



Section J

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 April 2002.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that two milestones were completed early, one milestone was completed two days late, 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

Procedures continue to be developed for opening, packaging, and leak testing the SafeKeg shipping containers in support of qualifying PFP as a user for material shipments to Lawrence Livermore National Laboratory (LLNL). The Material Balance Area (MBA) 253 turnover inventory was completed. The inventories of Material Balance Area (MBA) 253 (Vaults 192B and 192C) and MBA 250 were combined that will reduce the inventory frequency of these vaults from bi-monthly to semi-annual. The replacement package X-ray machine for 2701-ZD arrived on-site the week of April 14th and was installed, tested, and declared operational on April 25th.

Maintain Safe and Compliant PFP WBS 3.3.3.2

The annual Land Disposal Restriction (LDR) report was submitted to the Washington Department of Ecology ahead of the April 30, 2002 commitment. PFP input to the preparation of the annual Polychlorinated Biphenyl (PCB) Document Log as required by 40 Code of Federal Regulations (CFR) 761.180(a) was reviewed and certified on April 23rd. This document includes information on PCB waste management activities including generation, storage, shipment, and disposal activities along with details on waste package identification, PCB waste weights, PCB waste of of services dates, wste storage locations, manifesting information, and PCB waste disposal sites. The PFP Training website (RapidWeb) is now on-line. This website consolidates information from a variety of sources into a single location and also provides links to other related areas. Although early in its infancy this site includes training schedules and courses, the training administration manual, and the required reading program. Inclusion of additional training related information continues.

Stabilization of Nuclear Material WBS 3.3.3.3

Metals, Alloys, Oxides and Polycubes — During April thirty-three Bagless Transfers Cans (BTC) were welded and thirty furnace runs completed in 234-5Z and 2736-ZB. A total of 564 BTCs have been made in the 234-5Z and 2736-ZB facilities as of the end of April. Stabilization of Magnesium Hydroxide precipitated material began in mid April and is expected to be completed by mid July. Startup of the polycube stabilization process was initiated in mid April; approximately five months ahead of schedule. During startup the furnace off-gas flow rates were lower than expected and a series of tests are being conducted to evaluate the cause of this anomaly. These tests are expected to be completed in late May 2002. Completed installation of three additional Thermo Gravimetric Analyzers in 234-5 to measure moisture in stabilized oxides was completed and readiness review activities were initiated

Residues — Packaged 208,426 grams of Sand, Slag, and Crucible (SS&C) material into twenty-four Pipe Overpack Containers (POCs) during April. Processing of SS&C continues to exceed the baseline schedule by twenty-five percent. Shipment of POCs containing SS&C was initiated and forty-four POCs were shipped to the Central Waste Complex (CWC). The incorporation of the new Waste Isolation Pilot Plant Waste Acceptance Criteria (WIPP WAC) into the affected procedures was completed. The procedures have been transmitted to the Carlsbad Field Office (CBFO) for their review/approval in mid May. The CBFO must approve the procedure before work can be performed under the procedures.

Solutions ³/₄ During April the Solutions Stabilization Project stabilized 260 liters of material. The precipitation feed was shifted to the Double Pass/Single Pass Filtrate Solution family in mid April. This represents the last major Solution family (~1,240 liters) to stabilize. Guidance was issued by DOE-AL regarding use of the TGA-LOI (inert) as an approved moisture measurement method for impure oxides.

Outer Can Packaging ³/₄ Eighty-seven 3013 Containers were produced during the April reporting period raising the fiscal year to date total to 130 containers. Packaging of oxides was initiated on April 8; six weeks ahead of the scheduled May 22 start date. Outer Can Welder production rates were sufficient to work off the current year backlog material stored in bagless transfer containers.

Project W-460 ³/₄ All Project W-460 construction activities have been completed and final as-built field drawings, punch list and exception items have been completed and closed. The Construction Completion Document (CCD) that will officially close the project has been submitted to RL for approval.

Disposition of Nuclear Material WBS 3.3.3.4

The Engineering Change Notice (ECN) for the Standard Waste Box (SWB) Safety Analysis Report for Packaging (SARP) was approved by RL on April 19th. The SWB is used for transport of larger TRU waste items.

Disposition PFP Facility WBS 3.3.3.5

The Alternate SNM Storage Study was completed and a mechanism is ready to be implemented to assure continuity in the transition from the Project Enhancement Corporation (PEC) led study to the Fluor design team if approval is received from RL to begin functional/conceptual design of the Grout Vault option. Preparation of the Endpoint Criteria Document for PFP Decommissioning has been initiated and coordination with the River Corridor Project to obtain staff support heavily experienced in prior deactivation planning for PUREX/UO₃ and B Plant continues. Significant progress is being made in the accelerated cleanup of the PFP yard area and dismantling of those ancillary structures for which no future use has been identified. All staff and the majority of costs associated with this work are being self-generated by the application of existing base operations resources. Yard cleanup is proceeding at a rapid pace and dismantling of the physical structures will begin within the next few months and extend into FY 2003. Planning for the cleanout and dismantling of the 232-Z facility and the Plutonium Process Support Laboratories office annex is well underway. A mini-Project Management Plan (PMP) is being developed for the 232-Z facility dismantling sub-project to serve as a model for other, large or complex decommissioning activities. The deactivation planning for 241-Z has been initiated. The PFP Decommissioning Project is working with CH2M HILL Hanford Group, Inc. (CHG) Tank Farms to assure that both organizations are in synchronized on the logistical path to support the milestone to discontinue the use of noncompliant transfer lines by June 30, 2005. During April, preparation of a list of Decommissioning Technical Uncertainties was initiated. This is a collaborative effort with the PNNL Technology Management organization for the purpose of identifying areas of project risk and then developing actions, which will minimize planning uncertainty.

