



Section J

Plutonium Finishing Plant

PROJECT MANAGERS

G.H. Sanders, RL
(509) 372-1786

G.W. Jackson, FH
(509) 373-6622

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 May 2002.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that three 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

Negotiations have been held, and progress is being made with RL, DOE-HQ, International Atomic Energy Agency (IAEA), and Protection Technology Hanford (PTH) in establishing a path forward to stabilize and package IAEA safeguarded material in vault three to 3013 criteria without losing IAEA surveillance continuity.

Maintain Safe and Compliant PFP WBS 3.3.3.2

The Notice of Construction (NOC) for stabilization, deactivation, and demolition of ancillary buildings and structures was prepared and submitted to RL. Installation of 19 Canberra Continuous Air Monitors within the 234-5Z building has been initiated and is expected to be completed by July 31st. The Washington Department of Ecology's (WDOE) compliance inspection of the emergency diesel storage tank was supported by PFP staff. The 291-Z-1 stack replacement probe installation was completed and the probe is now operational.

Stabilization of Nuclear Material WBS 3.3.3.3

Metals, Alloys, Oxides and Polycubes — During May, 42 Bagless Transfer Containers (BTCs) were welded and 28 furnace runs were completed in 234-5Z and 2736-ZB. A cumulative total of 578 BTCs have now been made in the 234-5Z and 2736-ZB facilities. Stabilization of Magnesium Hydroxide precipitated material, which began in mid April, continues with 99 of the 607 liters stabilized. Testing and implementation of the new polycube furnace program is proceeding but is impacting restart of the polycube processing campaign. A Safeguards Termination Letter (STL), for discard of 1.5 metric tons of less than ten weight percent plutonium Mixed Oxide (MOX), was submitted to RL on May 30th. RL approval is requested by June 30th. A Technical Evaluation of processing options for high chloride oxides was completed by PNNL. This evaluation recommended washing in the existing solutions precipitation columns. An initial engineering evaluation was completed for the use of the existing solutions precipitation columns and other glovebox equipment to support washing of high chloride oxides. The evaluation indicated the equipment is useable with modifications. Testing of real material is planned for June that should allow scoping and resource requirements of the chloride wash effort to be further defined.

Residues ³/₄ During May 220,336 grams of Sand, Slag, and Crucible (SS&C) material was packaged into 29 Pipe Overpack Containers (POCs). Processing of SS&C is exceeding the baseline schedule and all scheduled FY02 Sand, Slag and Crucible (SS&C) was packaged by May 31, 2002. Processing of FY03 SS&C material is now underway. Fourteen POCs were shipped to the Central Waste Complex (CWC) in

May. The new Waste Isolation Pilot Plant Waste Acceptance Criteria (WIPP WAC) requirements were incorporated into the affected NDA procedures and approved by the required May 17, 2002 implementation date. Hanford was the first site completing this implementation in the entire DOE complex. The Environmental Protection Agency (EPA) has approved the waste characterization activities conducted at the Plutonium Finishing Plant (PFP).

Solutions ³/₄ During May the Solutions Stabilization Project stabilized 800 liters.

Outer Can Packaging ³/₄ Thirty-four 3013 Containers were produced during the May reporting period with a fiscal year to date total of 223 containers. PFP management continues to seek concurrence from the Savannah River Site for use "as is" for the first 358 3013 containers that have been produced.

Disposition of Nuclear Material WBS 3.3.3.4

A review of conditions and circumstances associated with an anomalous Bagless Transfer Can (H-5430) was completed and a draft report was issued as a white paper on May 17, 2002.

Disposition PFP Facility WBS 3.3.3.5

In May, RL formally advised FH that \$3 million in supplemental FY 2002 funds would be made available in June to begin the ramp-up of the accelerated PFP Decommissioning Project. RL also authorized FH to begin updating the project baseline to accelerate completion from 2016 to 2009. A formal kickoff meeting was held shortly thereafter on May 15th, to initiate this effort. The Applicable or Relevant and Appropriate Requirements (ARARs) report for Tank 241-Z-361 was submitted to RL on May 9th. Ongoing discussions with RL and the Environmental Protection Agency (EPA) may necessitate revising the report in the future. The PFP Special Tasks Team completed draining, flushing, and removal of Potassium Hydroxide (KOH) line originating in room 337 (zone 1) and running down to room HA 46 sample station (zone 3). Removal of the remaining KOH line is currently scheduled, pending resources. This work completes the mitigation of the last remaining Facility Vulnerability Assessment item ranked at >36 for PFP. Significant progress is being made in accelerated cleanup of the PFP yard area and dismantling of those ancillary structures for which no future use has been identified. Existing resources are conducting this work. Progress this month includes the removal of the 2734-Z structure and deactivation of the steam line to 2715-Z. The removal of the underlying 2734-Z concrete slab and the steam line removal are ongoing. Neither of these facilities is scheduled to be dismantled under the current baseline until FY 2014. Tri-Party Agreement (TPA) negotiations on PFP decommissioning have resulted in a draft set of TPA milestones expected to be issued for public comment in June.

