



Section K

Plutonium Finishing Plant

PROJECT MANAGERS

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INTRODUCTION

The Plutonium Finishing Plant (PFP) consists of Project Baseline Summary (PBS) RL-CP03, Work Breakdown Structure (WBS) 3.3.3.

NOTE: Unless otherwise noted, all information contained herein is as of the end of August 2002.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that four milestones were completed early, one milestone was completed two days late, one milestone is overdue and one FY 2001 milestone is overdue. Further details can be found in the milestone list.

NOTABLE ACCOMPLISHMENTS

Maintain Safe & Secure SNM WBS 3.3.3.1

The International Atomic Energy Agency (IAEA) has agreed in principle with the designs for safeguard modification to Vault 3 and Room 639. The door sealing bar has been installed and 18 3013 racks have been set in place. The racks will be bolted in and heat shields installed before quality control (QC) inspection and approval.

Maintain Safe and Compliant PFP WBS 3.3.3.2

A draft Tri Party Agreement (TPA) baseline change request (BCR) was issued reflecting completion of milestone negotiations. Completion of these negotiations provided for public comment regarding the logic to arrive at the PFP "slab-on-grade" end point. The public comment period ended July 31. The negotiations team is responding to comments at this time. RL and Ecology are working to resolve one remaining comment.

A Cultural Resource Review (CRR) letter from Pacific Northwest National Laboratory (PNNL) for Laydown yard activities was submitted by RL to the State Historic Preservation Officer (SHPO) and Tribes on August 26, 2002 for their 30-day review.

Infrastructure Services completed removal and general cleanup of the W-460 construction zone and surrounding areas. In anticipation of accelerated deactivation activities, they vacated 2715-Z, excessed tools and materials no longer needed, removed the old Construction-Forces shed, and dispositioned an abandoned tank.

Stabilization of Nuclear Material WBS 3.3.3.3

Metals, Alloys, Oxides and Polycubes ³/₄ During August, 38 bagless transfer containers (BTCs) were welded. As of August 31 a fiscal-year-to-date total of 668 BTCs have now been made in the 234-5Z and 2736-ZB facilities. Stabilization of Plutonium (Pu) Oxide material began in early August with 63 items processed. Stabilization/packaging of previously processed oxides in food pack cans was also initiated in August. PNNL and Plutonium Process Support Laboratories (PPSL) continue with testing to support the washing of the high chloride oxides. The testing will be completed by the end of September 2002. Test results will be used to develop detailed process plans and used as the basis of a Baseline Change Request (BCR).

Residues ³/₄ During August 2002, 178,067 grams (against a plan of 148,000 grams) of Sand, Slag and Crucible (SS&C) were packaged into 26 Pipe Overpack Containers (POCs). Processing of SS&C continues exceeding the baseline schedule. Forty-five POCs were shipped to the Central Waste Complex (CWC).

Outer Can Packaging —Thirty 3013 containers were produced during August with a fiscal-year-to-date total of 396 containers. Packaging of non-chloride oxides continued through August with 63 items packaged.

Disposition of Nuclear Material WBS 3.3.3.4

During the month of August, PFP shipped 101 waste containers – included in the total were three POC shipments and 23 Transuranic waste drums.

Disposition PFP Facility WBS 3.3.3.5

Fluor Hanford met with the Environmental Protection Agency (EPA) over regulatory treatment of PCBs regarding the sludge in the 241-Z-361 on July 25, 2002. The EPA agreed to treat the sludge in 241-Z-361 as non-PCB waste, simplifying the documentation necessary to dispose the tank contents. The Applicable or Relevant and Appropriate Requirements, (ARARs) document is being amended to document the EPA decision.