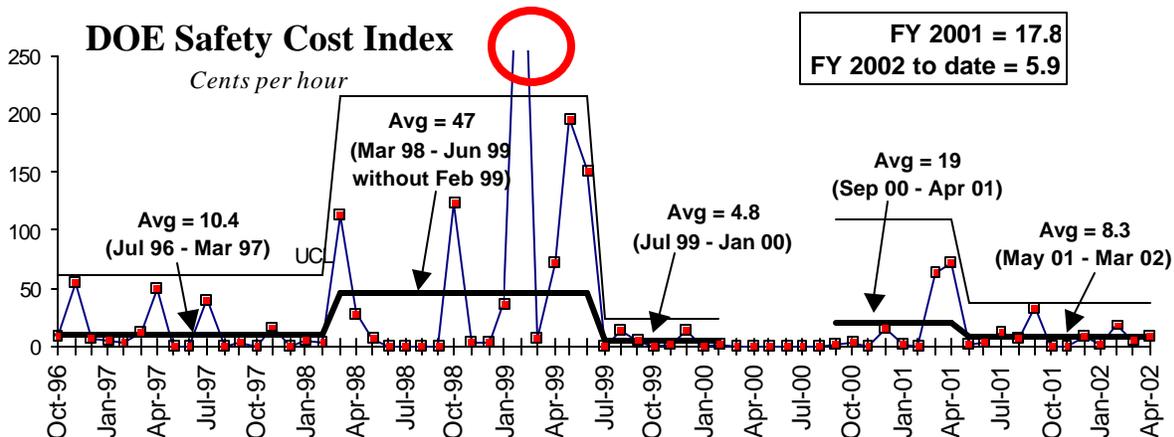
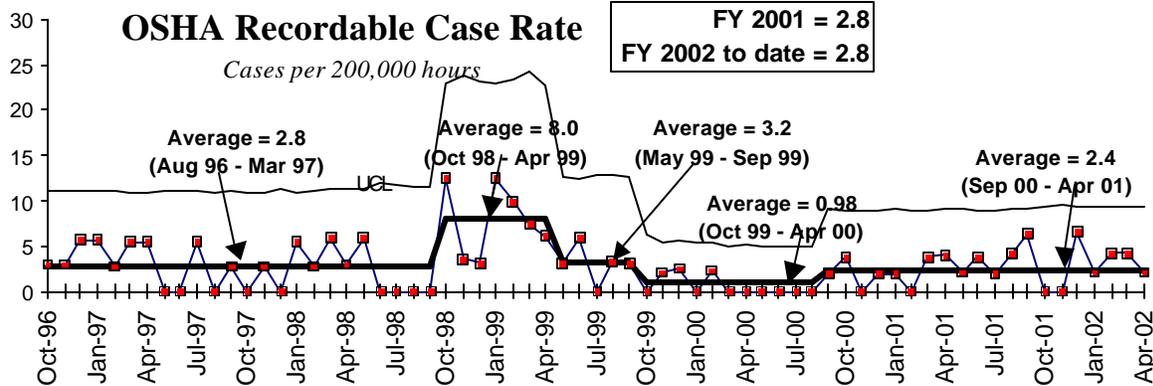
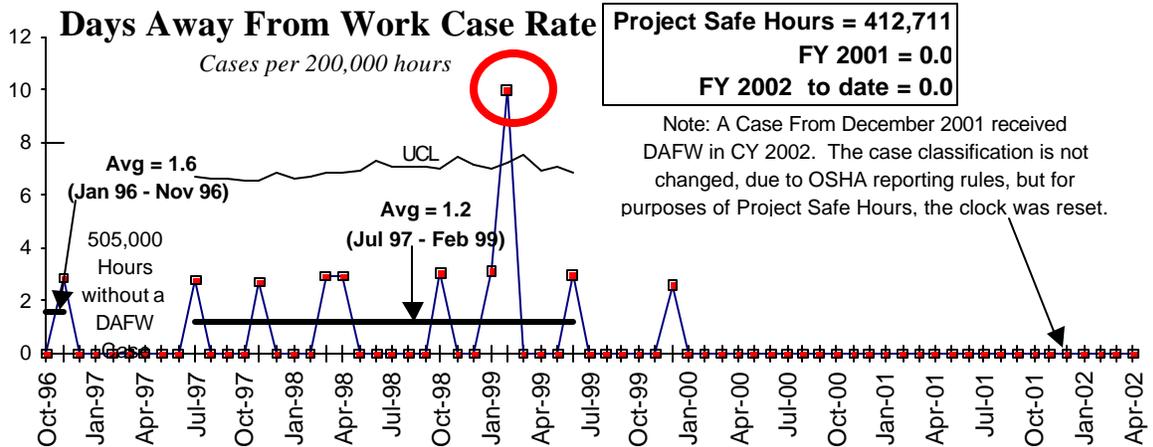
Project Management & Support WBS 3.3.3.6

There have been over 412,000 safe staff hours since the last recorded workday injury in December 2001. Completed preparations for the Voluntary Protection Program (VPP) and submitted application for FH review.