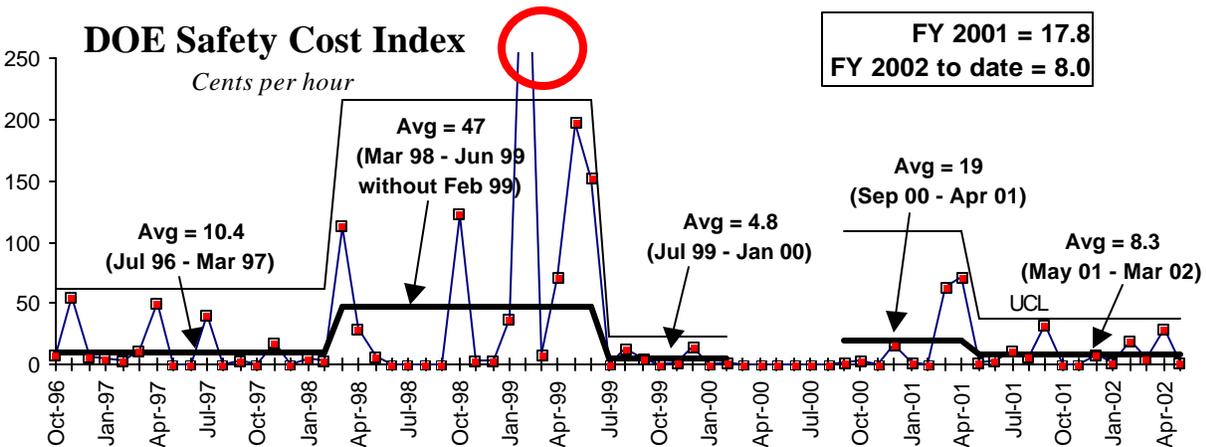
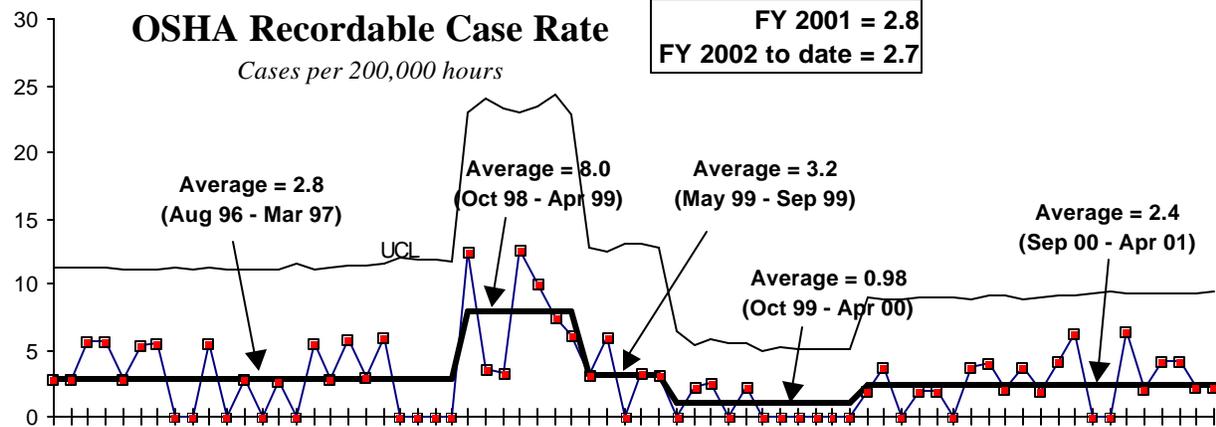
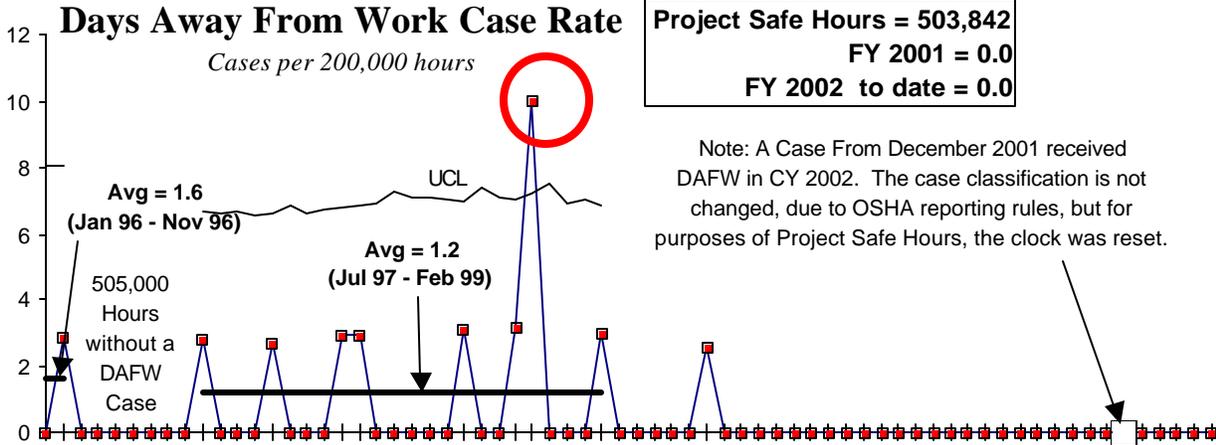
Project Management & Support WBS 3.3.3.6