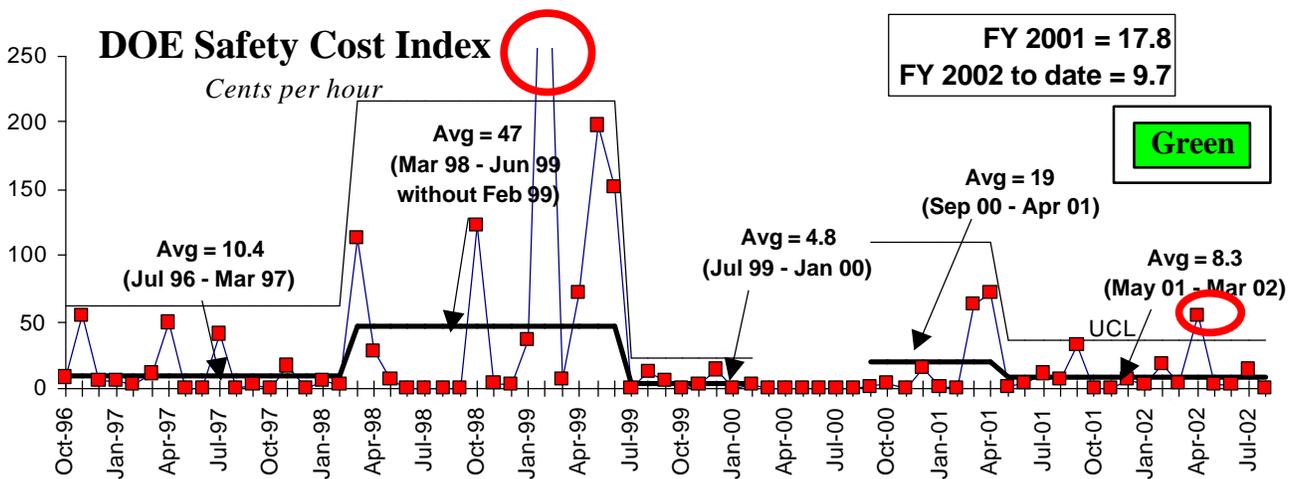
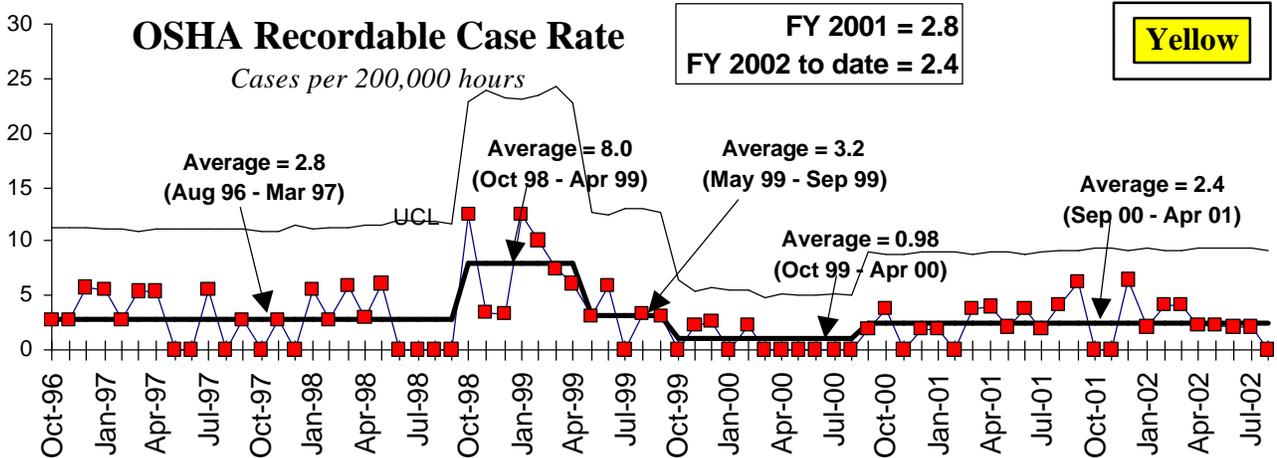
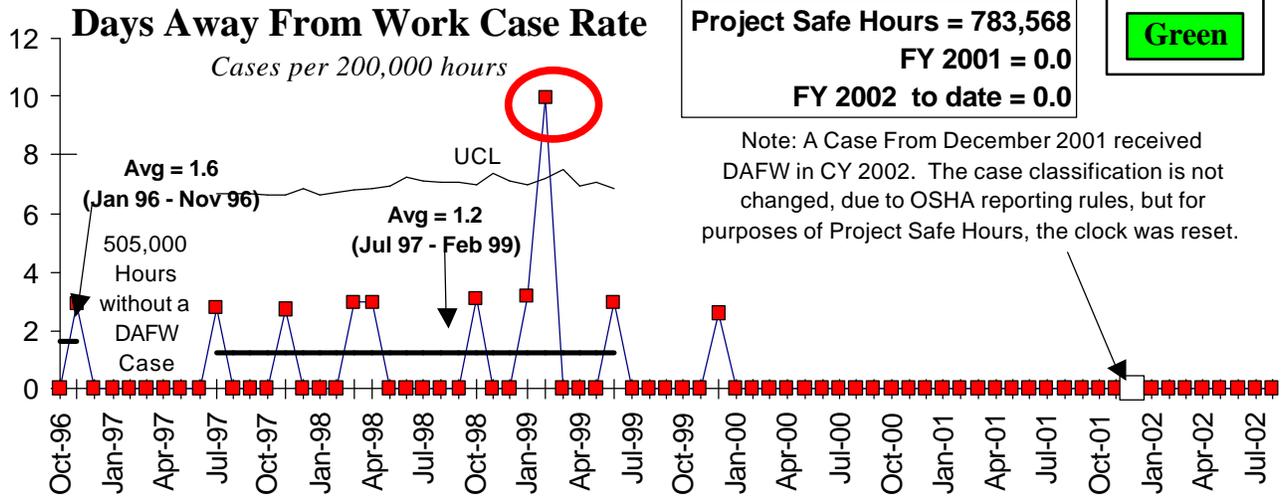
Significant progress is continuing on the Chemical Vulnerability/Legacy Holdup Removal activities with two planning packages completed and five other packages in various stages of completion. Field crews continued to work the chemical vulnerability mitigation actions with two tanks (KOH Tanks) dislodged from their foundations and ready for removal from the plant. Three other tanks in Room 336/337 are in various stages of preparation for removal in the next week. The Legacy Holdup field crew has completed verification of HC-7C, criticality drains and alarms, CAM alarm operability, and fire suppression systems in preparation of initiating legacy holdup removal activities on September 9. All the planning documents are complete for commencing work on HC-7C.