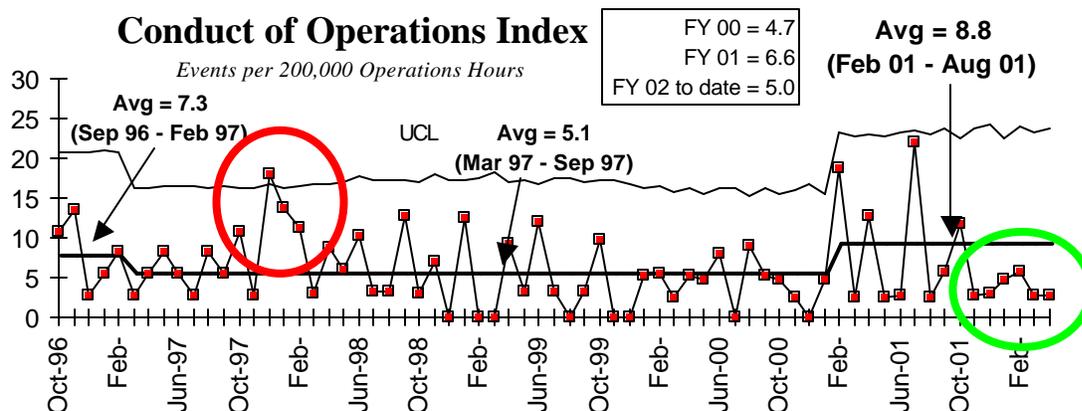
SAFETY



There now have been over 412,000 safe staff hours since the last recordable work day injury. A production pause is scheduled for late May to focus on safety related topics.



CONDUCT OF OPERATIONS



BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Nothing to report at this time.

Opportunities for Improvement

Processing Improvement ³/₄ Plutonium Finishing Plant and contractor staffs have identified opportunities for improving the material control and accountability (MC&A) inventory process at the PFP. The evaluation resulted in three primary potential corrective action areas; Operations, Safeguards and Laboratory Measurements. A schedule has been developed to review and complete the recommendations for the MC&A Productivity Improvement Task Team.

Processing Improvement ³/₄ The Stabilization & Packaging Equipment (SPE) system Process Qualification Application is being prepared for RL submittal in mid May. This plan will enable the SPE system, once qualified, to perform Loss On Ignition/Thermogravimetric Analyzer analysis on a representative sampling of canned items rather than all items. This is significant since the processing throughput is more limited by the LOI/TGA measurement throughput than either the furnace or canning capacity. Without RL approval of the Process Qualification Application the May 2004 commitment to complete stabilization and packaging of oxides 30 wt percent Pu/U will be in jeopardy.

UPCOMING ACTIVITIES

Residues Processing — Complete FY 2002 processing and packaging of Sand, Slag & Crucible material in May 2002.

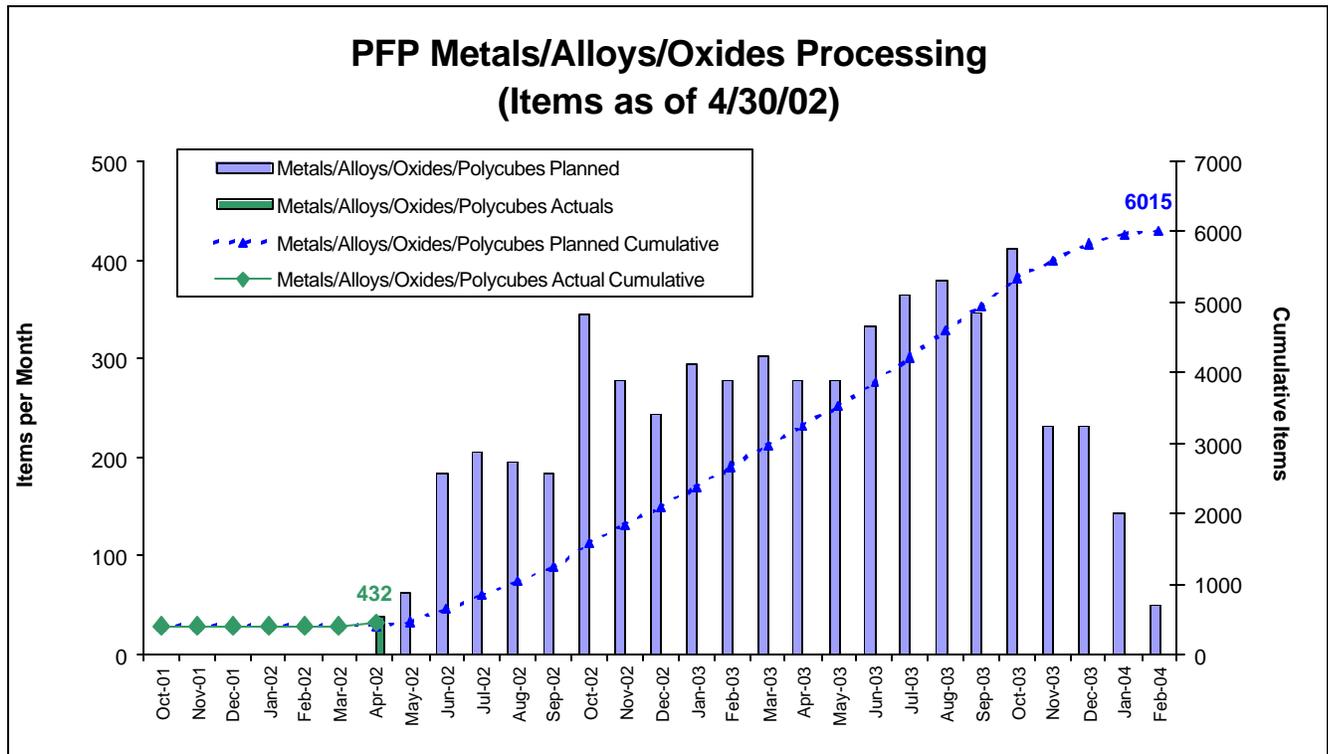
Solutions Processing — Complete solutions stabilization and packaging by August 31, 2002.