The Facility Evaluation Board (FEB) conducted a focused assessment of the plant's chemical management and facility vulnerability corrective actions. Also reviewed during the May 6-20 visit were engineering, operations, and safety. The FEB is expected to issue a final report the week of June 10th. During the week of May 13, 2002, a team consisting of 15 personnel conducted a Voluntary Protection Program (VPP) self-assessment of the safety and health programs and processes. The team evaluated the program based on the criteria for the five VPP tenets required by the Occupational Safety and Health Administration (OSHA), and the U.S. Department of Energy (DOE) for employers wishing to participate in the DOE VPP. Based on document review, 91 employees, and four days of field observations, the team was able to reach several conclusions regarding the status of PFP's effort to implement an effective VPP. Overall, the team concluded that the PFP has met, and in some cases exceeded the expectations and requirements for the DOE VPP. There were however, areas identified that will require some improvement to ensure peak VPP performance. This evaluation meets the VPP intent and requirements for an annual safety and health review.

SAFETY

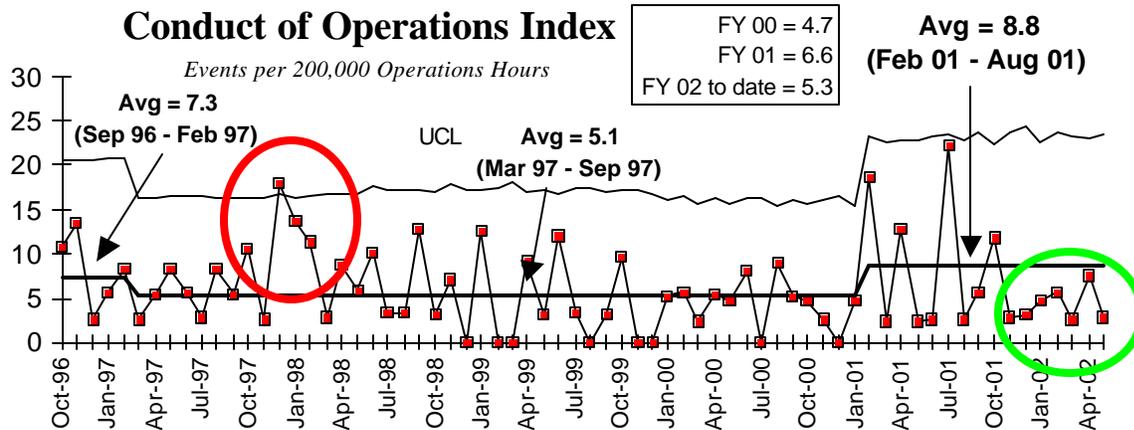


There now have been over 500,000 safe staff hours since the last recordable workday injury. An all day production pause was held May 31st to focus on safety and housekeeping.



CONDUCT OF OPERATIONS

Green



BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Nothing to report at this time.

Opportunities for Improvement

Processing Improvement ¾ PFP personnel 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 is currently being prepared and is scheduled for final approval and release in July 2002.

Processing Improvement ¾ A Process Qualification Application was submitted on May 17th. Approval of the process qualification by RL is required to allow processing of oxides to achieve the DNFSB milestones and PFP baseline schedules. Volume II of the application to a Third Party Review Team by mid June, with expectation of implementing the Process Qualification Program by mid July. RL approval of the technical basis document supporting Process Qualification is required by June 30th. Without this approval the Stabilization and Packaging Equipment (SPE) schedule could potentially be impacted. Schedule impacts due to an approval delay have not yet been integrated into the baseline.

