

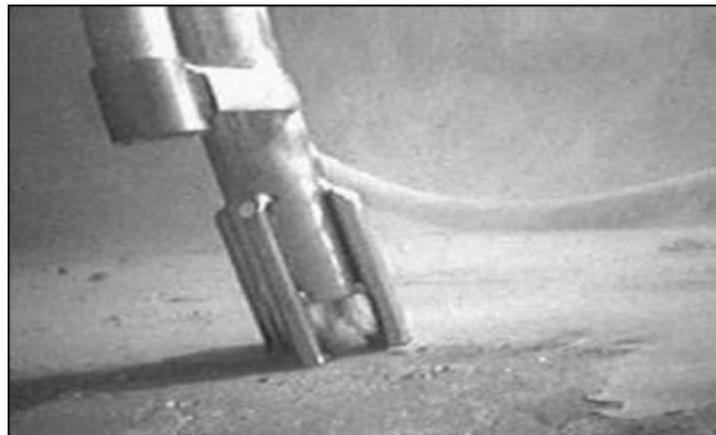
SNF Stabilization and Disposition (RL-0012)

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KBC picnic marking recovery progress and remaining goal

Final Pass vacuuming continues in K East Basin



KBC Earth Day contribution; Highway 240 cleanup

Overview

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

NOTE: Unless otherwise noted, all information contained herein is as of the end of April 2007.

Notable Accomplishments

SNF Stabilization and Disposition (PBS RL-0012)

- **K East Containerization:**
 - Completed vacuuming 2,589 cubicles (including 1,080 determined complete by inspection)
 - Installed, tested, and commenced using new AMP-100 underwater radiation detection probe
 - Completed 75 percent of FH approval on review Sampling Analysis Plan/Data Quality Objective (SAP/DQO) for monoliths
 - Completed 50 percent of Fuel Transfer System Preventative Maintenance (PMs)
- **Hose In Hose (HIH) Transfer:**
 - Transferred sludge from container SCS-CON-104 to K West
 - Replaced failed P-112 pump
 - Performed ultrasonic wall thickness measurements on booster station pumps and installed additional sensors at locations of highest wear
 - Started transfer of sludge from container SCS-CON-103
- **K West Containerization:**
 - Removed seven racks, both Konan manipulator arms, and one PCM basket
 - Completed sludge containerization of Tech View Pit and Weasel Pit access channel
 - Cut and relocated underwater Canister Cleaning System (CCS) Shuttle
- **Legacy Fuel/CVD:**
 - RL approved Multi-Canister Overpack (MCO) Final Safety Analysis Report (FSAR) on March 27, 2007
- **Sludge Treatment Project (STP):**
 - Project**
 - Integrated schedules with FH/British Nuclear Group America (BNGA) and PNNL
 - Integrated design teams being institutionalized
 - Use of Fluor Corporate and other outside resources to validate project direction
 - Parallel path technology development to advance understanding of technology improvements
 - Performance Incentive (PI) Facility Modification Packages (FMPs)
 - Equipment**
 - Mobile Solidification System (MOSS)
 - Fabrication 100 percent complete
 - Initiated Factory Acceptance Testing (FAT)
 - Drum Loadout System Design
 - 10 percent complete
 - Control Systems
 - General Service Control System Programmable Logic Controller (PLC) programming – 35 percent complete
 - Safety Class PLC programming – 10 percent
 - Hardwired Safety Class Control System design – 100 percent complete
 - Equipment Installation Packages Design
 - 60 percent complete

Issues

SNF Stabilization and Disposition (PBS RL-0012)

- **Final Pass in K East Basin is in jeopardy of missing May 31, 2007, milestone**
 - Mitigation In Progress:
 - War Room team
 - Assist by K West personnel
 - Parallel vacuuming in both east bay and North Loadout Pit (NLOP)

- **HIH completion by May 31, 2007, in jeopardy**
 - Mitigation in Progress:
 - War Room team
 - Final Pass recovery plan

- **K West Floor and Pit Sludge Retrieval (FPSR) resources being committed to K East**
 - Mitigation in Progress:
 - XYZ on June 4, 2007
 - War Room team to stay through June 30, 2007
 - Dual system operations planned

- **Impact of RL January 29, 2007, directed hold on new procurements and Cold Vacuum Drying Facility (CVDF) construction starts until successful RL Critical Decision (CD)-3, "Readiness to Start Construction" review**
 - Mitigation In Progress:
 - Continue dialog with RL on requirements and schedule for successful CD-3 and technology
 - Planning for implementation of Fluor Corporate Independent Review and KBC Project STP Functional Integration Management Assessment recommendations for risk reduction actions
 - Development of detailed scope and planning of deliverables required for RL CD-3 review
 - Support a June 14-16, 2007, meeting with the Defense Nuclear Facility Safety Board (DNFSB)

