

Section B

Spent Nuclear Fuel Stabilization and Disposition (RL-0012)



K. L. Kehler
Vice President and
Project Manager for
D&D Project

November 2011
CHPRC-2011-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The first 25 KOP Scrap Basket Inserts were successfully poured by Copper Alloys in the United Kingdom. Although casting is being interrupted for approximately two weeks to repair foundry equipment, the casting is now back on track and is expected to be completed by the end of January 2012.

The CHPRC internal review of the 105KW Basin, CVDF, & CSB Safety Basis Document revisions supporting KPS Operations was completed. Comments from both the CHPRC internal review and DOE-RL, via an In-Process Review, were also being incorporated. The schedule is to have all KOP-related Safety Basis Document revisions internally approved and submitted to DOE RL for their formal review & approval by the first week in December.

The KPS Verification Containers (VCs) were formally received through the AVS receipt inspection process and delivered to the MASF Test Facility. With both the safety significant VCs and safety significant Volume Measurement Tools (VMTs) having been received, KOP Project personnel initiated functional checks to ensure that accurate volume correlations are established for every combination of VC and VMT. The functional checks are intended to validate the assumed accuracy of measuring the volume of KOP product material with the safety significant components.

A second revision of the TRL-6 Test Report was issued for review by the Joint Test Group (JTG). JTG comments were subsequently resolved and incorporated. Due to the large amount of documentation associated with this report, scanning the documents and issuing the report is forecasted to be completed the week of 12/5/11.

Formal CHPRC Review of the Engineered Container Retrieval and Transport System (ECRTS) Preliminary Design Report (PDR) concluded early this month, with the comment period extended to assure a more detailed review by the systems engineers and nuclear safety reviewers. Project resolution of these comments were completed, with final approval and issuance of the PDR expected to occur by 12/1/2011.

Construction activities associated with installation of the three-hour firewall on the north end of the KW annex were conducted.

Subcontractor (AREVA) internal review of the modified KW Annex final design was concluded.

PNNL transmitted its final report, PNNL-20884, "Settling Studies of KW Basin Settler Sludge from SCS-CON-230 and Settler Sludge Simulant (230)", on October 31. These settling and filtration tests allow comparison of the settler stimulant with the settler sludge composite samples. In general, the settler stimulant exhibits settling and filtration properties similar to the settler sludge core composite samples. The suspended solids in the supernate of the sludge samples were composed primarily of U, Fe, Al, and Si.

CHPRC received Change Order #173/Contract Modification #194 to initiate work on selected Sludge Treatment Project Phase 2 pre-conceptual studies. An advanced work authorization (AWA) is being processed. With the identified funding CHPRC will develop a preliminary technology plan to support RL's response to TPA milestone M-016-171 which is due on March 31, 2012, and conduct a siting evaluation which will consider existing, hybrid, and new facility alternatives.

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	2	N/A
First Aid Cases	0	10	N/A
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

The KOP Processing System (KPS) Formal Design Review Report and Final Design Report were both finalized in the month. The CHPRC Project Review Board approved the KOP Disposition Subproject to advance to the KPS Equipment Installation & Commissioning Phase. The updated Special Packaging Authorization (SPA) Evaluation Checklist (SEC) for the KOP payload, which includes the supporting analysis showing how the package satisfies the requirements of the F-SPA, was submitted to DOE-RL for approval. The SEC was updated to respond to DOE-RL's comments.

MAJOR ISSUES

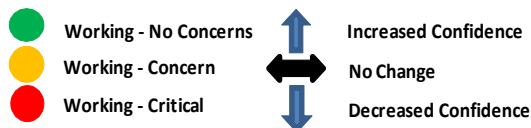
No major issues to report this month.

RISK MANAGEMENT STATUS

Unassigned Risk

Risk Passed

New Risk



Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
STP-030: 100K KOP system operations	Refurbish IWTS, FRS, CLS to minimize operational downtime	●	↔	Baseline includes refurbishment.
STP-007: Competing K Basin Priorities	Integrated, detailed working schedules/plan-of-the-week meetings	●	↔	Training impacts due to work force restructuring "bump and roll" requirements.
KBC-010: Unexpected TRU Debris or Other Waste	Develop characterization & blending/packaging strategy; establish alternate waste disposition pathways	●	↔	No issues at this time.
KBC-011: DSA/FHA Limits Impact Waste Staging	Modify DSA/FHA to increase combustible loadings	●	↔	Work in this area is proceeding without impact.
KBC-018: Discovery of Additional Sludge or SNF	Ensure SNF handling capabilities and WCH agreements are in-place	●	↔	WCH has delayed shipments, and has requested extension of the window to make additional shipments.
STP-039: KOP Separations Process Qualification	Test the mechanical separations process in a relevant environment at MASF	●	↔	Pretreatment test equipment modified and shipped to 100K for staging
STP-075A: ECRS Technology Maturation Testing	Continue technology testing at MASF to demonstrate TRL-6 maturity by March 2012 TRA.	●	↔	Full Integrated Testing (TRL-6) is complete.
STP-082: Changing in Classification of Annex from PC-2	Continue meetings with RL and stakeholders on hazards analysis	●	↔	It has been determined that the PC-2 is correct classification.

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Base	3.8	5.9	7.6	2.1	55.7	-1.7	-29.0

Numbers are rounded to the nearest \$0.1M

CM Schedule Performance (+\$2.1M/55.7%)

Positive SV primarily due to the point adjustments related to implementation of PMB-3 (BCR-PRC-12-001R0) in November. RL-12 prepared for a December implementation, with the eventual implementation in November a larger point adjustment resulted.

CM Cost Performance (-\$1.7M/-29.0%)

Negative CV primarily due to the point adjustments related to implementation of PMB-3 (BCR-PRC-12-001R0) in November. RL-12 prepared for a December implementation, with the eventual implementation in November a larger point adjustment resulted.

Contract-to-Date

(\$M)

RL-0012 Spent Nuclear Fuel Stabilization and 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 (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
Base	260.2	261.8	262.3	1.7	0.6	-0.5	-0.2	625.6	624.7	+0.9

Numbers are rounded to the nearest \$0.1M

CTD Schedule Performance (+\$1.7M/0.6%)

The combined 100K and STP variance is within reporting thresholds.

CTD Cost Performance (-\$0.5M/-0.2%)

The combined 100K and STP variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

Estimate at Completion (EAC)

The current EAC is slightly lower than the projects BAC.

FUNDS VS. SPEND FORECAST

(\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	FY2012		
	Projected Funding	Spending Forecast	Spend Variance
Base	86.9	82.6	4.3

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

The Base funding distribution by PBS was revised based on Revision 3 of the Performance Measurement Baseline.

Critical Path Schedule

Critical Path Analysis can be provided upon request.

Baseline Change Requests

BCR-PRC12-001R0, Baseline Rev. 3

MILESTONE STATUS

TPA milestones 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 following table is a one year look ahead of key milestones.

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comment
DNFSB 120W	Complete Sludge Treatment	DNFSB	11/30/09			A pending Implementation Plan update will address this milestone.
M-016-171	Complete K Basin Sludge Treatment & Packaging Tech Eval Report	TPA	3/31/12			On Schedule.

SELF-PERFORMED WORK

The Section H.20 clause entitled, Self-Performed Work, is addressed in the Monthly Report Overview.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.