UPCOMING ACTIVITIES

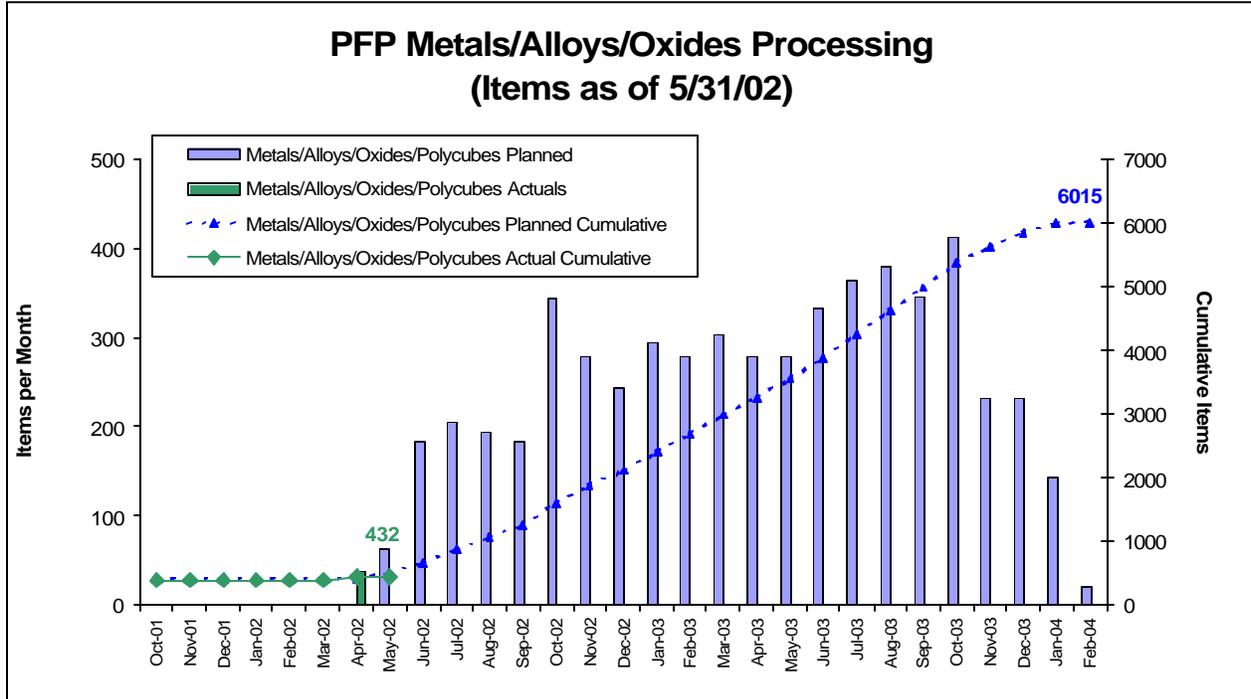
Solutions Processing — Complete solutions stabilization and packaging by August 31, 2002.

MILESTONE ACHIEVEMENT

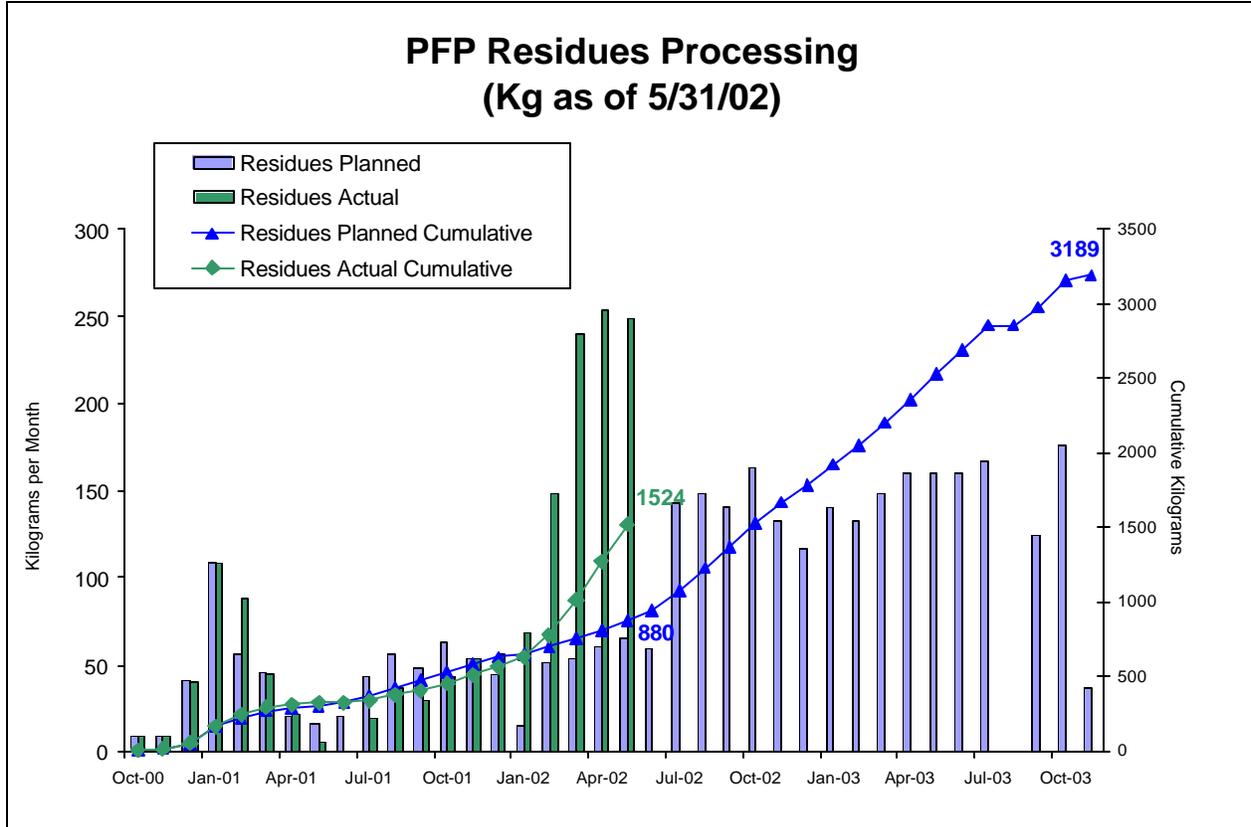
Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-01-501	Package Alloys for disposition to WIPP or stabilize & package per DOE-STD-3013 criteria	DNFSB	6/30/01		12/31/02	Moisture Measurement Resolution +60 Days
TRP-01-502	Complete Installation of the Bagless Transfer System	RL	12/1/01	8/29/01		Completed ahead of schedule
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			Ahead of 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

