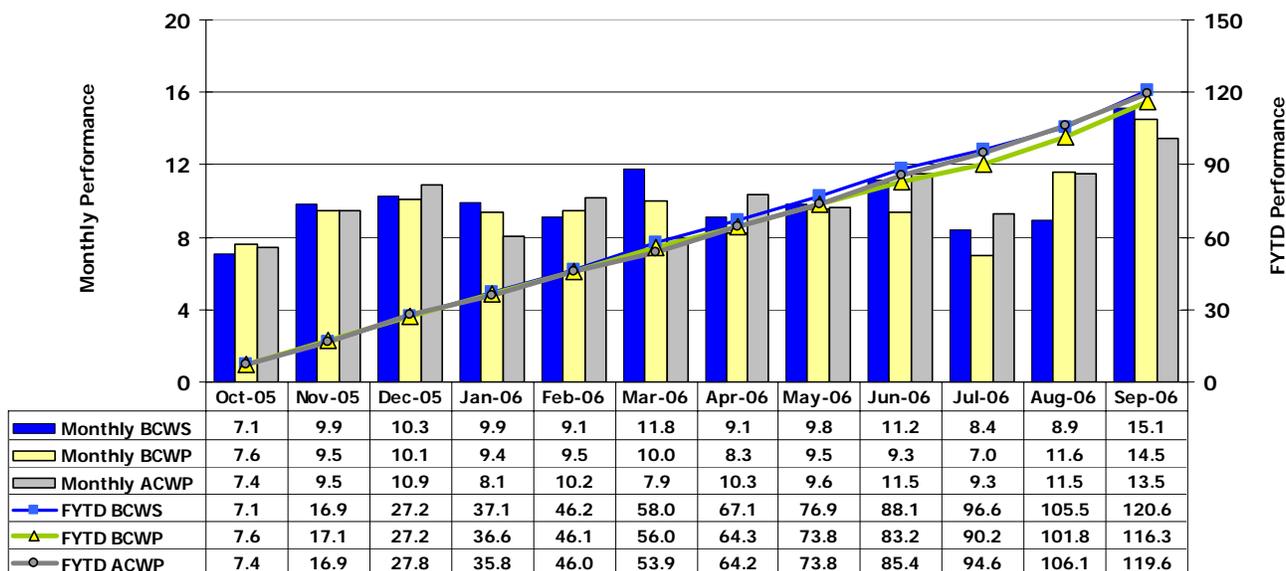
		Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-0012	SNF Stabilization & Disposition	\$120.6	\$116.3	\$119.6	-\$4.3	-3.5%	-\$3.3	-2.8%	\$120.6
<b>Total</b>		<b>\$120.6</b>	<b>\$116.3</b>	<b>\$119.6</b>	<b>-\$4.3</b>	<b>-3.5%</b>	<b>-\$3.3</b>	<b>-2.8%</b>	<b>\$120.6</b>

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

- **Schedule Performance (-\$4.3M/-3.5%):** Schedule variance is within threshold.
- **Cost Performance (-\$3.3M/-2.8%):** Cost variance is within threshold.

## FY 2006 Schedule/Cost Performance (\$M)

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



## Milestone Achievement

Number	Milestone Title	Type (TPA/P1/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		Completed 11 days ahead of milestone
M-034-34 (S10-05-010)	Complete Removal of K East Sludge	TPA	05/31/07		03/30/07	Ahead of Schedule
DNFSB 120E (S10-05-015)	Complete K East Basin Containerized Sludge Removal	DNFSB	05/31/07		11/29/06	Ahead of Schedule
DNFSB 122E	K East Final Pass Sludge Removed	DNFSB	05/31/07		03/30/07	Ahead of Schedule
M-034-35a (S10-05-011)	Containerize K West Bulk Sludge	TPA	07/31/07		06/05/07	Ahead of Schedule
DNFSB 119W (S10-05-016)	Complete K West Bulk Sludge Containerization	DNFSB	07/31/07		06/05/07	Ahead of Schedule
M-034-35b (S10-05-011)	Complete K West Final Pass	TPA	01/31/08		07/02/07	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.