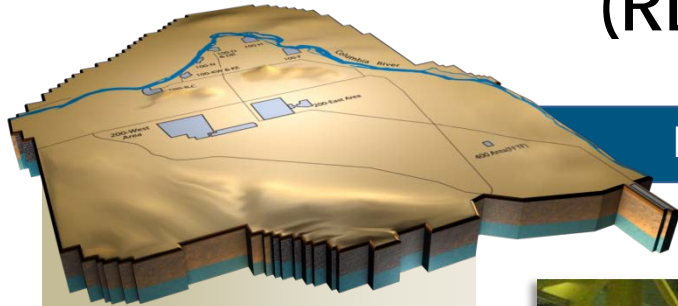


Section B

Spent Nuclear Fuel Stabilization and Disposition (RL-0012)



Monthly Performance Report

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Deliverable C.3.1.3.1 - 1



**Sludge Transfer Storage Cask (STSC)
Positioned at the Maintenance and Storage Facility**



Top of the STSC Trailer and Cask

PROJECT SUMMARY

In preparation of sampling of the Settler Tank sludge from Engineered Container (EC)-230, STP and 100K have approved procedure OP-70-151W, "Load and Ship Sludge Samples in Type A Containers", and OP-43-039W, "Obtain Sludge Samples from 105KW Basin Storage Containers". All construction activities associated with the ability to insert the extraction tubes have been completed and the Management Self Assessment was initiated.

A revision of the Knockout Pot (KOP) proof of dryness analysis was issued. The analysis concluded that the same proof of dryness test that has been used for previous Multi-Canister Overpacks (MCOs) can be applied to the KOP MCOs. The document was updated to incorporate the KOP MCO basket insert dimension change and to include analysis on the effect of surface tension. In addition, the developmental testing for the Size Separation, Verification Container Loading, and Insert Packaging hardware was successfully completed. The KOP Disposition subproject completed the draft of the Preliminary Design Report for the KOP Processing System (KPS). An internal STP design review was held and the review comments incorporated into the document. The Formal Design Review will commence in September.

The Maintenance and Storage Facility (MASF) continues to prepare for the initial tests for the XAGO Retrieval Test, the Overfill Retrieval Test, and the Decant Tests for the Engineered Container Retrieval and Transport Systems (ECRTS), as well as continued support to the KOP Pretreatment Separations and Sorting testing. For ECRTS, MASF completed the mezzanine installation and then placed the Transfer Box and Decant Box in place on top of the mezzanine to replicate the planned configuration of the K West Annex facility. They also received and placed the Sand Filter box in an interim location pending parking the Sludge Transfer and Storage Cask (STSC) Trailer under the mezzanine. For the KOP Disposition Subproject, developmental testing for the Size Separation, Verification Container Loading, and Insert Packaging hardware was successfully completed. The electrical utilities at MASF have been upgraded around the perimeter of the facility with extensions to strategic locations (i.e., top of the mezzanine) to support testing requirements.

EMS OBJECTIVES AND TARGET STATUS

Objective #	Objective	Target	Due Date	Status
09-EMS-EPC-10-OB4-T1	Identify Pollution Prevention opportunities for the Sludge Treatment Project locations	Perform Assessment/Surveillance (EPC-STP-SURV-10036 – IEP #7725) of programs to be implemented	03/31/10	Complete
		Implement recommendation actions at the Federal Bldg	05/31/10	Complete
		Implement recommendation actions at MASF	06/30/10	Complete
		Follow-up Assessment/Surveillance	09/30/10	Complete

TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	3	N/A
First Aid Cases	2	39	08/09 – 100K Millwright sustained an insect bite to neck in the 1717K Shop area. Taken to AMH for evaluation and returned to work with no restrictions. (21185) 08/16 – 100K Pipefitter reports that due to the job duties over a period of time developed Dupuytren’s Contracture on right hand. Worker was referred to personal physician and returned to work without restrictions. (21213)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Sludge Treatment Project (STP)