Project Management & Support WBS 3.3.3.6

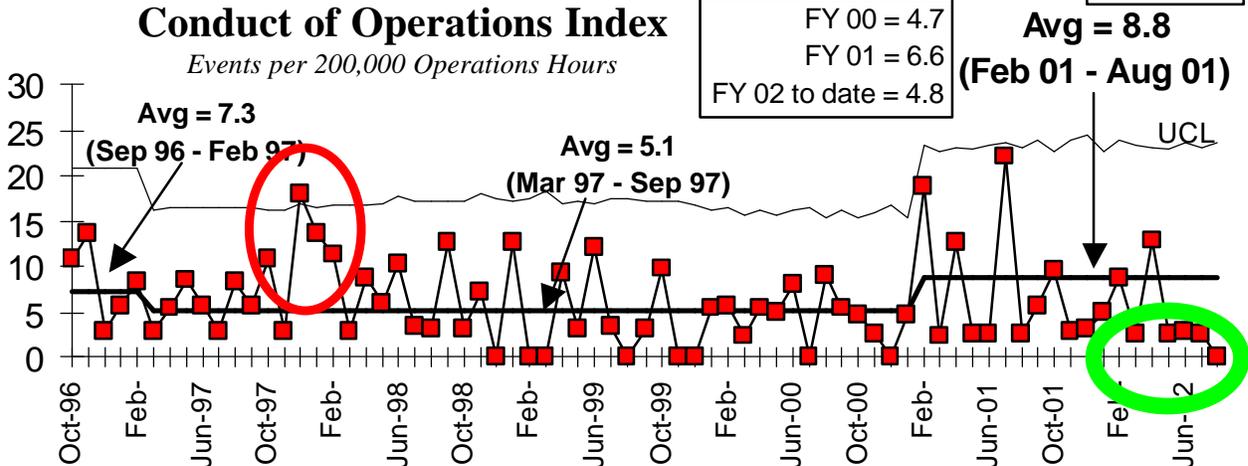
The DOE-HQ Voluntary Protection Program (VPP) review team completed their review and reported the results August 29. They concluded that we performed at the "STAR" level in 4 of the 5 Key Elements and "Merit" level for the other Key Element with an overall "Merit" status recommendation.

SAFETY

There have now been over 783,568 safe staff hours since the last recorded workday injury in December 2001.



CONDUCT OF OPERATIONS



BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Processing Improvement — Over 400 items of oxides originally thought to require thermal stabilization and packaging have been selected for discard as a result of investigations into their plutonium content. The database from which the original stabilization inventory was developed did not list net weights for these items. However, a more in-depth investigation revealed them to contain less than 30wt% Pu. These items are the subject of a Safeguards Termination Request that is currently at DOE-HQ for approval.

It was determined that the oxide/MOX materials could be characterized based on process knowledge. This eliminates the need for a sampling program and associated costs and schedule impacts.

Opportunities for Improvement

Inventory Control ³/₄ PFP and contractor staffs have identified opportunities for improving the material control and accountability (MC&A) inventory process at the PFP. The MC&A Process Improvement Plan draft report was approved and released in August.

Processing Improvement — The PFP Stabilization & Packaging Equipment (SPE) process qualification plan was submitted to RL. This plan will enable the SPE system, once qualified, to perform Loss on Ignition (LOI)/ Thermogravimetric Analysis (TGA) on a representative sampling of canned items rather than on all canned items. Representative sampling is significant since the processing throughput is limited more by the LOI/TGA measurement throughput than either furnace or canning capacity. Comments from the Third Party Review Team on the Process Qualification package were received in July. Final resolution to comments completed in August and the document revised, support data collected, and transmittal to RL for approval. Approval is expected from RL by September 16. Delay in approval impacts execution of accelerated schedule and cost. A contractual letter to RL on their delayed response is being prepared by PFP.

