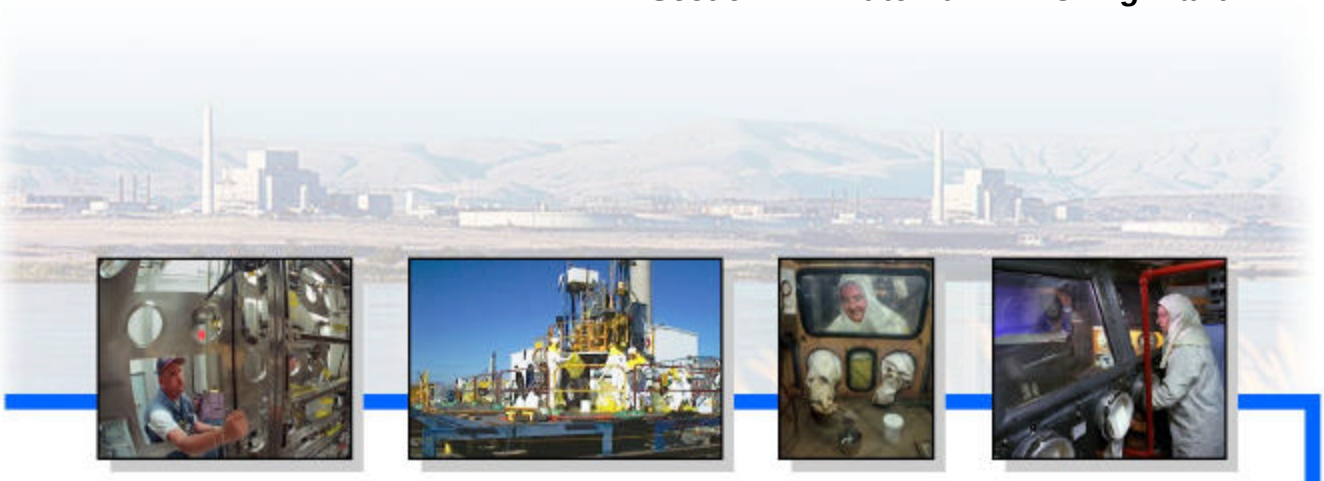


Section K

Plutonium Finishing Plant

PROJECT MANAGERS

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

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

DOE/RL-2000-76, Rev. 21

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 July 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, 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. A video conference will be scheduled to finalize our plan and obtain final approval.

In support of stabilizing IAEA safeguarded material, a three-phase plan is being developed that identifies stabilized material packaged into 3013 containers to be exchanged with IAEA. The material stabilization plan is approximately 30 percent complete.

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.

A Cultural Resource Review (CRR) letter from Pacific Northwest National Laboratory (PNNL) for deactivation and demolition of 10 PFP buildings that are eligible for listing in the National Register of Historic Places was forwarded by RL to the State Historic Preservation Officer (SHPO) and Tribes for review.

Obtained RL approval of the National Environmental Protection Act (NEPA) Categorical Exclusion (CX) for deactivation and demolition of 30 ancillary buildings.

Fluor Hanford and Environmental Quality Management staff and RL met with representatives of the U.S. Environmental Protection Agency (EPA) on Thursday, July 25, to discuss regulatory treatment of low-level polychlorinated biphenyls samples detected from 241-Z-361. It was agreed that the results could be averaged in accordance with regulations and the Hanford manual on the Toxic Substances Control Act (TSCA). This agreement confirms that the Z-361 sludge will not have to be disposed of as TSCA waste. This agreement will require some minor revisions of the previously released Applicable or Relevant and Appropriate Requirement (ARAR) document, which is currently being revised to incorporate RL comments.

Stabilization of Nuclear Material WBS 3.3.3.3

Metals, Alloys, Oxides and Polycubes ¾ During July, 119 Bagless Transfer Containers (BTCs) were welded. As of July 31st a cumulative total of 753 BTCs have now been made in the 234-5Z and 2736-ZB facilities. In support of solutions, stabilization of Magnesium Hydroxide precipitated material, which began in mid April, was completed in late July. Polycube stabilization resumed July 9, 2002. As of July 31st, 6 polycube items have been run through the stabilization process.