MILESTONE ACHIEVEMENT

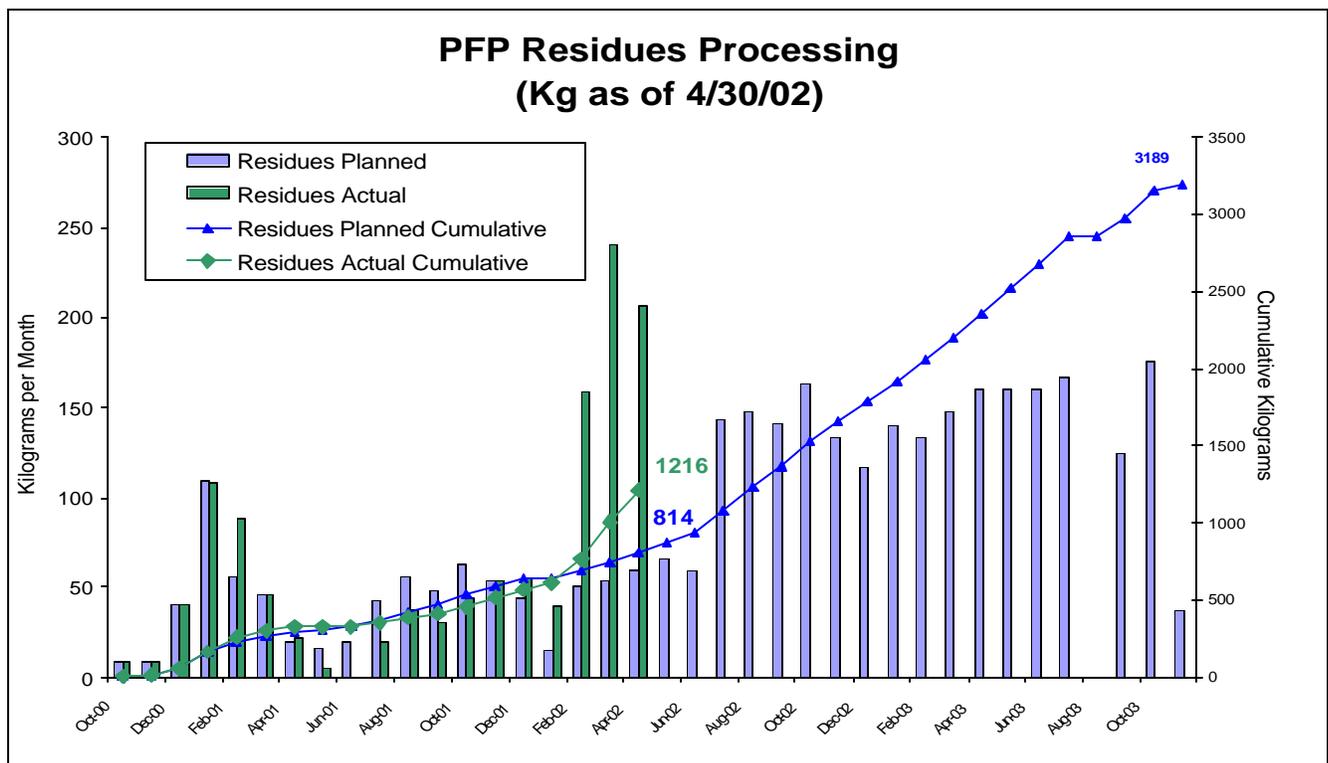
Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-01-501	Package Alloys for disposition to WIPP or stabilize & package per DOE-STD-3013 criteria	DNFSB	6/30/01		12/31/02	Moisture Measurement Resolution +60 Days
TRP-04-505	Hot Startup of the 2736-ZB Stabilization & Packaging 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		Completed ahead of schedule
TRP-01-500	Complete Stabilization & Packaging of Plutonium Solutions	DNFSB	7/31/02		08/31/02	Ahead of schedule to Baseline date of 10/16/02 Behind schedule to DNFSB date of 7/31/02
TRP-02-501	Complete Stabilization & Packaging of Polycubes	DNFSB	8/31/02		3/21/2003	On schedule to Baseline date of 3/21/03 Behind schedule to DNFSB date of 8/31/02
TRP-02-504	Complete Repackaging & Shipment of Hanford Ash to CWC	TPA	8/31/02	3/7/02		Completed ahead of schedule
TRP-04-506	Completion of all PU Stabilization & Packaging	PI Stretch	2/18/04			On schedule
TRP-04-507	Complete Repackaging & Shipment of Sand, Slag and Crucible to CWC	TPA	1/30/04			On 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			Ahead of 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