UPCOMING ACTIVITIES

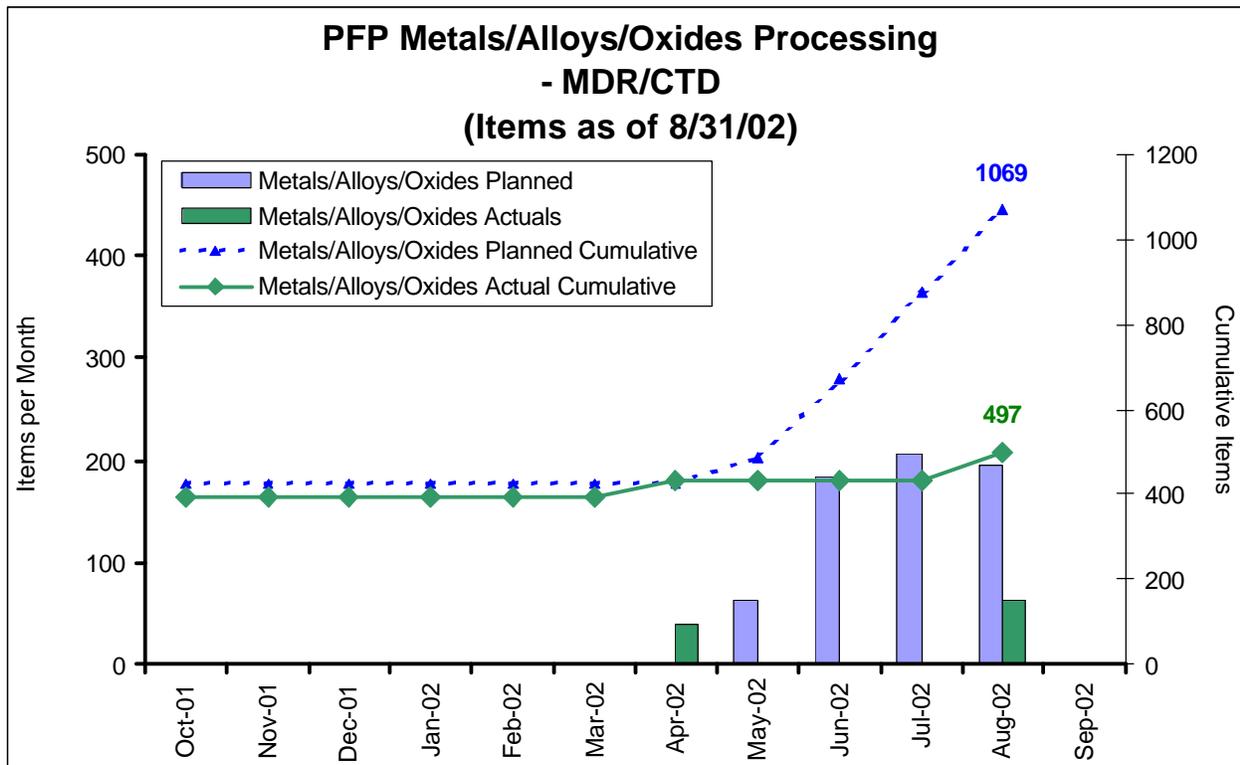
Nothing significant to report.

MILESTONE ACHIEVEMENT

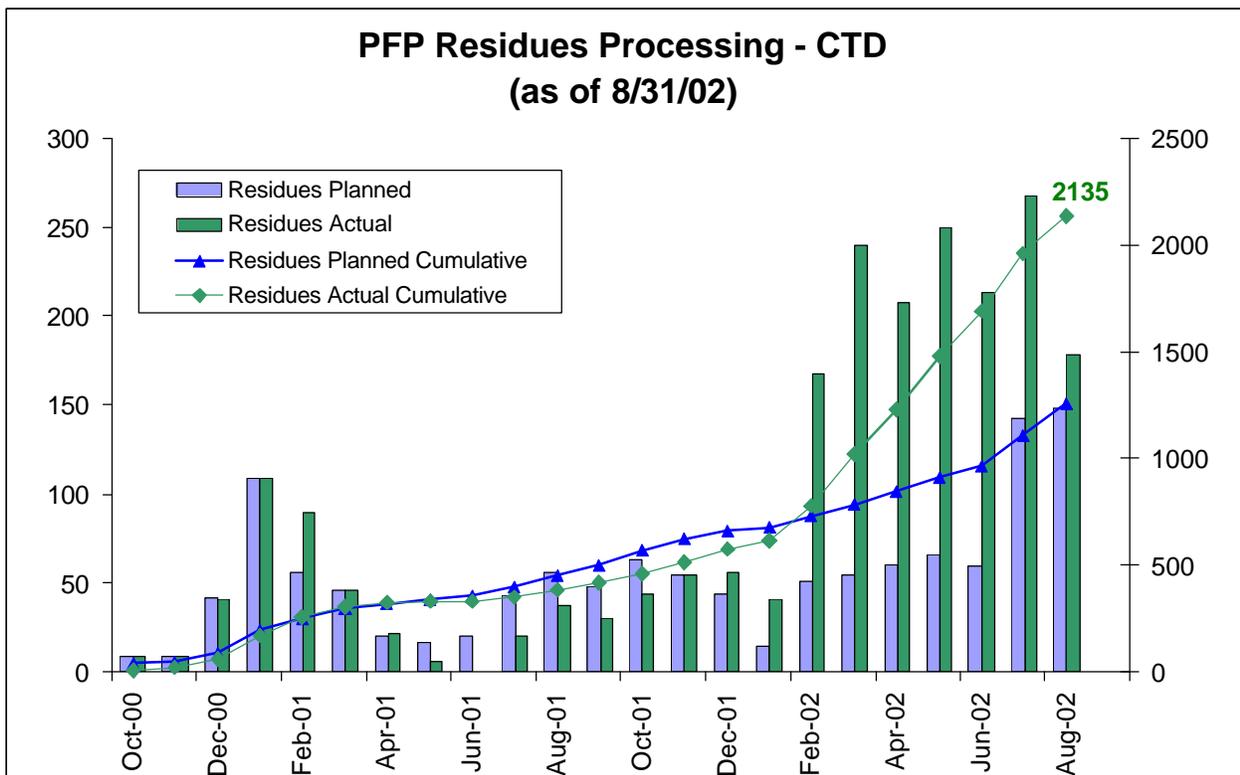
Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-01-501	Package Alloys for disposition to WIPP or stabilize & package per DOE-STD-3013 criteria	DNFSB	6/30/2001		10/31/2002	Moisture Measurement Resolution +60 Days
TRP-01-502	Complete Installation of the Bagless Transfer System	RL	10/1/01	8/29/01		Complete
TRP-04-505	Hot Startup of the 2736-ZB Stabilization & Packaging System	PI	11/27/01	11/29/01		Complete
TRP-02-505	Complete Direct Discard of Selected Solutions	TPA	3/31/02	3/11/02		Complete
TRP-01-500	Complete Stabilization & Packaging of Plutonium Solutions	DNFSB	7/31/02	7/29/02		Complete
TRP-02-501	Complete Stabilization & Packaging of Polycubes	DNFSB	8/31/02		3/21/2003	On schedule to revised DOE IP date of 3/2003
TRP-02-504	Complete Repackaging & Shipment of Hanford Ash to CWC	TPA	8/31/02	3/7/02		Complete
TRP-04-506	Completion of all PU Stabilization & Packaging	PI Stretch	2/18/04		5/31/04	Projected delay due to change in moisture measurement method.
TRP-04-507	Complete Repackaging & Shipment of Sand, Slag and Crucible to CWC	TPA	1/30/04		1/31/03	Ahead of Schedule
TRP-03-500	Complete Stabilization & Packaging of Residues	DNFSB	4/30/04			On Schedule
TRP-05-500	Complete Stabilization & Packaging of Oxides >30% Pu/U	DNFSB	5/31/04			On Schedule
TRP-08-500	Dismantlement NEPA/ CERCLA Decision Document Complete	RL	9/30/05			On Schedule
TRP-06-501	Complete 100% of Legacy Pu Holdup Removal & Disposition	PI Stretch	9/30/06			On Schedule
TRP-06-502	232-Z & PPSL Annex Demolished to Slab-on-Grade	PI Stretch	9/30/06			On Schedule
TRP-06-503	Protected Area Reduced to 2736-Z/ZB and Yard Storage	PI Stretch	9/30/06			On Schedule
TRP-06-504	Relocate SNM Required to Reduce the PFP Protected Area	PI Stretch	9/30/06			On Schedule