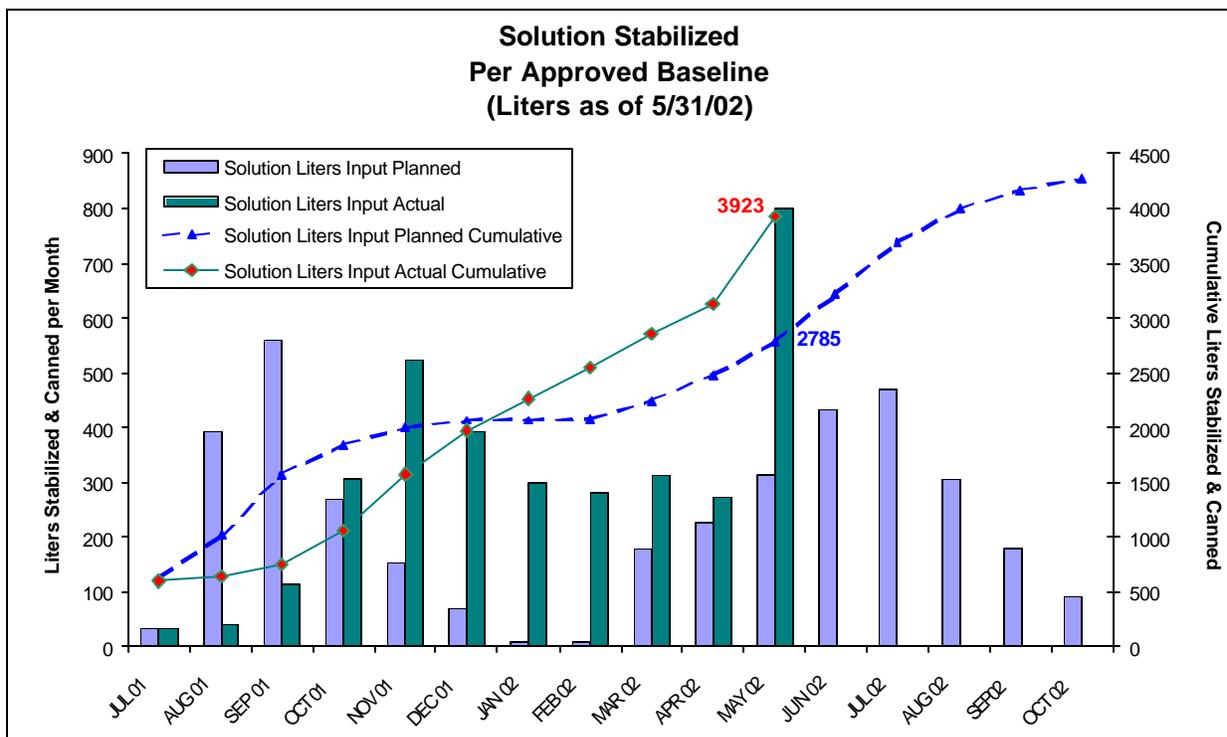
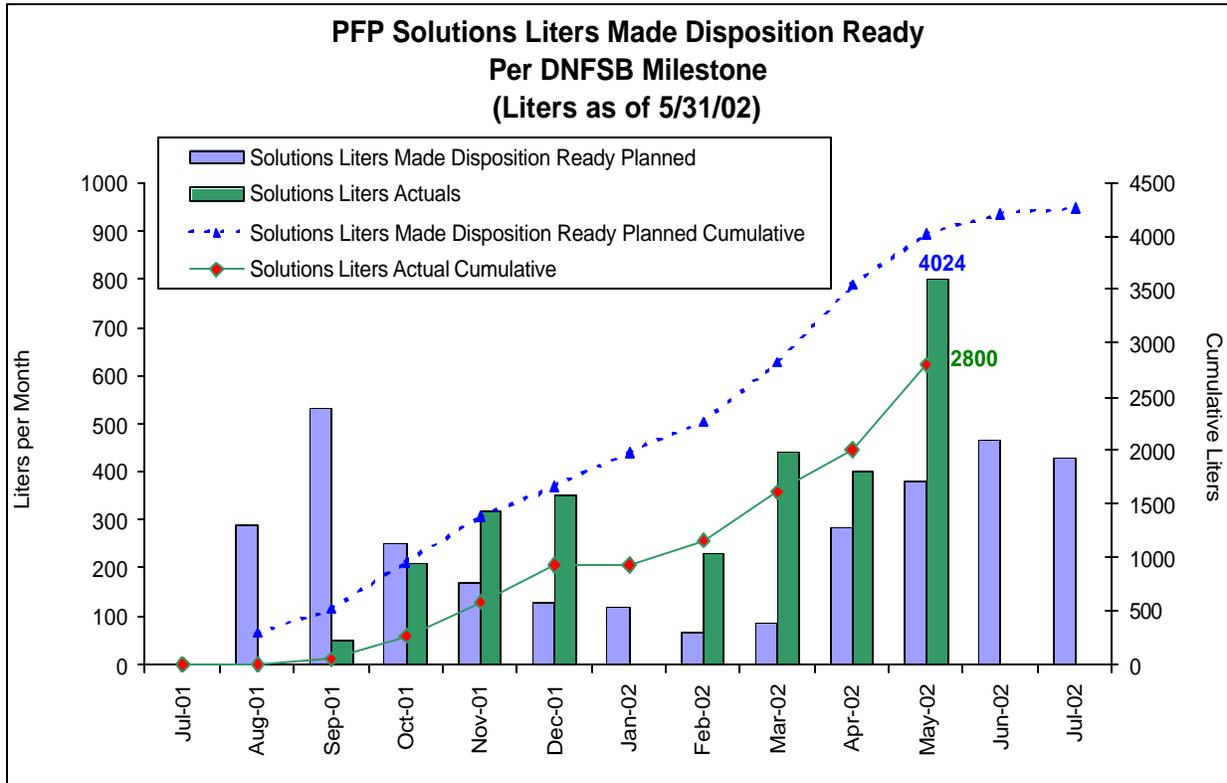
METALS/ALLOYS/OXIDES STABILIZATION