Residues ¾ During the reporting period, 267,400 grams of Sand, Slag and Crucible (SS&C) were packaged into 33 Pipe Overpack Containers (POCs). Processing of SS&C continues to exceed the baseline schedule. Thirty Pipe Overpack Containers (POCS) were shipped to the Central Waste Complex (CWC).

Solutions ¾ Solutions Stabilization activities at PFP were officially completed Monday, July 29, 2002, on swing shift. This major stabilization activity was completed two days ahead of the DNFSB Milestone (TRP-01-500) and 2½ months ahead of the baseline schedule.

Outer Can Packaging ¾ Packaging of the stabilized solution product was completed in late July. A total of 3221 liters have been placed in 3013 Containers, with 1070 liters dispositioned as direct discard or empties. Seventy-three 3013 Containers were produced during July with a fiscal-year-to-date total of 328.

Disposition of Nuclear Material WBS 3.3.3.4

Provided a presentation package concerning DNFSB questions related to 12 barrels of retrievably stored waste containing Pu238. Thermal data was updated to reflect 'time now' and thermal and radiation data were compared to WRAP and PFP operating safety documentation and recent working experience. Although it would be technically feasible to handle in either facility, these drums are outside the current allowable operating parameters of both plants, and beyond recent operating experience at Hanford.

The final report on the use of pure and mixed Cerium Dioxide and Magnesium Dioxide as surrogate materials for testing heat profiles in the Plutonium Dioxide thermal stabilization furnaces, HNF-11207, is at RL awaiting approval for public release.

Disposition PFP Facility WBS 3.3.3.5

The development of the 232-Z Health & Safety Plan (HASP) is ongoing, and is expected to receive RL approval by October 2.

The Legacy Hold-up Team continued planning for FY02 activities with document search initiated for rooms #40 and #41, chemical vulnerability piping and tank removal, and facility modification plan development for SNM legacy hold-up removal for glovebox HC-7C. Fieldwork completed this period by the PFP Special Task Team included verifying nitric header/ drop legs located in room 262 to room 185 (PPSL labs) to be free of solution.

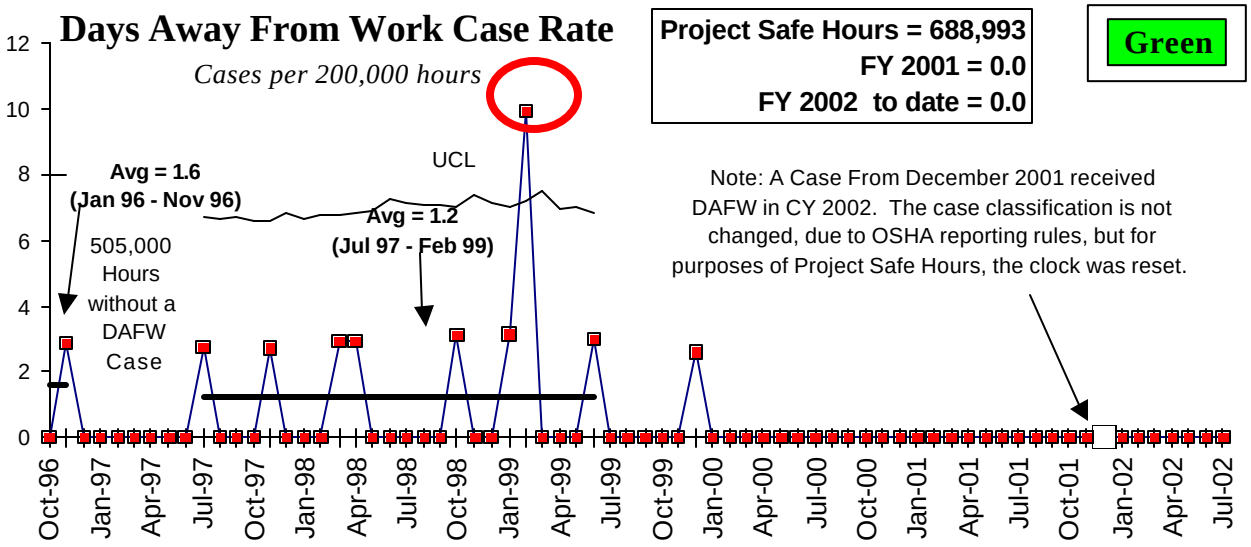
Dismantling of ancillary structures has been on hold for the month of July awaiting RL approval of a Categorical Exclusion (CX) and stakeholder reviews of cultural documentation. The CX was approved the end of July.