PERFORMANCE OBJECTIVES

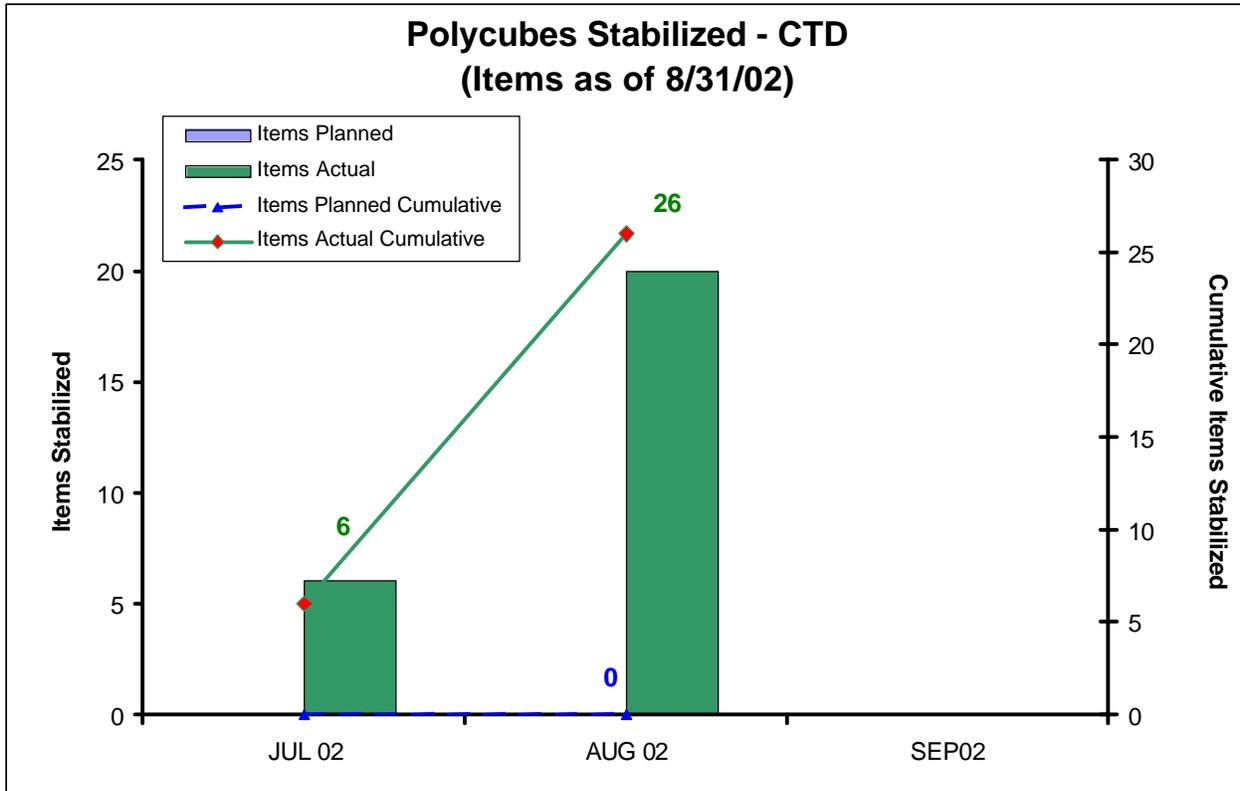
METALS/ALLOYS/OXIDES STABILIZATION



RESIDUE STABILIZATION



POLYCUBE STABILIZATION



FY 2002 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FISCAL YEAR TO DATE STATUS – (\$000)