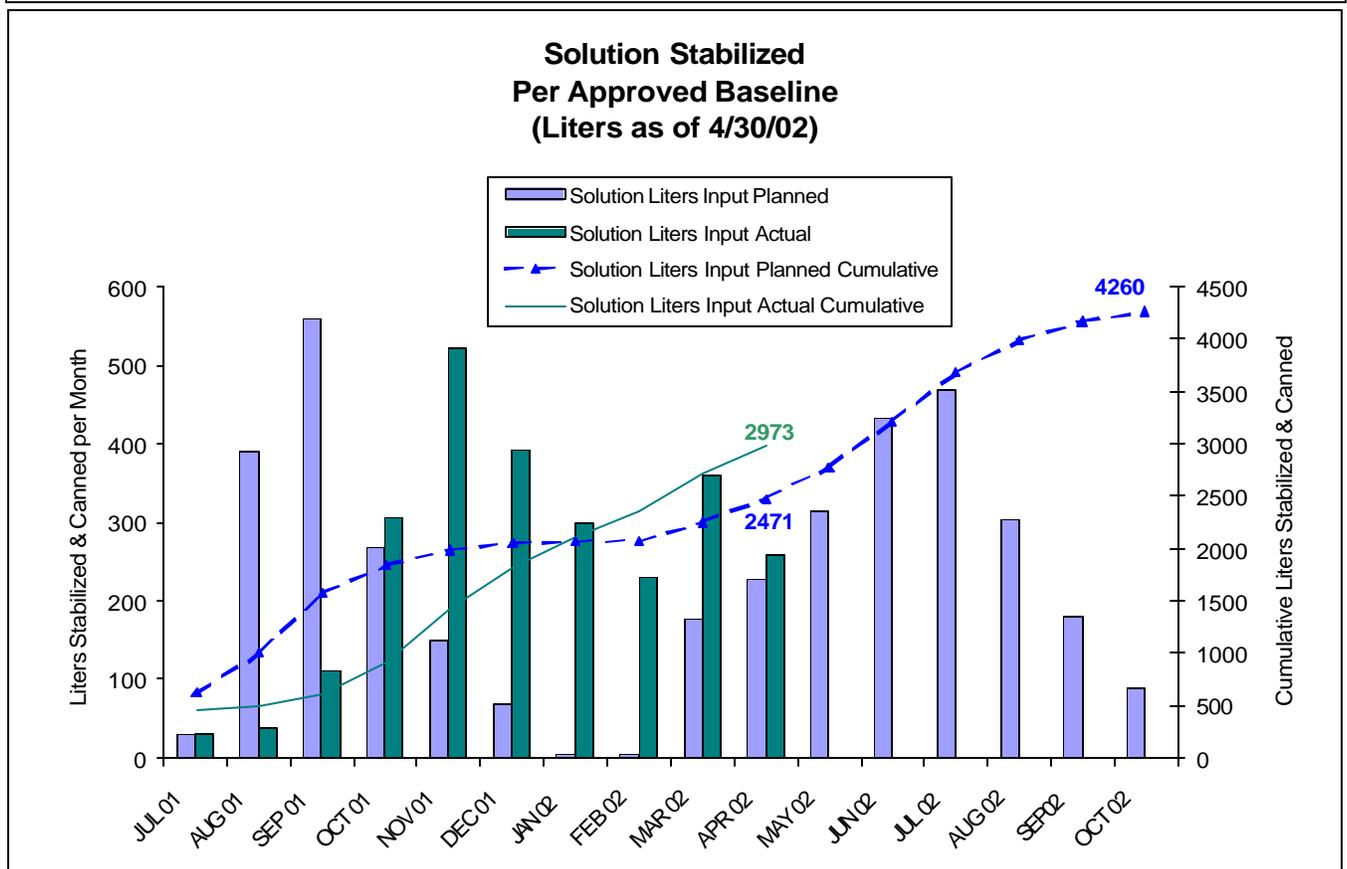
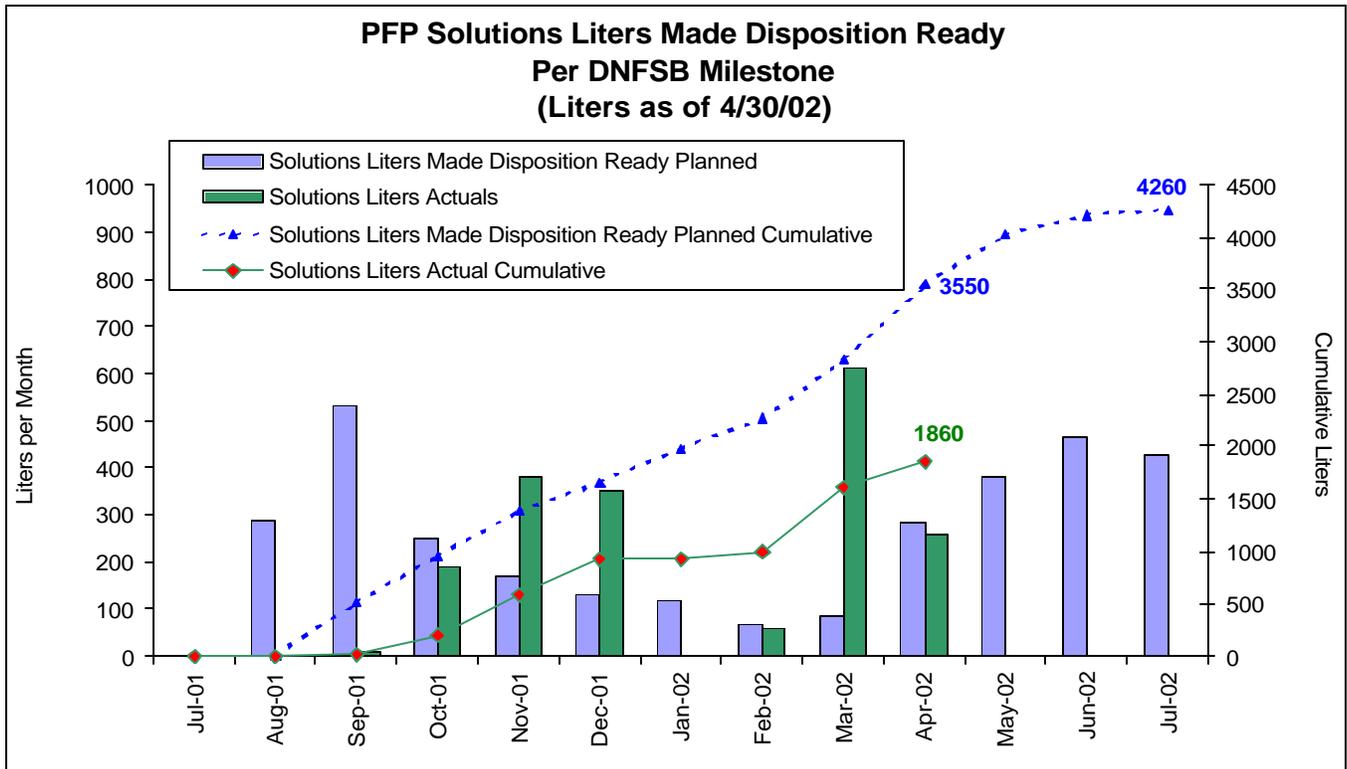
METALS/ALLOYS/OXIDES STABILIZATION