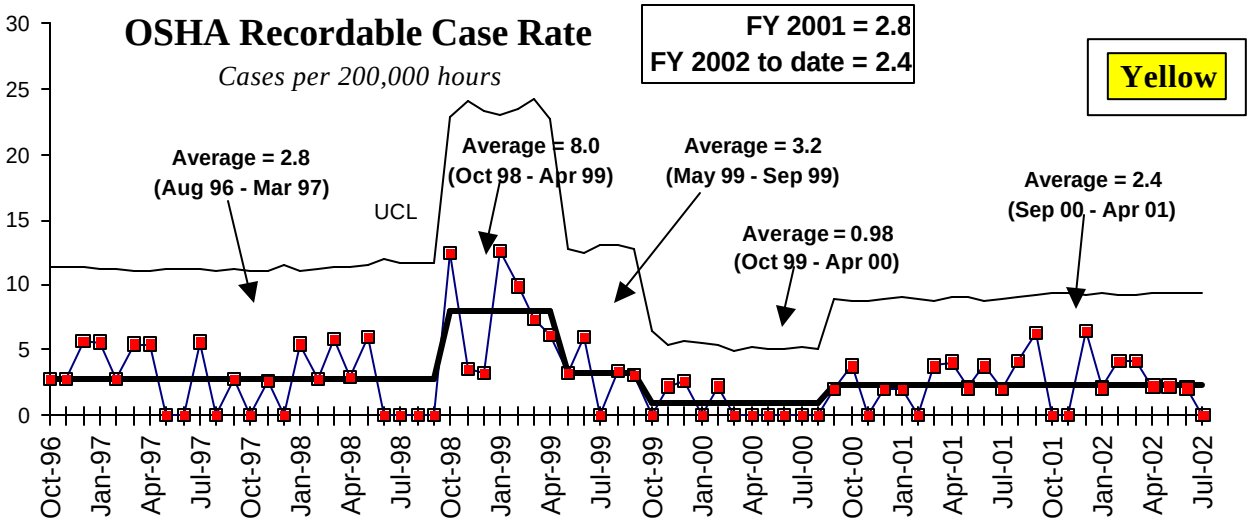
Project Management & Support WBS 3.3.3.6

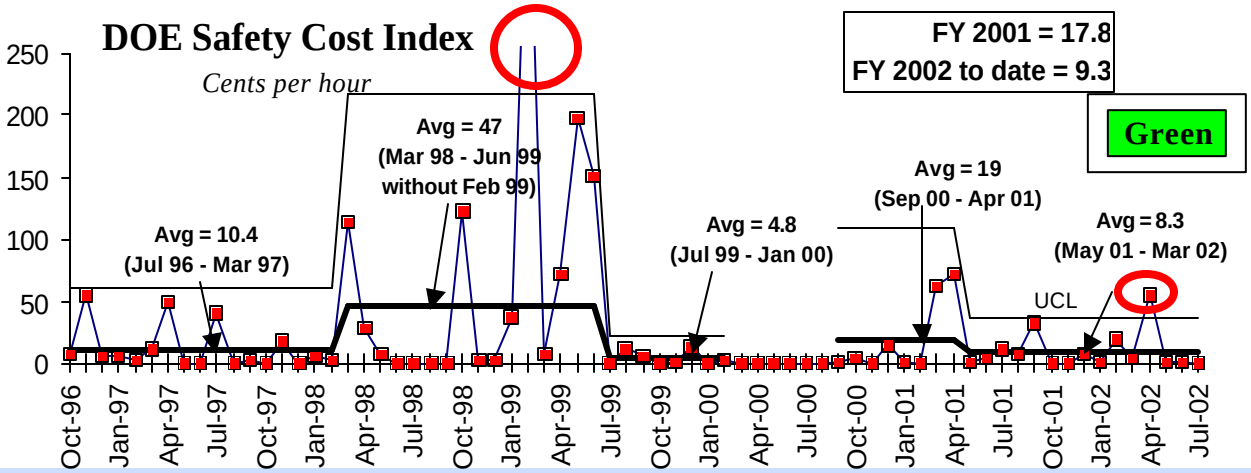
PFP continues to prepare for the VPP site visit.