By PBS		BCWS	BCWP	ACWP	SV \$	SV %	CV \$	CV %	BAC
PBS CP03	Maintain Safe and Secure	3,805.5	4,092.1	4,049.5	286.6	7.5%	42.6	1.0%	4,359.5
WBS 3.3.3.1	SNM								
PBS CP03	Maintain Safe and	24,056.3	24,337.9	23,893.8	281.6	1.2%	444.1	1.8%	26,698.6
WBS 3.3.3.2	Compliant PFP								
PBS CP03	SNM Stabilization	25,288.2	26,613.8	21,322.1	1325.6	5.2%	5291.7	19.9%	28,625.9
WBS 3.3.3.3									
PBS CP03	Disposition SNM	3,830.4	3,902.3	2,980.3	71.9	1.9%	922.0	23.6%	4,245.0
WBS 3.3.3.4									
PBS CP03	Disposition PFP Facility	1,295.9	1,347.4	1,987.8	51.5	4.0%	(640.4)	-47.5%	1,385.6
WBS 3.3.3.5									
PBS CP03	PFP Project Management	15,867.5	16,140.6	16,694.6	273.1	1.7%	(554.0)	-3.4%	11,271.9
WBS 3.3.3.6	and Support								
Total:		\$74,143.8	\$76,434.1	\$70,928.1	\$2,290.3	3.1%	\$5,506.0	7.2%	\$76,586.5
PBS CP03	W-460 PuSH Line Item	425.6	3,485.0	545.2	3,059.4	718.8%	2,939.8	84.4%	2,326
WBS 3.3.3.7	Support								
Total:		\$74,569.4	\$79,919.1	\$71,473.3	\$5,349.7	7.2%	\$8,445.8	10.6%	\$78,912.1

FY TO DATE SCHEDULE / COST PERFORMANCE

The favorable schedule variance continues to be primarily the result of higher than planned processing, completion of solutions stabilization and packaging, and completion of FY01 scope.

The favorable cost variance is down slightly from last month. A continuance of higher than planned performance within the Stabilization Project areas is the primary contributor to the positive status.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

SCHEDULE VARIANCE ANALYSIS: (+ \$5.3M)

3.3.3.1 Maintain Safe & Secure SNM

Description and Cause: The eight percent favorable schedule variance (+\$0.3M) is due to the performance of FY01 Remote Monitoring System (RMS) work scope in FY02.

Impact: None.

Corrective Action: None.

3.3.3.2 Maintain Safe & Compliant PFP

Description and Cause: The current one percent favorable schedule variance (+\$0.3M) is within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.3 SNM Stabilization

Description and Cause: The five percent favorable schedule variance (+\$1.3M) is primarily attributable to the progress in solutions and residues projects where production has respectively doubled and trebled baseline expectations. Completion of prior year (FY 2001) carryover workscope in the solutions stabilization and packaging also contribute to this positive variance.

Impact: Progress within the solutions stabilization project is now complete and supports the Defense Nuclear Facilities Safety Board (DNFSB) milestone (TRP-05-500) completion date of July 31, 2002. Additionally, all FY 2002 planned processing of Sand Slag, and Crucible material was completed in late May. Processing of planned FY 2003 SS&C material is underway and continues to exceed baseline expectations.

Corrective Action: None.

3.3.3.4 Disposition SNM

Description and Cause: The two percent favorable schedule variance (+\$0.1M) is within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.5 Disposition PFP Facility

Description and Cause: The four percent favorable schedule variance (+\$0.1M) is within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.6 PFP Project Management & Support

Description and Cause: The two percent favorable schedule variance (+\$0.3M) is within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.7 W-460 PuSH Line Item Support

Description and Cause: The 719 percent favorable variance (+\$3.1M) is attributable to construction and facility modification activities scheduled in FY 2001 being completed in FY 2002.

Impact: None. The project completed more than a year ahead of schedule.

Corrective Action: None.

COST VARIANCE ANALYSIS: (+ \$8.4M)

3.3.3.1 Maintain Safe & Secure SNM

Description and Cause: The one percent favorable cost variance (\$0.04M) continues to be within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.2 Maintain Safe & Compliant PFP

Description and Cause: The two percent favorable cost variance (+\$0.4M) continues to be within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.3 SNM Stabilization

Description and Cause: The 20 percent favorable cost variance (+\$5.3M) continues to be attributable to sustained higher than planned production within the Solutions Project that has provided the resources for second shift processing Sand, Slag, and Crucible material (SS&C). As a result processing of all planned FY 2002 SS&C material was completed in late May.