RESIDUE STABILIZATION



SOLUTIONS STABILIZATION



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

	By PBS	BCWS	BCWP	ACWP	SV \$	SV %	CV \$	CV %	BAC
PBS CP03 WBS 3.3.3.1	Maintain Safe and Secure SNM	2,437.7	2,849.4	2,806.5	411.7	16.9%	42.9	1.5%	4,111.5
PBS CP03 WBS 3.3.3.2	Maintain Safe and Compliant PFP	17,397.0	17,602.5	17,210.9	205.5	1.2%	391.6	2.2%	26,698.6
PBS CP03 WBS 3.3.3.3	SNM Stabilization	18,546.6	20,805.7	16,090.0	2259.1	12.2%	4715.7	22.7%	28,370.1
PBS CP03 WBS 3.3.3.4	Disposition SNM	2,719.6	2,860.9	2,054.4	141.3	5.2%	806.5	28.2%	4,178.9
PBS CP03 WBS 3.3.3.5	Disposition PFP Facility	982.9	945.8	761.1	(37.1)	-3.8%	184.7	19.5%	1,385.6
PBS CP03 WBS 3.3.3.6	PFP Project Management and Support	11,336.4	11,611.9	12,372.1	275.5	2.4%	(760.2)	-6.5%	11,189.9
Total:		\$53,420	\$56,676	\$51,295	\$3,256	6.1%	\$5,381	9.5%	\$75,935
PBS CP03 WBS 3.3.3.7	W-460 PuSH Line Item Support	425.6	1,585.0	569.6	1,159.4	272.4%	1,015.4	64.1%	2,326
Total:		\$53,846	\$58,261	\$51,865	\$4,415	8.2%	\$6,397	11.0%	\$78,260

FY TO DATE SCHEDULE / COST PERFORMANCE

The favorable schedule improvement trend continues with a nearly one percent improvement from last month. Continuous higher than planned steady state processing operations and completion of the FY 2002 solutions inventory packaging backlog are the primary contributors. The PFP Deactivation & Decommissioning Safety Analysis is progressing better than expected despite a late start.

