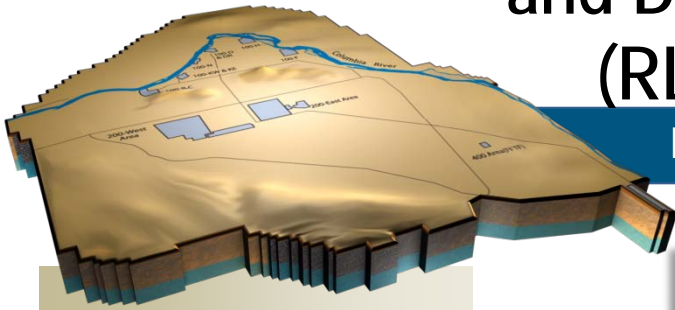
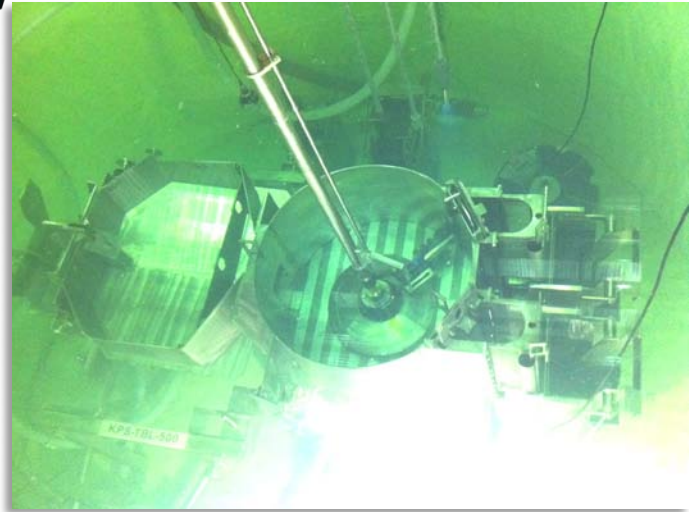


Section B Spent Nuclear Fuel Stabilization and Disposition (RL-0012)

Monthly Performance Report



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D&D Project



Knockout Pot Processing System Test Setup at MASF



Knockout Pot Pretreatment Operations at 100K

April 2011
CHPRC-2011-04, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The Knockout Pot (KOP) subproject continued preparation for the Pretreatment Campaign. Primary equipment components were installed in K West Basin and acceptance testing completed. Following a final walk down, the 105KW Basin Pretreatment Operations Procedure was finalized, and the Readiness Demonstration was completed. The current schedule is to formally declare readiness the last week of April and commence the Pretreatment Campaign early the first week of May.

The KOP Processing System (KPS) hardware required for the KPS Qualification Test was delivered to the Maintenance and Storage Facility (MASF). Construction Forces and MASF personnel are working on equipment installation into the KOP Test Tank. The schedule is to complete installation by April 29th so that equipment can be functionally tested and prepared for the Qualification Test. The Qualification Test is scheduled to commence the week of May 2, 2011.

The Engineered Container Retrieval and Transportation System (ECRTS) subproject issued the draft Control Decision Report for the ECRTS preliminary design. The Integrated (TRL-6) Test continued this month with K West simulant (the first of three simulants planned, the others being K East and Settler Tank). Over 3,700 pounds of simulant were transferred from the engineered containers to the Sludge Transfer Storage Cask (STSC). In addition, progress continues to be made on both the K West Annex Initial Modification and the preliminary design of the K West Annex Final Modification.

The Sludge Treatment Project's (STP) transportation subcontractor issued the final shielding analysis for the transport of K West containerized sludge. The calculated dose rates are well within allowable Fuel-Special Packaging Authorization (F-SPA) transportation conditions. Conclusions from this analysis will be incorporated into the F-SPA checklist for the transport of the K West sludge from K West Basin to T Plant. The draft shielding analysis for the transport of Settler Tank sludge was also issued. It concluded that the calculated dose rates are within allowable F-SPA transportation conditions. CHPRC and the Savannah River National Laboratory Assist Team have completed their reviews of this and comments have been provided to the subcontractor.

The plans for the Decision Support Board (DSB) to evaluate the alternative technologies for Phase 2 treatment of sludge were finalized. Potential attendees were identified and the final agenda was distributed to them and the members of the DSB. The meeting is scheduled for May 9-12 at the Clarion Hotel in Richland. In addition, dry runs of the technical briefing materials have been scheduled for the last week of April to assure both a level of consistency and that the important technical elements for each alternative are clearly presented.

Pacific Northwest National Laboratory provided a letter report which provides analytical results collected to date on the four core samples taken from the engineered container containing K West Settler sludge. The report includes initial results for physical properties, uranium metal, total uranium, radionuclides, plus Waste Isolation Pilot Plant Hazardous Waste Facility Permit and other metals (analyzed by induction coupled plasma optical emission spectrometry). Analyses are being performed consistent with the controlling STP Waste Quality Assurance Project Plan/Sampling Analysis Plan.