Impact: None. This favorable variance will be used to fund other areas of the project and to meet savings commitments identified in the FH contract.

Corrective Action: None.

3.3.3.4 Disposition SNM

Description and Cause: The 24 percent favorable cost variance (+\$0.9M) is primarily attributable to efficiently completing work with less than planned staff.

Impact: None.

Corrective Action: Processing of clearances for additional staff was in final processing in July. However, this favorable variance is expected to continue and will be used to fund other areas of the project.

3.3.3.5 Disposition PFP Facility

Description and Cause: The 48 percent unfavorable cost variance (-\$0.6M) is the result of Accelerated PFP Closure scope being worked in advance of the BCR approval, per direction by RL.

Impact: None.

Corrective Action: Additional staff is being hired to support accelerated PFP Decommissioning activities.

3.3.3.6 PFP Project Management & Support

Description and Cause: The three percent unfavorable cost variance (-\$0.5M) continues to be within the reportable threshold.

Impact: None.

Corrective Action: None.

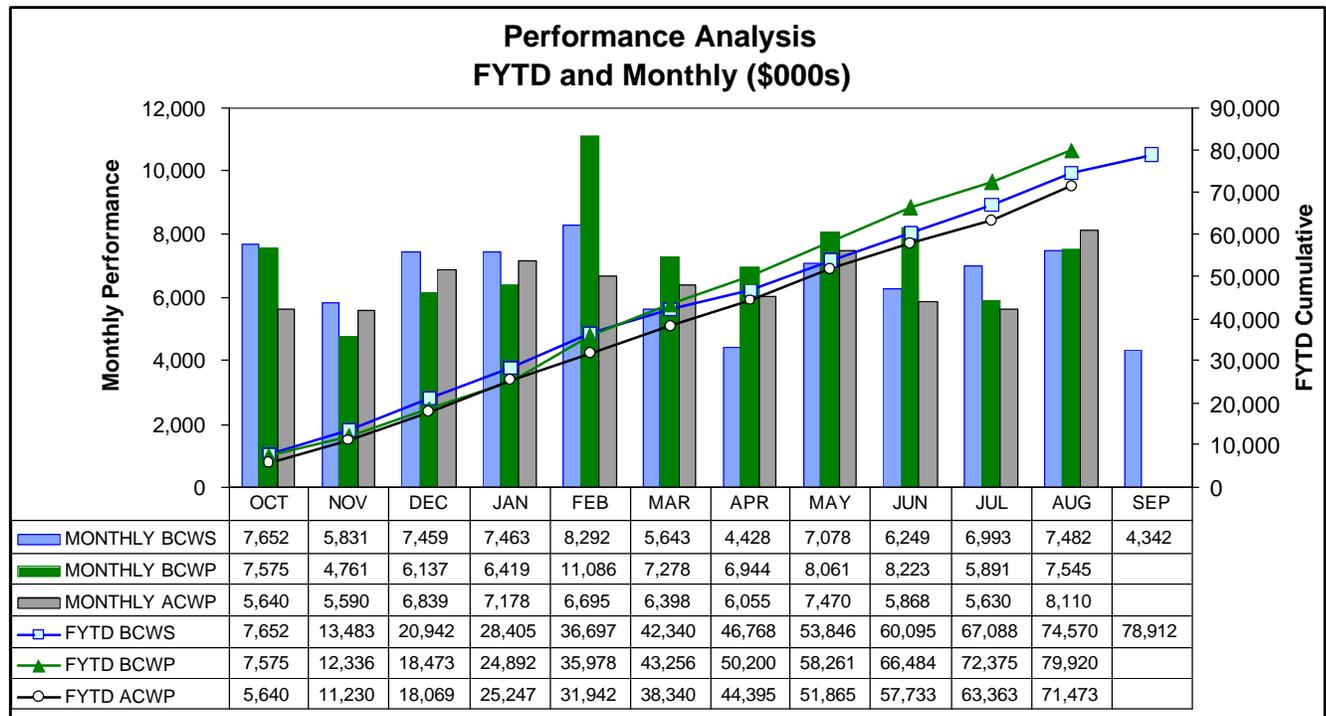
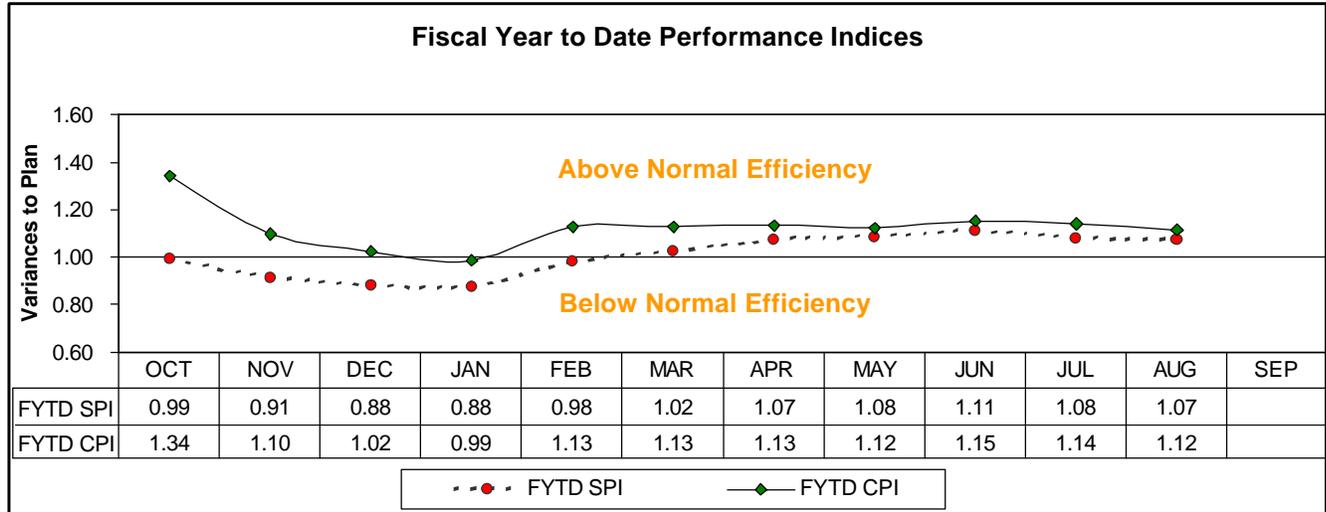
3.3.3.7 W-460 PuSH Line Item Support