RESIDUE STABILIZATION



SOLUTIONS STABILIZATION



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

By PBS	BCWS	BCWP	ACWP	SV \$	CV \$	SV %	CV %	BAC
PBS CP03 WBS 3.3.3.1 Maintain Safe and Secure SNM	2,034.6	2,388.1	2,404.3	353.5	(16.2)	17%	-1%	4,176.5
PBS CP03 WBS 3.3.3.2 Maintain Safe and Compliant PFP	14,722.9	14,920.5	15,002.7	197.6	(82.2)	1%	-1%	26,628.6
PBS CP03 WBS 3.3.3.3 SNM Stabilization	16,947.0	18,493.9	13,752.4	1546.9	4741.5	9%	26%	29,846.4
PBS CP03 WBS 3.3.3.4 Disposition SNM	2,305.0	2,447.2	1,737.3	142.2	709.9	6%	29%	4,178.9
PBS CP03 WBS 3.3.3.5 Disposition PFP Facility	845.0	711.6	447.6	(133.4)	264.0	-16%	37%	1,385.6
PBS CP03 WBS 3.3.3.6 PFP Project Management and Support	9,488.0	9,653.7	10,480.8	165.7	(827.1)	2%	-9%	11,189.9
Total:	\$46,343	\$48,615	\$43,825	\$2,273	\$4,790	5%	10%	\$77,406
PBS CP03 WBS 3.3.3.7 W-460 PuSH Line Item Support	426	1,585	570	1,159	1,016	272%	64%	2,326
Total:	\$46,768	\$50,200	\$44,395	\$3,432	\$5,805	7.3%	11.6%	\$79,732

FY TO DATE SCHEDULE / COST PERFORMANCE

The current favorable schedule variance represents a five percent improvement from last month. This improvement is primarily attributable to a twenty-five percent schedule improvement in residues processing and packaging, early completion of Project W-460, and restart of the Outer Can Welder operations. Higher than planned steady state production within the solutions stabilization project continues.

The current favorable 11.6 percent cost variance remains virtually unchanged from last month. Sustained higher than planned performance within the Stabilization Project areas continues to be the primary contributor to the positive status, accounting for 7 percent of this positive variance. (Solutions 2.9 percent, Thermal Stabilization 2.7 percent, and Residues 1.4 percent). Production rates since the March 4th restart of the Outer Can Welder have also exceeded expectations. Efficiencies in completing Project W-460 material procurement and execution of construction activities are also contributing factors.

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: (+ \$3.4M)

3.3.3.1 Maintain Safe & Secure SNM

Description and Cause: The seventeen percent favorable schedule variance (\$0.4M) is due to the performance of FY01 Remote Monitoring System (RMS) work scope in FY02.

Impact: None.

Corrective Action: A detailed working level schedule has been implemented to complete FY01 and FY02 RMS work scope this fiscal year.

3.3.3.2 Maintain Safe & Compliant PFP

Description and Cause: The current one percent favorable schedule variance (+\$0.2M) is within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.3 SNM Stabilization

Description and Cause: The nine percent favorable schedule variance (+\$1.5M) is attributable to sustained higher than planned processing of Solutions and SS&C material, Outer Can Welder production rates that were sufficient to work off the current year backlog material stored in bagless transfer containers, and early startup of polycube stabilization process. Completion of prior year (FY 2001) carryover workscope in the solutions and residues processing areas also contribute to this positive variance.

Impact: Current processing production rates project a February 2003 completion of oxide stabilization and packaging; six months ahead of the Defense Nuclear Facilities Safety Board (DNFSB) milestone. Early completion of this activity provides the necessary resources to support the seven year acceleration of the PFP Decommissioning Project.