SAFETY

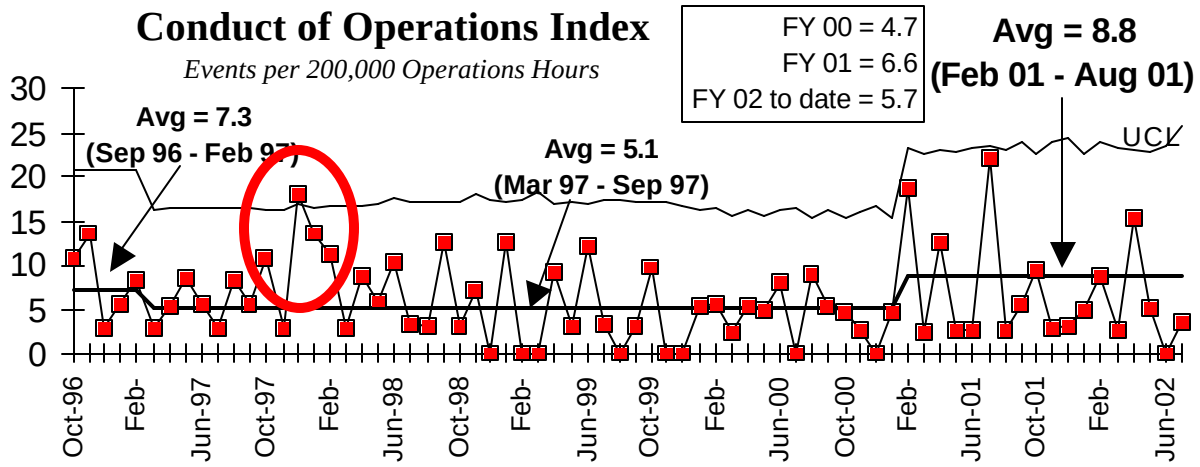
There have now been over 688,993 safe staff hours since the last recorded workday injury in December 2001.







Conduct of Operations



Breakthroughs / Opportunities for Improvement

Breakthroughs

Approximately 1.5 metric tons of bulk mixed 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 included uranium and plutonium to drive the net weights for these items. However, a more in depth investigation revealed them to contain less than 30 wt percent plutonium. These items are the subject of a Safeguards Termination Limit (STL) request that is currently in for approval at RL.

Opportunities for Improvement

Inventory Control ¾ 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 is currently being prepared and is now scheduled for final approval and release by the end of August 2002.

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 will complete in August and the document revised, support data collected, and transmittal for approval completed by August 23, 2002.