Description and Cause: The 84 percent favorable variance (+\$2.9M) is attributable to efficient management of the project resulting in completing the project under budget.

Impact: None.

Corrective Action: Funding is in the process of being reprogrammed.

Schedule / Cost Performance (MONTHLY AND FYTD)



FUNDS MANAGEMENT

FYTD FUNDS VS SPENDING FORECAST (\$000)

	FH Funds Reallocation	FYSF	Variance
3.3.3 Plutonium Finishing Plant			
CP03			
Project Completion - Operating	\$ 84,951	\$ 80,679	\$ 4,272
- Line Item	\$ 570	\$ 545	25
Total	\$ 85,521	\$ 81,224	\$ 4,297

[Status through August 2002]

Note: FH Reallocation reflects an FYSF adjusted for scope deletions, deferrals, and identified savings to address funding shortfalls, additional unplanned scope, and cost increases.

ISSUES

Technical Issues

Issue: Oxide items with high levels of chloride salts are currently identified in the baseline as being processed via direct thermal stabilization.

Impact: Recent testing by PNNL indicates that the approach isn't feasible.

Corrective Action: A follow-up study recommended washing the chloride salts in the existing solutions precipitation equipment to remove the salts. Laboratory testing of high chloride oxides has begun. Preliminary results are somewhat encouraging in that one of the items was successfully washed without generation of thick slurries and two other items, when opened, were discovered to contain very little chloride. Technical staff graded four washing options and the highest rated one is being mocked up for surrogate testing. Also cold testing has begun on corrosion rates for the furnace and related equipment. The additional test information will support development of detailed process plans. PNNL has completed several furnace runs to test corrosion rates and has found corrosion rates with the one percent salt surrogate material is highly material dependent with Inconel-600, appearing to corrode the quickest and Hastalloy-214 the slowest. PNNL surrogate testing of the washing hardware mockup is also going well. Both sets of tests are anticipated to be completed by the end of September. In the interim, preparations are underway to begin the detailed design work early in October. A listing of functional design requirements will be drafted and methods for accomplishing the design work are being explored. In addition, methods for doing a prescreen to identify items that do not require washing are also being explored.

Regulatory, External, and DOE Issues and DOE Requests

Issue: Need approval so Loss on Ignition (LOI)/Thermal Gravimetric analysis (TGA) analysis may be performed on a sampling of canned items.

Impact: Impacts execution of accelerated schedule and cost.

Corrective Action: Approval of Stabilization & Packaging Equipment (SPE) Process Qualification Plan expected from RL by September 16, 2002. A contractual letter to RL on their delayed response is being prepared by PFP.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR No.	Date Originated	Description	Impact		Approved	Status
			Days	Dollars (\$000s)		
FH-2001-008	8/13/01	MYWP Bridge		N/A		At RL
FH-2002-010	2/28/02	Revise Labor Rates		\$2,590	8/22/02	Partial Approval
CP03-02-030	5/20/02	Accelerate D&D Planning		\$3,000	8/7/02	RWOA
CP03-02-030, R1	5/20/02	Accelerate D&D Planning		\$3,000		At RL
CP03-02-032	6/30/02	Transfer FY 2003 Solutions Scope		- 0 -		In Development
CP03-02-034	7/1/02	Revise Stabilization Schedule		- 0 -		At RL
CP03-02-035	8/7/02	Chloride Wash		- 0 -		On hold
CP03-02-036	8/7/02	Min Safe Changes		- 0 -		In Development
CP03-02-037	8/7/02	Procure Rad Con Equipment		TBD		In Development
CP03-02-038	8/12/02	Polycubes/Alloys DNFSB Milestone		- 0 -		At PFP
CP03-02-039	8/12/02	PFP Accelerated Closure		TBD		In Development
FH-2002-020	7/11/02	Document FY 2002 Cost Savings		\$1,111		At FH