

# Plutonium Finishing Plant Project

S. M. Sax, Acting Vice President/  
(509) 373-5377

---

## *Legacy Holdup Removal Activities*



*Radiation Dose Rate Measurement  
Of HA-9A Glovebox, 234-5Z*



*Inspection in the 232-Z  
Process Room*



## OVERVIEW

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

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

## NOTABLE ACCOMPLISHMENTS

On August 21, 2003, PFP received the Voluntary Protection Program Star Status from the Department of Energy. PFP is the first former defense production facility to achieve this prestigious safety award.

### Maintain Safe and Secure Special Nuclear Materials

In early August, PFP received the first shipment of the Fast Flux Test Facility (FFTF) fuel. Receiving this fuel supports the accelerated Decontamination and Decommissioning (D&D) of the FFTF Reactor.

### Stabilization of Nuclear Materials

**Metals, Alloys, Oxides and Polycubes:** Three hundred forty-eight oxide items were processed during the reporting period. As of August 24, 2003, 2,442 oxide items have been processed under the fiscal year (FY) 2003 work scope, which is 138 items under the fiscal-year-to-date goal.

**Residues:** On August 6, 2003, PFP formally completed the Defense Nuclear Facilities Safety Board (DNFSB) commitment for residues repackaging, eight months ahead of the DNFSB milestone and six months ahead of the FH baseline commitment.

**Outer Can Packaging:** One hundred forty-seven 3013 containers were produced during August. Eight hundred seventy-nine 3013 containers have been produced during this fiscal year, which is 62 containers behind schedule.

### Disposition of Nuclear Materials

Sixteen containers of waste materials (low level, transuranic (TRU)/TRU mixed waste, etc.) and twenty-six pipe overpack containers (POCs) of waste were shipped to the Central Waste Complex. The 9975 Safety Analysis Report for Packaging document was approved by DOE-HQ on August 15, 2003.

### Disposition PFP Facility

**Transition 232-Z Facility:** RL has transmitted a letter to the Washington State Department of Health (WDOH) on August 22, 2003, agreeing with the 232-Z Notice of Construction (NOC) Conditions and Limitations and requesting an approved NOC by September 18, 2003.

## NOTABLE ACCOMPLISHMENTS, CONTINUED

**Transition 234-5Z Facility:** Plutonium (Pu) legacy holdup removal activities have begun in glovebox HC-9B; an initial sweep-down of the box has been completed, generating four poly-jars of material.

**Transition 236-Z Facility:** Reactivation of gloveboxes MT-5 and MT-6 has continued. This is the final prerequisite for Pu legacy holdup removal activities to start.

**Transition 241-Z Facility:** The 241-Z D&D NOC, Rev. 2, and Alternate Monitoring Plan were submitted to RL on schedule on August 8, 2003, and transmitted by RL to WDOH on August 18, 2003.

**Transition 241-Z-361 Facility Engineering Evaluation/ Cost Analysis (EE/CA):** Tank 241-Z-361 EE/CA was delivered to RL on schedule (August 26, 2003). FH requested that RL complete the action memorandum by December 26, 2003.

## FY 2003 SCHEDULE/COST PERFORMANCE (\$000)

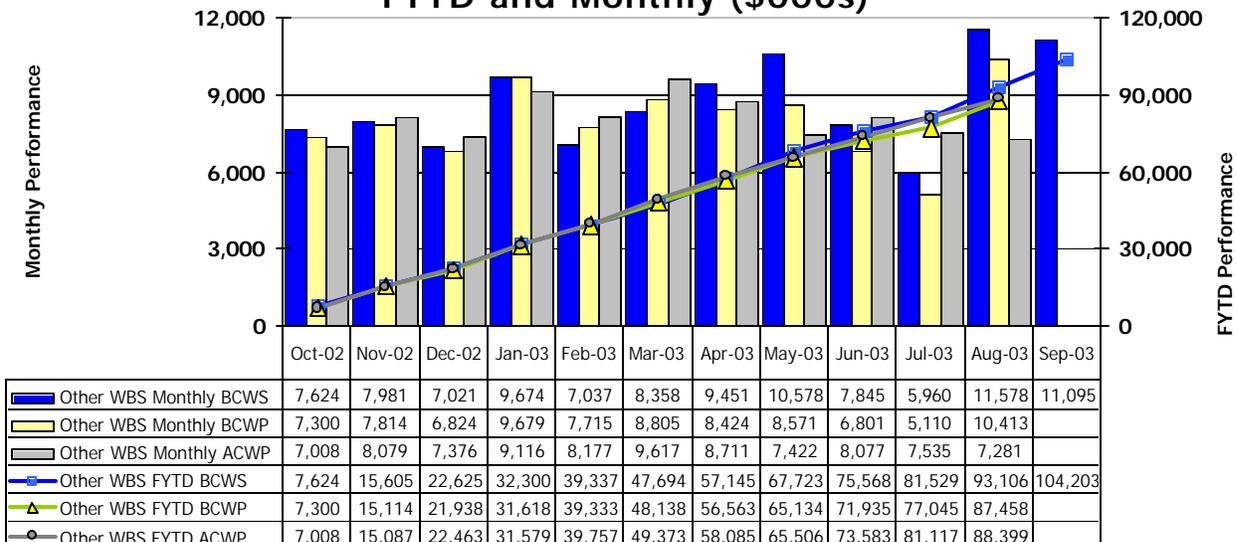
	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-CP03 Plutonium Finishing Plant	93,106	87,458	88,399	-5,648	-6%	-940	-1%	104,203

**Schedule Variance (-\$5,648K/-6%):** The negative variance is primarily attributed to delayed procurement of POCs, deferral of the 2736-ZB Vault Complex documented safety analysis (DSA), and late start of the PFP complex EE/CA. The following corrective action is planned: Procurement of POCs has been initiated, and POCs will be received on a schedule to support packaging of mixed oxide. Around \$2.6M of the schedule variance will be recovered by year end, with the remaining work scope carried over into the next fiscal year (including the PFP complex EE/CA and the vault DSA work scope).

**Cost Variance (-\$940K/-1%):** The negative variance is primarily attributed to the unplanned labor costs for the high chloride oxides stabilization; and under-estimating personnel dosimetry costs, medical assessments, and selected sub-contracts as well as labor rate increases. These negative variance(s) will continue through the balance of the fiscal year and are offset, at the FH-level, by underruns in other PBSs.

## FY 2003 SCHEDULE/COST PERFORMANCE, CONTINUED

### Performance Analysis FYTD and Monthly (\$000s)



## MILESTONE ACHIEVEMENT

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/Comments
TRP-02-501	Complete Stabilization and Packaging of Polycubes	DNFSB	3/31/03	2/28/03		Complete
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	7/25/03		Complete
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			Repackaging is complete. Shipment to CWC will be impacted since request to lower the attractiveness level D was denied.
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			
<b>Project Completion - Operating</b>	\$ 107,412	\$ 102,620	\$ 4,792

## ISSUES

**Shipment of the first 3013 containers to the Savannah River Site (SRS):** PFP continues working with DOE (RL, HQ and SRS) to resolve issues and complete all activities needed to make the first shipment of material from PFP to SRS.