Upcoming Activities

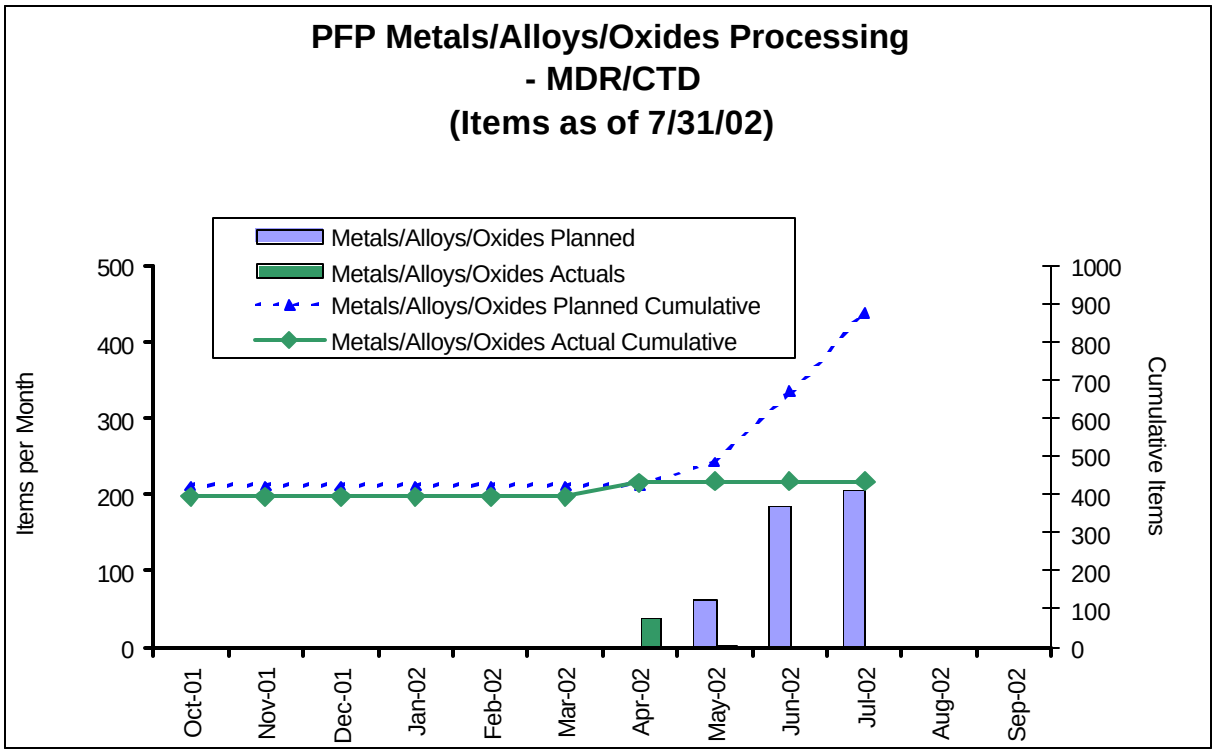
Nothing significant to report.

MILESTONE ACHIEVEMENT

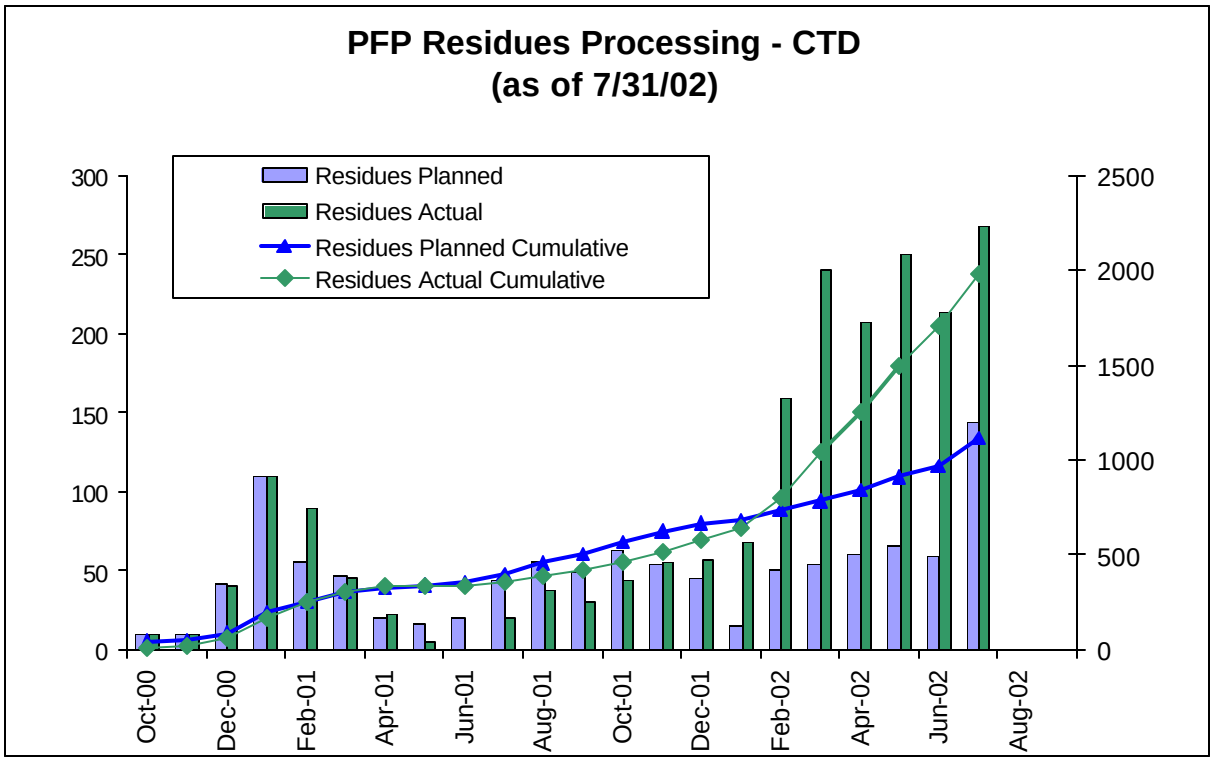
Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-01-501	Package Alloys for disposition to WIPP or stabilize & package per DOE-STD-3013 criteria	DNFSB	6/30/2001		9/30/2002	Moisture Measurement Resolution +60 Days
TRP-01-502	Complete Installation of the Bagless Transfer 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 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		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

