

Plutonium Finishing Plant Project

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2734-Z Dismantlement



Solutions Processing Completion



INTRODUCTION

The Plutonium Finishing Plant Project is responsible for work in Project Baseline Summary (PBS) RL-CP03, *Plutonium Finishing Plant (PFP)*.

NOTE: Unless otherwise noted, all information contained herein is as of the end of February 2003.

NOTABLE ACCOMPLISHMENTS

Stabilization of Nuclear Materials

Metals, Alloys, Oxides and Polycubes: Polycube stabilization was completed on February 28, 2003 one month ahead of the Defense Nuclear Facility Safety Board (DNFSB) milestone IP-115. Eighty-seven polycube items were completed during the reporting period.

One hundred eighteen oxide items were processed during the reporting period. As of February 23, 2003, 908 oxide items have been processed under the 2736-ZB facility work scope. The 908 items surpassed the contract-to-date goal by 79 items.

The following are related to the High Chloride Oxides:

- Design work was completed on modifications to the muffle furnace off-gas system to support the processing of high chloride oxides.
- Operating procedures for the chloride wash process were drafted.
- Work by the Technical Equivalency Team on development of the equivalency for low temperature stabilization of PFP chlorinated oxides continues. Personnel from DOE-Albuquerque, Los Alamos National Lab, Savannah River Technical Center, Rocky Flats Environmental Technology Site, PFP, and Pacific Northwest National Labs are on the team. Status meetings are held twice weekly.

Residues

- During the reporting period, 48,472 grams of oxide/Mixed Oxide (MOX) were packaged into 57 Pipe Overpack Containers (POCs).
- The last 19 Sand, Slag and Crucible (SS&C) Nondestructive Assay (NDA) batch reports were validated.
- The last three procedures for the new calorimeters and the Room 172 Segmented Gamma Scan Assay System (SGSAS) were approved by the Carlsbad Field Office.
- The As-Low-As-Reasonably-Achievable (ALARA) assessment and hazards assessment for the Group 2 alloys were completed.
- Calorimeter AR-1 was approved by Safeguards for accountability measurements.
- Calorimeter AR-8 was received and acceptance testing initiated.
- The evaluation of the Safety Analysis Report for Packaging (SARP) for the Pipe Overpack Containers (POC) was approved which allowed initiation of shipment of a portion of the oxide/MOX.

Outer Can Packaging: A total of ninety 3013 containers were produced during this reporting period. A total of three hundred seventy one 3013 containers have been produced during this fiscal year, sixty-one containers ahead of the FY 2003 production baseline.

Disposition PFP Facility

Transition 232-Z Facility: The Engineering Evaluation/Cost analysis (EE/CA) for 232-Z deactivation and decommissioning (D&D) has been developed and reviewed by FH. A draft has been provided to DOE for informal transmittal to the Environmental Protection Agency (EPA) and Ecology per their request for an advance review.

The 232-Z Notice of Construction (NOC) for 232-Z has been revised to address comments provided by the Washington State Department of Health (WDOH). FH plans to meet with WDOH to review revisions on March 11, 2003.

Revised Technical Description and Start-Up Score Sheet have been prepared reflecting discussions held with FH & DOE Start Up Readiness personnel and DOE Facility Representatives and Program Representative. It has been agreed to proceed with a low-level FH-approved Readiness Assessment with FH independent oversight.

Transition 234-5Z Facility: Completed tank removal in Rooms 336/337. A punch list of remaining work was developed for final acceptance of "Demo Ready" condition (Performance Incentive number S-5, Performance Objective 1, 6.I).

Transition 236-Z Facility: Removed four tanks of highest concern from Room 40 in the Plutonium Reclamation Facility.