The favorable eleven percent cost variance remains basically unchanged from last month. A continuance of higher than planned performance within the Stabilization Project areas continues to be the primary contributor to the positive status, accounting for nearly 6 percent of this favorable variance (Solutions 2.9 percent, Thermal Stabilization 1.8 percent, and Residues 1.2 percent). Additionally, the increased Outer Can Welder (OCW) production rate resulted in a complete reduction in the FY 2002 backlog of packaging solution inventory that has negated the need for a second shift as originally planned. Although staffing levels continue below planned levels, overtime usage continues to trend within approved levels.

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: (+ \$4.4M)

3.3.3.1 Maintain Safe & Secure SNM

Description and Cause: The nearly 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 twelve percent favorable schedule variance (+\$2.3M) 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 accelerated 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 solutions stabilization completing ahead of the baseline schedule but behind the Defense Nuclear Facilities Safety Board (DNFSB) milestone and oxide stabilization and packaging completing three and one half months ahead of the DNFSB milestone (TRP-05-500). Early completion of these activities provides the necessary resources to support acceleration of the PFP Decommissioning Project.

Corrective Action: None.

3.3.3.4 Disposition SNM

Description and Cause: The five percent favorable schedule variance (+\$0.01M) is within the reportable threshold.

Impact: None.

Corrective Action: None.

3.3.3.5 Disposition PFP Facility

Description and Cause: The four percent unfavorable schedule variance (-\$0.4M) 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) 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: (+\$6.4M)

3.3.3.1 Maintain Safe & Secure SNM

Description and Cause: The two 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 twenty-three percent favorable 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). Processing of planned FY 2002 SS&C material was completed in May.

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-eight percent favorable cost variance (+\$0.8M) is primarily attributable to efficiently completing work with less than planned staff.

Impact: None.

Corrective Action: Processing of clearances for additional staff is underway and is expected to be completed 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 twenty percent favorable cost variance (+\$0.2M) is directly attributable to a slower than planned transition of technical staff from Project W-460 to the Decommissioning Project.

Impact: None.

Corrective Action: Additional resources are being hired to support accelerated PFP Decommissioning activities.

3.3.3.6 PFP Project Management & Support

Description and Cause: The seven percent unfavorable cost variance (-\$0.8M) continues to be within the reportable threshold.

Impact: None.

Corrective Action: None.