Corrective Action: None.

3.3.3.4 Disposition SNM

Description and Cause: The six 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 sixteen percent unfavorable schedule variance (-\$0.1M) is attributable to a later than planned start for the Safety Analysis Contract.

Impact: None.

Corrective Action: The contract for the PFP Deactivation & Decommissioning Safety Analysis has been placed.

3.3.3.6 PFP Project Management & Support

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

Impact: None.

Corrective Action: None.

3.3.3.7 W-460 PuSH Line Item Support

Description and Cause: The 272 percent favorable variance (+\$1.2M) is attributable to construction and facility modification activities that were scheduled in FY 2001 were completed in FY 2002.

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

Corrective Action: None.

COST VARIANCE ANALYSIS: (+\$5.8M)

3.3.3.1 Maintain Safe & Secure SNM

Description and Cause: The one percent unfavorable cost variance (-\$0.2M) is within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.2 Maintain Safe & Compliant PFP

Description and Cause: The one percent unfavorable cost variance (-\$0.8M) is within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.3 SNM Stabilization

Description and Cause: The favorable twenty-six percent cost variance (+\$4.7M) 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) that is also exceeding baseline expectations.

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

Corrective Action: None.

3.3.3.4 Disposition SNM

Description and Cause: The twenty-nine percent favorable cost variance (+\$0.7M) is primarily attributable to efficiently completing work with less than planned staff.

Impact: None.

Corrective Action: This favorable variance will be used to fund other areas of the project.

3.3.3.5 Disposition PFP Facility

Description and Cause: The thirty-seven percent favorable cost variance (+\$0.3M) is directly attributable to a slower than planned transition of technical staff from Project W-460 to the Decommissioning Project, and completion of Tank 241-Z-361 Applicable or Relevant and Appropriate Requirements (ARAR) scope under budget.

Impact: None.

Corrective Action: Transition of technical staff from Project W-460 and the Direct Discard campaign is underway to support the Decommissioning Project's planned staffing levels. The Tank 241-Z-361 under run is currently supporting accelerated activities in the Yard Transition area.

3.3.3.6 PFP Project Management & Support

Description and Cause: The nine percent unfavorable cost variance (-\$0.8M) is attributable to the actual cost of labor liquidating at a higher rate than what was in the planning rates. Higher than planned staff are also charging to this account to support Strategic Planning for the Alternate Storage Study and the unplanned OA-50 Assessment.

Impact: Underruns in other accounts will help offset these projected over-runs.

Corrective Action: Management is reviewing appropriate charging to this account.

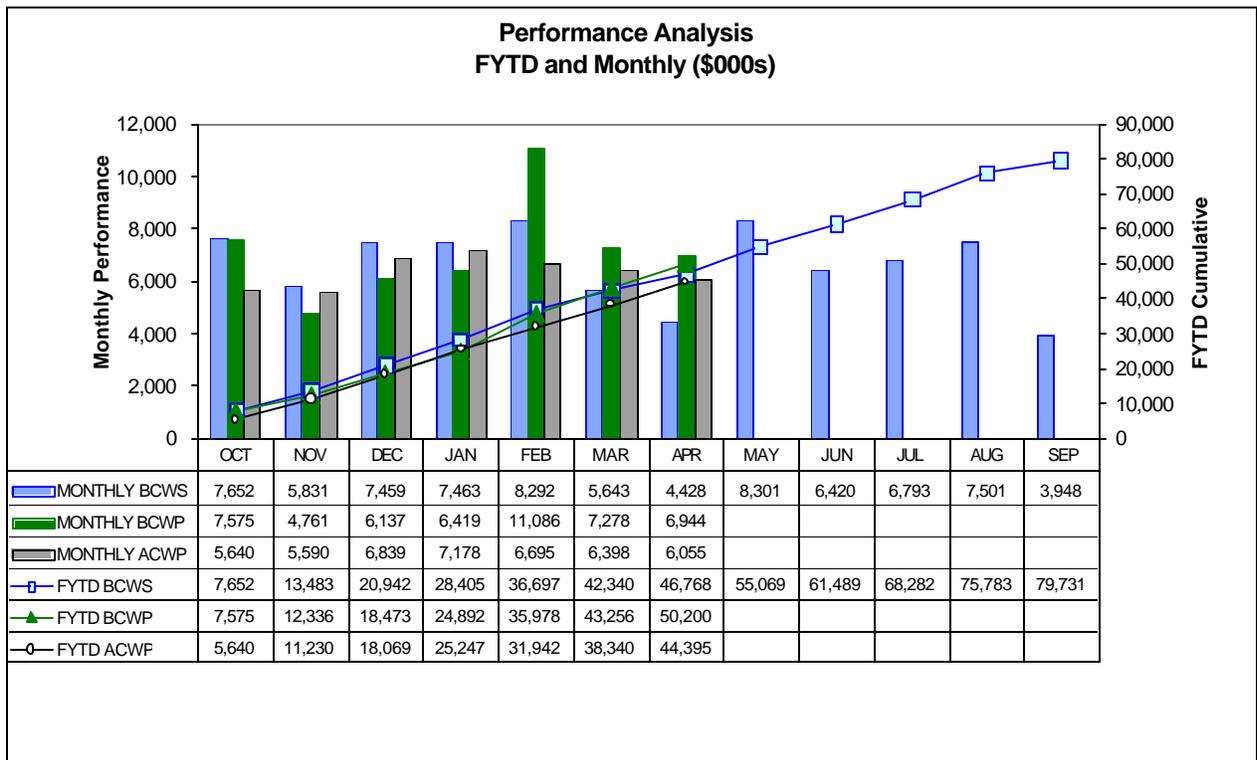
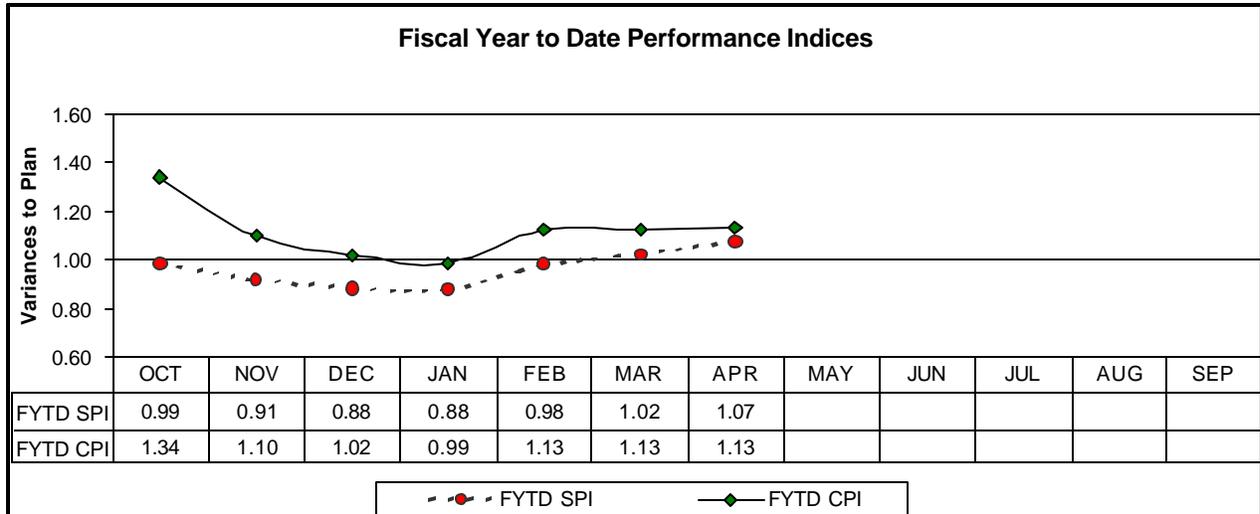
3.3.3.7 W-460 PuSH Line Item Support