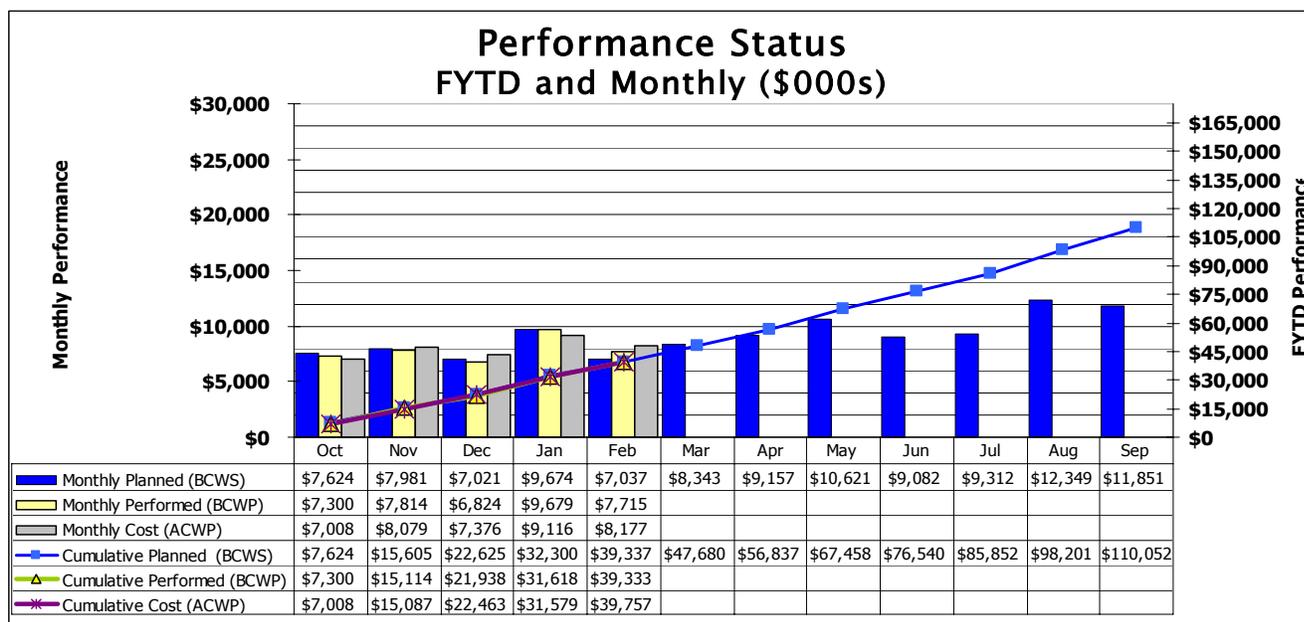
Transition 241-Z Facility: The 241-Z NOC for terminal clean-out activities was declared incomplete by the WDOH on January 6. A meeting and site tour was held with WDOH on January 14 to review their NOC comments. The FH Environmental Engineering consensus on a path forward for this NOC would involve reclassifying the 241-Z back to a major stack. The stack reclassification will involve EPA approval of the existing 241-Z stack monitoring system. FH Environmental Engineering has prepared an alternate monitoring plan for submission to EPA and has redrafted the NOC for submission to WDOH in early March.

FY 2003 SCHEDULE/COST PERFORMANCE ALL FUND TYPES (\$000)

Schedule Variance: (-\$3.5K/0%). Variances are within the threshold (+/- 10% or \$1M); therefore no variance analysis is provided.

Cost Variance: (-\$423.5K/-1.1%). Variances are within the threshold; therefore no variance analysis is Provided.

	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
RL-CP03 Plutonium Finishing Plant	39,337	39,333	39,757	-3	0.0%	-423	-1.1%	110,052



MILESTONE ACHIEVEMENT

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/Comments
TRP-03-501	Submit Facility End Point Criteria Document to Ecology	TPA	9/30/03			On Schedule
TRP-03-503	Submit to Ecology a PFP Residual Chemical Hazards Assessment	TPA	12/31/02	12/27/02		Complete
TRP-03-504	Submit Closure Plan for 241-Z Waste Treatment Facility TSD Unit to Ecology	TPA	7/31/03			On Schedule
TRP-04-506	Completion of all Pu Stabilization & Packaging	PI	2/18/04			On Schedule
TRP-04-508	Complete Repackaging of PFP Residues and Ship to CWC	TPA	4/30/04			On Schedule
TRP-05-501	Discontinue Waste Discharges from the 241-Z Tanks to Tank Farms	TPA	6/30/05			On Schedule
TRP-05-503	Special Nuclear Material Transferred to Savannah River Site of DOE Approved Interim Storage	PI	9/30/05			On Schedule
TRP-05-504	Legacy Pu Holdup Removed & Dispositioned	PI	9/30/05			On Schedule
TRP-06-501	Complete 100% of Legacy Pu Holdup Removal & Disposition	TPA	9/30/06			On Schedule
TRP-06-502	Complete Transition & Dismantlement of the 232-Z Bldg Incinerator	TPA	9/30/06			On Schedule
TRP-06-503	Protected Area Eliminated	PI	12/31/05			On Schedule
TRP-06-507	PFP Facilities (61 Buildings) Ready For Demolition	PI	9/30/06			On Schedule

FY 2003 FH FUNDS VS FORECAST (\$000)

	Expected Funds	Spend Forecast	Variance
RL-CP03 Plutonium Finishing Plant	\$ 110,030	\$ 112,182	\$ (2,152)
Project Completion - Operating			

ISSUES

Shipment of the first 3013 containers to Savannah River Site (SRS): Working with DOE (RL, HQ and SRS) to resolve and complete all activities needed to make the first shipment of material from PFP to SRS. Goal is to make one shipment in April 2003 to verify readiness.