- ECRTS and STP Project Management personnel briefed RL on the current status of the modified K West Annex Design
- ECRTS and STP Project Management personnel met with K West Basin personnel to brief them on the status of the ECRTS Design, the layout in the K West Basin, and the requirements for basin debris removal/relocation
- The STP Joint Test Group (JTG) reviewed the Test Specification for the ECRTS Overfill Recovery Test. JTG comments were incorporated into the specification and the specification was re-submitted for approval.
- The project released PRC-STP-00307, *Engineered Container Retrieval and Transfer System Conceptual Design Seismic Limit States*
- As a prerequisite for sampling settler sludge from EC-230, the project released A21C-STP-SPL-001, Rev 3, *Spare Parts Listing Sludge Treatment Project Sampling and Retrieval*
- HNF-40089, Rev 2, *Conduct of K West Basin Sludge Sampling Campaign*, was released. This documents the expected sludge volumes that the operations personnel can expect to draw at each location of the isolation and extraction tubes. It also has the checklist that the lead sampling engineer uses during the sampling operations.
- Fabrication and installation of hoses and other equipment for testing the Overfill Retrieval System was initiated, the test procedure development is on-going, and the draft test specification is being updated to incorporate JTG comments
- AREVA Federal Services completed its structural review of the MCO cask/MCO with the KOP product material and the copper inserts. The review found that the addition of the KOP product material and the copper inserts is bounded by the original MCO Cask structural analysis, thus not

requiring any additional structural reviews.




- An expression of interest (EOI) notice has been prepared to establish and qualify a list of prospective bidders for the design of the Alternative Interim Storage (AIS) facility. The EOI was issued on August 25, 2010 and required replies by September 2, 2010.
- The Phase 2 subcontractors continue to make progress on the demonstration of potential technologies that can be deployed to “treat” the engineered container and settler tank sludge streams




MAJOR ISSUES















None identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk

 Working - No Concerns
 Working - Concern
 Working - Critical

 Increased Confidence
 No Change
 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			Close interactions between the projects is occurring, schedules are reviewed and evaluated, against established priorities.
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			With completion of KOP / Canister washing with no surprises, confidence level increased for this risk area.
STP-039: KOP Separations Process Qualification	Test the mechanical separations process in a relevant environment at MASF			Testing being conducted at MASF has identified changes required to optimize the process
STP-075A: ECRTS Technology Maturation Testing	Continue technology testing at MASF to demonstrate TRL-6 maturity by March 2012 TRA.			Component level testing is being conducted. Full Integrated Testing will commence in December 2010.

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	6.1	5.9	6.4	(0.2)	-3.4	(0.5)	-8.6

CM Schedule Performance (-\$0.2M/-3.4%)

The STP current month variances include: 1) late start on the sampling of the settler tank sludge stream, as 100K Operations personnel are supporting the MCO proficiency activities (-\$0.1M); 2) procurement of the MCOs and the Integrated Water Treatment System (IWTS)/MCO processing systems are behind schedule due to management decision to hold procurements until the Engineering evaluation of all requirements was known (-\$0.3M); 3) mockup pool at MASF completed early and BCWS now catching up with the performance that has been realized (-\$0.1M), offset by a positive variance in the ECRS transportation safety analysis this month (+\$0.3M).

Recovery actions for the settler tank sampling schedule variance will correct when the MCO proficiency activities complete. Recovery actions for the MCOs is underway with a contract being awarded to Joseph Oat Corporation (fabricated previous MCOs) to fabricate three additional MCOs, and the procurements on the IWTS/MCO processing system upgrades have been awarded and are actively being worked at 100K. No recovery actions are required for the MASF pool mockup, as all actions are complete.

CM Cost Performance (-\$0.5M)/-8.6%

The STP negative variance (-\$0.3M) is within variance thresholds. No recovery actions required.

The 100K Area negative variance (-\$0.2M) is within variance thresholds. No recovery actions required.

Project Services & Support: is within variance thresholds. No recovery actions required.

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	164.3	160.1	164.8	(4.2)	-2.6	(4.7)	-3.0	577.4	585.0	(7.6)

Numbers are rounded to the nearest \$0.1M.

CTD Schedule Performance (-\$4.2M/-2.6%)

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

CTD Cost Performance (-\$4.7M/-3.0%)

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

Contract Performance Report Formats are provided in Appendix A.

FY2010 FUNDS VS. SPEND FORECAST (\$M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	FY2010		Variance
	Projected Funding	Spending Forecast	
Base	86.5	78.3	8.1

Numbers are rounded to the nearest \$0.1M.

Funds/Variance Analysis

Projected Funding includes FY2009 uncosted and FY2010 expected new Budget Authority.

Critical Path Schedule

Critical Path Analysis can be provided upon request.

Estimate at Completion (EAC)

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

Baseline Change Requests

None.

MILESTONE STATUS

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 (IP) update that will address this missed milestone.

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.