- **Potential impacts from ten open issues identified during Corrosion System 100 percent design hazards analysis**
 - Actions In Progress:
 - BNGA has submitted baseline change request (BCR) to address issues by performing additional analysis and documenting design changes and safety classifications of affected equipment
 - FH has reviewed BCR and is in the process of completing the technical evaluation
 - Some issues may need to be revisited when other technical changes affecting design are considered

- **Resolve TOYO/Fulewa pump design data issues**
 - Actions In Progress:
 - Review specifications, modify or enforce as needed
 - Expedite resolution (elevate with vendor)
 - Initiate backup plan (other vendors)

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

		Projected FY 2007 Funding	FY 2007 Fiscal Year Spend Forecast	Variance
RL-0012	SNF Stabilization & Disposition	\$ 134.0	\$ 127.4	\$ 6.6

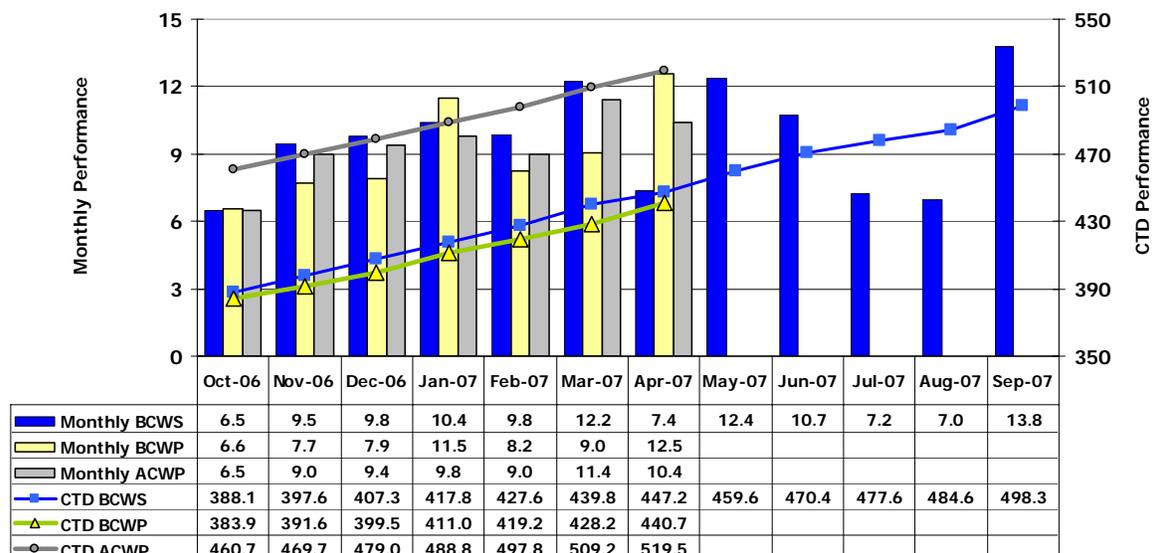
Schedule/Cost Performance (\$M)

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 (FY07/CTD)
Current Period (Month)	\$7.4	\$12.5	\$10.4	\$5.2	69.8%	\$2.2	17.2%	\$116.7
Cumulative-to-Date (FY 2004 - Present)	\$447.2	\$440.7	\$519.5	-\$6.4	-1.4%	-\$78.8	-17.9%	\$563.9

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

- CTD Schedule Performance (-\$6.4M/-1.4%):** Delays occurred in the following activities: K East final pass vacuuming activities due to water clarity, clogging, and debris issues; K East – K West sludge transfer system due to construction, startup and operational issues; K West sludge containerization due to debris removal issues and availability of resources (shifted to higher priority work scope); sludge treatment design review, procurement and construction activities due to decision to implement CD-3 design requirements; and D&D hydrolasing activities due to late turnover of the basin.
- CTD Cost Performance (-\$78.8M/-17.9%):** The unfavorable CV is primarily due to problems encountered in design, implementation, startup, and operations of fuel removal, sludge containerization, transfer, and treatment systems due to underestimated system complexity and requirements.

Performance Analysis CTD 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 11 days ahead of milestone
M-034-34 (S10-05-010)	Complete Removal of K East Sludge	TPA	05/31/07		05/31/07	On Schedule
DNFSB 120E (S10-05-015)	Complete K East Basin Containerized Sludge Removal	DNFSB	05/31/07		05/31/07	On Schedule
DNFSB 122E	K East Final Pass Sludge Removed	DNFSB	05/31/07		05/31/07	On Schedule
M-034-35a (S10-05-011)	Containerize K West Bulk Sludge	TPA	07/31/07		07/02/07	Ahead of Schedule
DNFSB 119W (S10-05-016)	Complete K West Bulk Sludge Containerization	DNFSB	07/31/07		07/02/07	Ahead of Schedule
M-034-35b (S10-05-011)	Complete K West Final Pass	TPA	01/31/08		01/31/08	On Schedule

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