

Nuclear Material Stabilization and Disposition (RL-0011)

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*232-Z
Decommissioning*



*Inner containments vessels
holding a 3013 container
being packaged into a 9975*

*A Nuclear Chemical Operator
moving a loaded 9975 (type
B shipping container used to
package/ship 3013
containers)*



Overview

This section addresses work in Project Baseline Summary RL-0011, *Nuclear Material Stabilization and Disposition*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of March 2004.

Notable Accomplishments

Disposition Special Nuclear Material (SNM)

Tri-Party Agreement (TPA) milestone M-83-13, *"Complete Repackaging of PFP Mixed Waste Residues and Ship To CWC,"* was completed March 11, 2004, six weeks ahead of schedule. Completion of this milestone is associated with the final shipment of residue material packaged in pipe overpack containers to the Central Waste Complex (CWC).

Disposition the Plutonium Finishing Plant (PFP) Facility

Transition 232-Z Facility: The 232-Z Removal Action Work Plan was transmitted to FH, the Environmental Restoration Disposal Facility, and RL on March 15, 2004. RL comments, received March 24, 2004, are currently being incorporated. This document provides for the management of the project under Comprehensive Environmental Response, Compensation and Liability Act of 1980 and includes the Site Specific Health and Safety Plan, Air Monitoring Plan, and Waste Management Plan.

The Data Quality Objective and the Sampling Analysis plan for 232-Z were completed and submitted to RL. RL comments are being resolved with approval expected in mid-April. These documents define the facility's characterization approach and needs to meet the EE/CA disposition and disposal option. Sampling will begin when the 232-Z Justification for Continued Operations is approved.

Transition 236-Z Facility: The PD-4 system (remote dose rate instrument) was received from the Pacific Northwest National Laboratory. This system will be beneficial in performing remote Plutonium Reclamation Facility canyon dose rate measurements prior to canyon entry.

Transition 241-Z Facility: The activity-based management review plan supporting the start of radiologically intrusive transition work in 241-Z continued in March and is now 90 percent complete. This review ensures readiness to proceed with new or modified program work during the various phases of the 241-Z D&D effort.

The 30-day public notice for the 241-Z and HA-20MB Resource Conservation and Recovery Act of 1976 Closure Plans was issued March 8, 2004. The 45-day public review period is scheduled from April 7, 2004, through May 24, 2004. These closure plans identify how 241-Z will be closed, the cleanup standards, activities necessary to achieve the cleanup standards, and the methods used to ensure the cleanup standards are met.

Legacy Pu Holdup Removal and Disposition: The invoice for the second increment of legacy holdup material was submitted for RL approval on March 10, 2004, three weeks ahead of schedule. Material removal activities from glove boxes MT-3, MT-1, HA-7A, HA-21I, HA-14 and vacuum line 9B-HC1 are underway to support completion of the third increment which is scheduled for late June 2004.

Notable Accomplishments, continued

Laboratory Transition: A peer review of the PFP non-destructive analysis program was completed April 1, 2004, by Rocky Flats Environmental Technology Site and Los Alamos National Laboratory personnel. The review was acceptable to all parties. A final report is scheduled to be issued on April 23, 2004.

Capitalized Modifications for Transition: A contract has been awarded and forces are being mobilized to install two four-wide mobile offices (MO) within the PFP Protected Area (PA). These MOs are expected to be ready for occupancy in early May. A ten-wide MO outside the PA is scheduled to be complete by the end of May. The PFP Project Closure Office, facility and project management, and engineering will occupy this MO when it becomes available.

Issues

SNM De-inventory Delay: RL's direction to delay the PFP SNM de-inventory will require a major revision of the PFP Closure Project baseline, including Performance Incentive objectives.

FY 2004 FH Funds versus Forecast (\$000)

	FY 2004 Anticipated Funding w/Carryover	FY 2004 Fiscal Year Spend Forecast	Variance
Nuclear Materials Stabilization & Disposition	\$ 163,438	\$ 153,644	\$ 9,794

The Fiscal Year Spend Forecast reflects the RL-directed two-year delay in SNM de-inventory as well as the disposition of fuel stored at PFP. The current forecast indicates the following factors contributed to the forecasted positive funding variance: delayed staff ramp-up, delayed purchasing of consumables, a delay in issuing subcontracts, and the corresponding decrease in overheads.