EMS OBJECTIVES AND TARGET STATUS

Goal #	Goal	Target	Due Date	Status
1	Reduce use of copier paper by 3 percent at 825 Jadwin and MASF during fiscal year (FY) 2011	Present goal to STP employees in a memo. Include 2010 usage and 2011 target for Room 301-C and 356 copy machines at 825 Jadwin and copy machine S/N31012668 at MASF	12/31/10	Complete
		Issue quarterly status to all employees	03/31/11, 06/30/11	Complete On Schedule
		Issue year-end status to all employees	09/30/11	On Schedule
2	Recycle/reuse test simulant and basin mockup water at MASF	Outline plan for recycling/reuse of test simulant and Basin mockup water at MASF	12/31/10	Complete
		Issue quarterly status to all employees	03/31/11, 06/30/11	Complete On Schedule
		Assess effectiveness of reuse program and evaluate if continued reuse in FY2012 is warranted.	09/30/11	On Schedule

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	3	N/A
Total Recordable Injuries	0	5	N/A
First Aid Cases	0	14	N/A
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS







- CHPRC and the SNRL Assist Team completed their reviews of the first revision of the thermal and gas evaluation for the transport of the K East sludge. Revision 1 of the K East thermal and analysis includes the use of the IP-2 cover that goes over the top of the STSC. The updated analysis shows the IP-2 cover contributes very little to the overall thermal and gas conditions.
- The SRNL Assist Team comments on the draft K East F-SPA Checklist have been addressed and incorporated. The updated draft has been routed for an additional internal review prior to being issued to RL.
- STP briefed the members of the Defense Nuclear Facilities Safety Board (DNFSB) earlier this month on three topics: 1) Current status of the project; 2) Response and current plans associated with the December letter discussing the DNFSB staff review of the CD-1 package for ECRTS; and 3) Current status of STP Phase 2 technology evaluations. The Board and staff had several questions but in summary, no new items or specific areas of concern were mentioned.

















MAJOR ISSUES

None identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk

 Working - No Concerns  Increased Confidence
 Working - Concern  No Change
 Working - Critical  Decreased Confidence

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			MCO Dry Runs completed, Engineered Container Sampling campaign have all completed. The next STP activity in KW is Pretreatment operations in April/May.
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) in-process with no known issues.
STP-082: Changing in Classification of Annex from PCS-2	Continue meetings with RL and stakeholders on hazards analysis			Initial reviews indicate that the PCS-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	5.9	5.9	6.6	(-0.0)	-0.9	(0.7)	-12.0

Numbers are rounded to the nearest \$0.1M

CM Schedule Performance (-\$0.0M/-0.9%)

The combined STP and 100K current month schedule variance are within thresholds.

CM Cost Performance (-\$0.7M/-12.0%)

The current month cost variance was driven by the ECRTS Annex design subcontractor billings that are being incurred without BCWS that is awaiting action on a Baseline Change Request (BCR) approval; and a current month adjustment to the KOP performance to adjust the Contract-to-Date to better represent equipment accruals and delivery schedules.

Corrective Action: The BCR is scheduled to be implemented in the month of May, which will correct this variance.

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	215.2	210.5	217.8	(4.8)	-2.2	(7.4)	-3.5	580.4	590.4	(10.0)

Numbers are rounded to the nearest \$0.1M

CTD Schedule Performance (-\$4.8M/-2.2%)

The combined 100K and STP variances are within reporting thresholds.

CTD Cost Performance (-\$7.4M/-3.5%)

The combined 100K and STP variances are within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

Estimate at Completion (EAC)

The BAC and EAC include FY2009 through FY2018, the PRC contract period.

The Base EAC increased from the prior month primarily due to a \$2.3M increase associated with the Displaced Workers Medical Benefits that will occur from FY2012 through FY2014 as a result of an RL approved reduction in force to be implemented in September 2011.

FY2011 FUNDS VS. SPEND FORECAST

(\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	FY2011		
	Projected Funding	Spending Forecast	Spend Variance
Base	83.8	78.8	5.0

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

Funding includes FY2010 carryover and FY2011 new Budget Authority.

Critical Path Schedule

Critical Path Analysis can be provided upon request.

Baseline Change Requests

BCR-012-11-004R0, STP Acceleration of Existing 100K Annex Modifications

BCR-PRC-11-021R0, Transfer of Workforce Restructuring to ARRA Only

MILESTONE STATUS

Tri-Party Agreement 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 PRC Baseline Revision 2 Update, implemented in September 2010, and subsequent approved BCRs define CHPRC planning with respect to Tri-Party Agreement (TPA) milestones. 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			Letter dated 30 June 2010, from Ms Triay to DNFSB, notifying the board of a pending Implementation Plan update that will address this missed milestone.
M-016- 170	Complete Knock-Out Pot Material Pre-treatment	TPA	9/30/11			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.