Description and Cause: The 64 percent favorable variance (+\$1.0M) is attributable to the movement of work scope for the enhanced security system from line item to expense.

Impact: None.

Corrective Action: Funding is now available for reprogramming.

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	\$ 84,695	\$ 85,433	\$ (738)
- Line Item	\$ 570	\$ 566	4
Total	\$ 85,265	\$ 85,999	\$ (734)

[Status through April 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: There is no alternative moisture measurement system in place to support processing of plutonium alloys and impure oxides.

Impact: Completion of solutions and polycube processing and stabilization activities will be delayed approximately two and one half months.

Corrective Action: RL has authorized use of the TGAs in the Loss-On-Ignition mode with inert gas in glovebox HA-20MB for impure oxides. Critical Mass Laboratory (CML) and precipitated filtrates can now be processed and sampled for moisture content in 234-5Z. This action is complete.

Regulatory, External, and DOE Issues and DOE Requests

Issue: No other issues identified at this time.

Impact: None at this time.

Corrective Action: None at this time.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR No.	Date Originated	Description	Impact		Date Approved	Status
			Days	Dollars (\$000s)		
CP03-02-001	8/13/01	MYWP Bridge (FH-2001-008)				At DOE
FH-2002-008	1/8/02	Reduce 3013 Surveillance System (CP03-02-013)		(\$1,075)	4/4/02	Approved
CP03-02-014	2/6/02	SRS Acceptance Criteria #2		\$267		At FH
CP03-02-015	2/19/02	Remove FY 2002 Neg Mgmt Res		\$6,289		At DOE
FH-2002-008	2/19/02	Replace/Defer FY 2002 Work Scope (CP03-02-016)		(\$750)	4/4/02	Approved
CP03-02-017	3/6/02	Integrated Surveillance Program		\$196		At FH
CP03-02-018	3/6/02	FY 2002 IWOs		(\$1,685)		At FH
FH-2002-010		Revise Labor Rates		\$2,590		At DOE
FH-2002-006	2/28/02	BPA Rate Increase		\$70	4/19/02	Approved
CP03-02-021	2/28/02	Incorporate DOE Comments		\$0	4/15/02	Approved
FH-2002-011	2/20/02	10 CFR 830 Implementation		\$0		At DOE
CP03-02-023	2/20/02	Revise WIPP/WAC Requirements			On hold pending WIPP audit	
CP03-02-024	2/20/02	CWC Security Upgrades		\$144		At FH
CP03-02-025	2/20/02	OSR Revisions for Fire Hazards		\$87	4/17/02	Approved
CP03-02-027	2/20/02	Re-Timephase POC Procurements		\$0	4/1/02	Approved
	2/20/02	OA-50 ISMS Assessment		TBD		In development
	2/20/02	NDA Lab Assessment		TBD		In development
	2/20/02	Consolidate NDA Program		TBD		In development
	3/6/02	Accelerated Deinventary		\$3,000		In development
CP03-02-029	4/30/02	Project W-460 Rate Adjustment		\$51	4/30/02	Approved