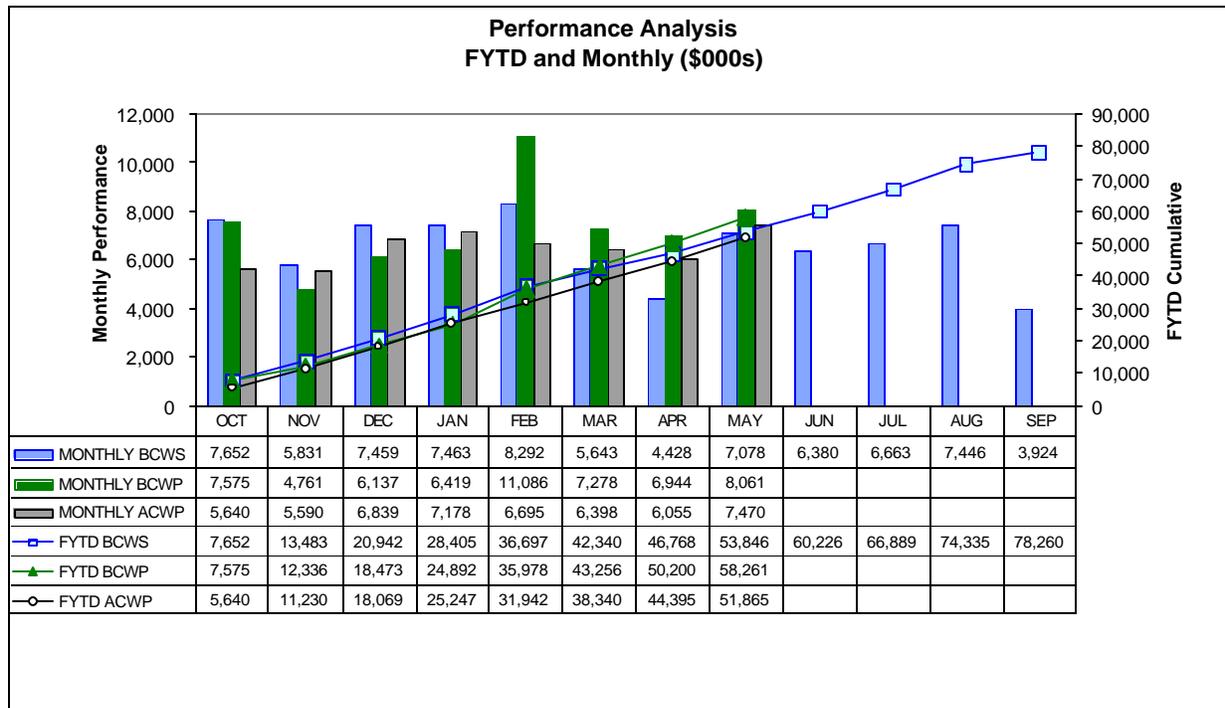
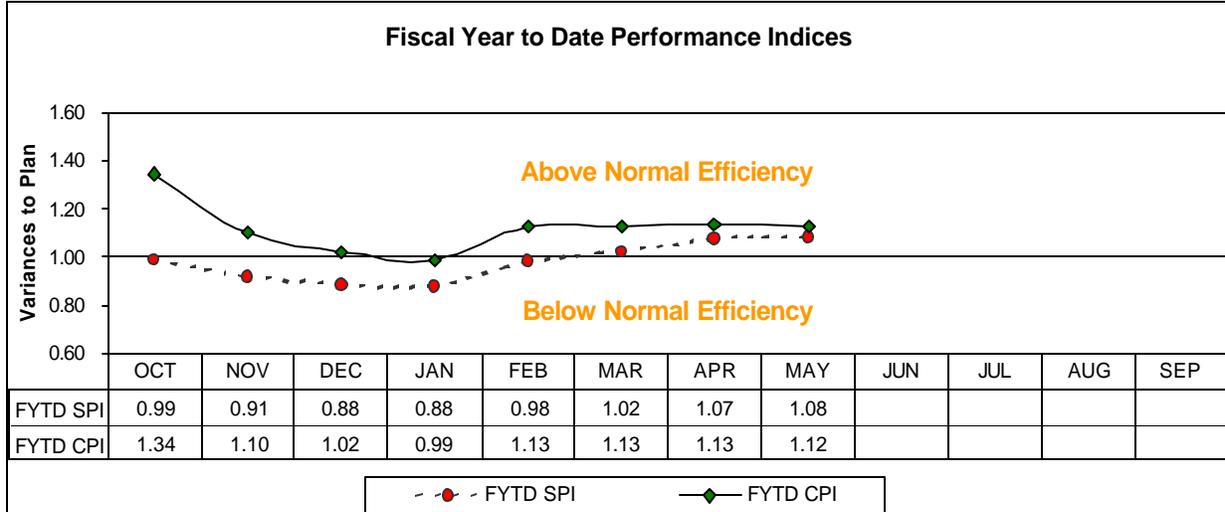
3.3.3.7 W-460 PuSH Line Item Support

Description and Cause: The 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 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 PFP			
CP03			
Project Completion - Operating	\$ 84,695	\$ 84,420	\$ 275
- Line Item	\$ 570	\$ 566	4
Total	\$ 85,265	\$ 84,986	\$ 279

[Status through May 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 are no technical issues at this time.

Regulatory, External, and DOE Issues and DOE Requests

Issue: No other issues identified 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 RL
CP03-02-014	2/6/02	SRS Acceptance Criteria #2		\$267		At RL
CP03-02-015	2/19/02	Remove FY 2002 Neg Mgmt Res		\$6,289		At RL
CP03-02-017	3/6/02	Integrated Surveillance Program		\$196		At RL
CP03-02-018	3/6/02	FY 2002 IWOs		(\$1,685)	5/29/02	Approved
FH-2002-010		Revise Labor Rates		\$2,590		At RL
FH-2002-011	2/20/02	10 CFR 830 Implementation		\$0		At RL
CP03-02-023	2/20/02	Revise WIPP/WAC Requirements				
CP03-02-024	2/20/02	CWC Security Upgrades		\$144	5/29/02	Approved
CP03-02-028	4/15/02	IAEA Security Upgrades		\$147		At PFP
CP03-02-030	5/20/02	Rebaseline NMS Program		\$3,000		In development
FH-2002-002	5/15/02	Revise Laundry Allocation		\$243		At RL
CP03-02-031	2/20/02	OA-50 ES&H Assessment		\$82	6/14/02	
	2/20/02	NDA Lab Assessment		TBD		In development
	2/20/02	Consolidate NDA Program		TBD		In development
		Chloride Wash		TBD		In development