FY 2004 Schedule/Cost Performance (\$000)

	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
Nuclear Materials Stabilization & Disposition	79,126	65,170	63,387	-13,956	-18%	1,783	3%	172,859

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

Schedule Performance (-\$13,956K/-18%): Primary contributors to the negative schedule variance are:

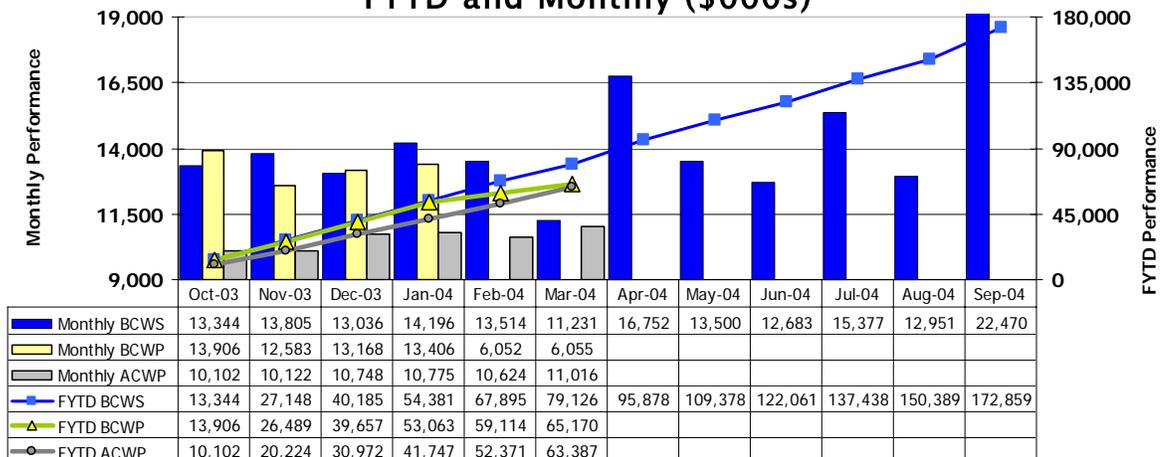
- Delayed shipment of SNM to Savannah River and associated procurement of shipping containers due to unavailability of safe and secure transports and approval of the Record of Decision for shipment (-\$4.5);
- Delay in staff ramp-up and the Tank D-5 transfer which are impacting D&D activities (-\$6.5);
- Difficulties associated with 232-Z deactivation (-\$1.3);
- Transition Operation Support earned value apportioned to delayed D&D work scope (-\$1.2); and
- Safety Analysis Implementation behind schedule (-\$.5).

The baseline adjustment is currently being prepared to revise the baseline consistent with the directed delay in SNM de-inventory (including changes in fuel de-inventory path forward), staffing delays and directed funding adjustments.

Cost Variance (\$1,783K/3%): The positive cost variance is the result of early completion of the Pu stabilization activities (\$2.5); reduced dosimetry and medical costs due to delay in staff ramp-up (\$.4); reduced labor cost due to Senior Management transfers (\$.2); and revenue and work transfer in Closure Services (\$.4). These were off-set by time-phasing of level-of-effort procurements and apportioned effort work scope (-\$1.6).

Cost savings will be utilized to offset cost increases resulting from increased scope and/or execution difficulties; time-phasing of procurements will be re-planned as part of the baseline adjustment; and improvements in packaging shipping containers are expected as routine packaging operations are established.

Performance Analysis FYTD and Monthly (\$000s)



Milestone Achievement

Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/Comments
Complete Stabilization and Packaging of Polycubes	DNFSB	3/31/03	2/28/03		Complete
Submit Facility End Point Criteria Document to Ecology	TPA	9/30/03	9/30/03		Complete
Submit to Ecology a PFP Residual Chemical Hazards Assessment	TPA	12/31/02	12/27/02		Complete
Submit Closure Plan for 241-Z Waste Treatment Facility TSD Unit to Ecology	TPA	7/31/03	7/25/03		Complete
Completion of all Plutonium (Pu) Stabilization & Packaging	PI	2/18/04	2/12/04		Complete
Complete Repackaging of PFP Residues and Ship to Central Waste Complex (CWC)	TPA	4/30/04	3/11/04		Complete
Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms	TPA	6/30/05			On Schedule
Special Nuclear Material Transferred to Savannah River Site of DOE Approved Interim Storage	PI	9/30/05		9/30/07	DOE has notified FH that the current shipping schedule will not be met.
Legacy Pu Holdup Removed & Dispositioned	PI	9/30/05			On Schedule
Complete 100% of Legacy Pu Holdup Removal & Disposition	TPA	9/30/06			On Schedule
Complete Transition & Dismantlement of the 232-Z Bldg Incinerator	TPA	9/30/06			On Schedule
Protected Area Eliminated	PI	12/31/05		12/31/07	Protected Area elimination will not be met due to delayed de-inventory
PFP Facilities (61 Buildings) Ready For Demolition	PI	9/30/06		TBD	Demo ready of 61 buildings will not be met. Two year SNM de-inventory delay, and funding reduction has necessitated a re-sequencing of D&D work scope.