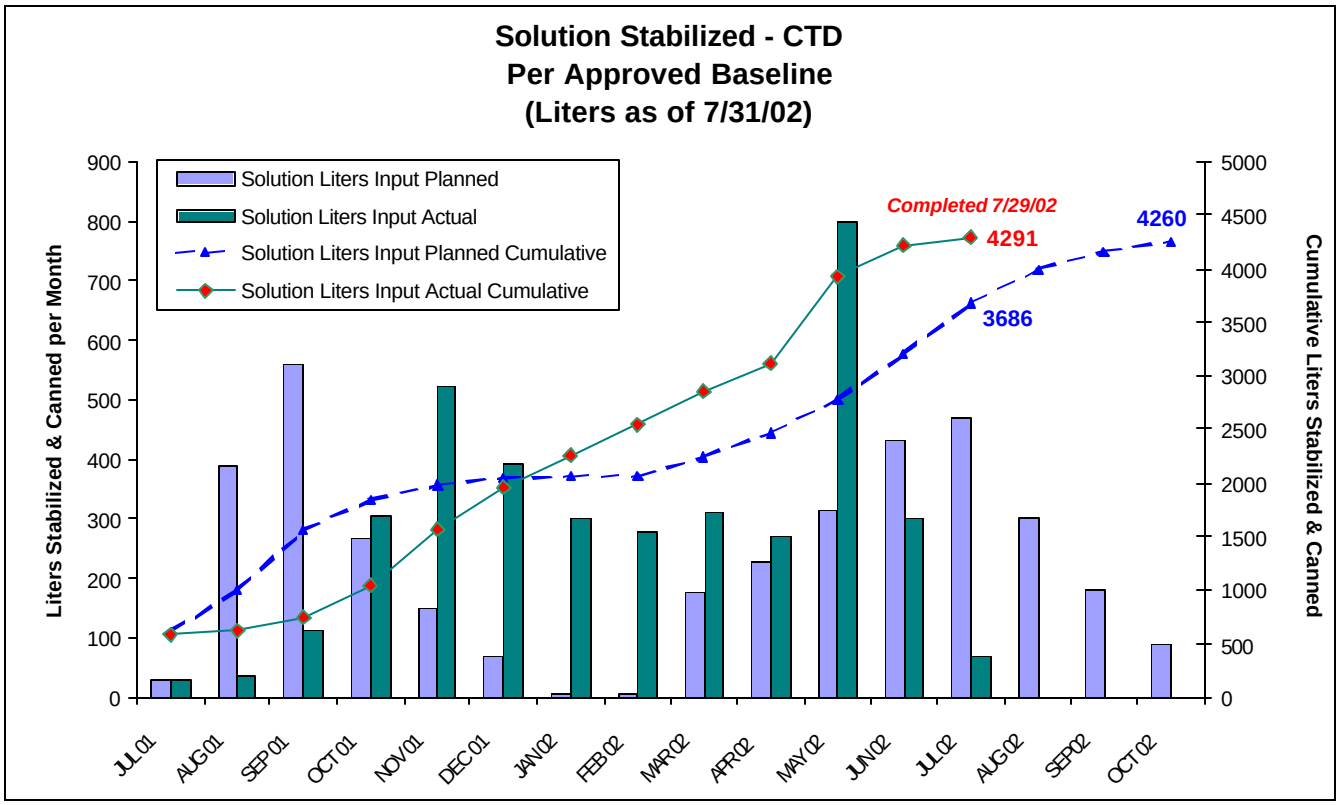
METALS/ALLOYS/OXIDES STABILIZATION

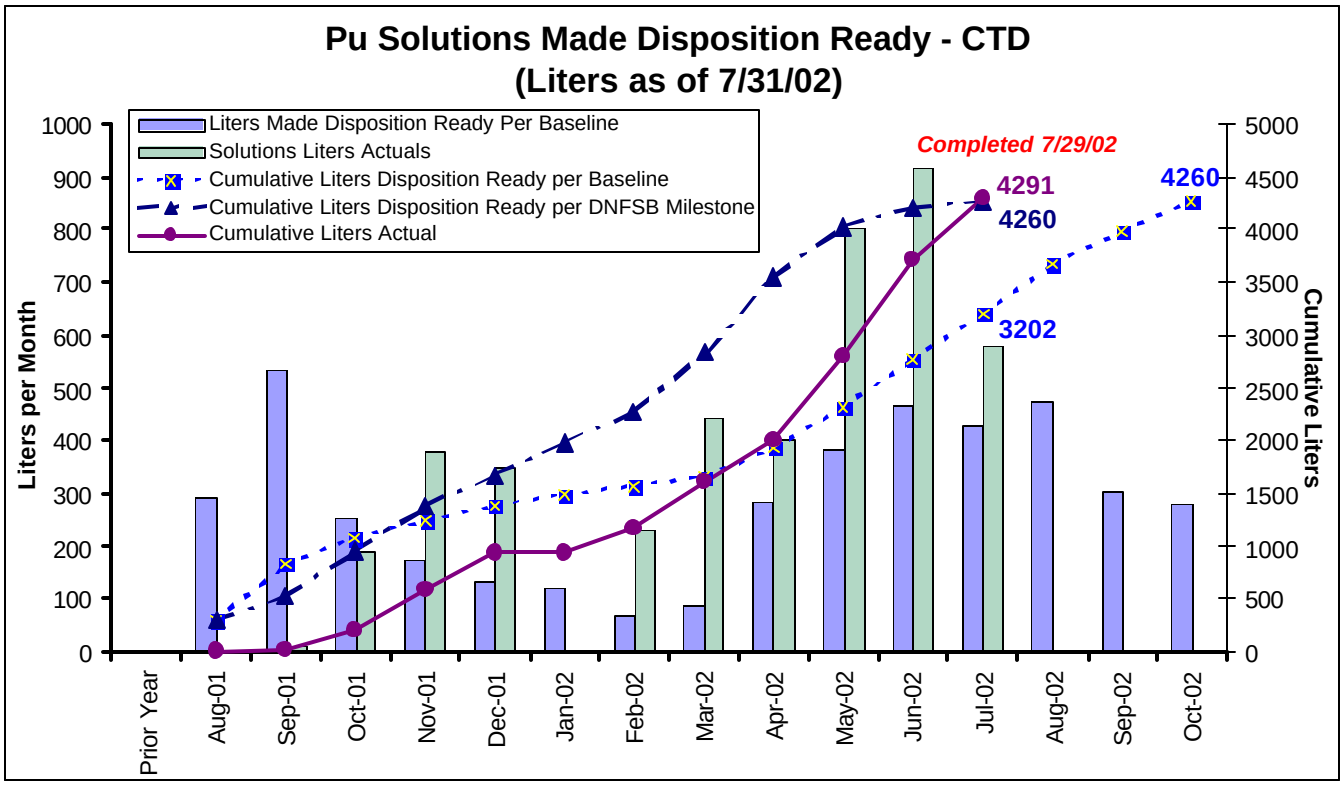


RESIDUE STABILIZATION



SOLUTIONS STABILIZATION





FY 2002 Schedule / Cost Performance – All Fund Types
Fiscal Year to Date Status – ($000)

	By PBS	BCWS	BCWP	ACWP	FYTD SV $	SV %	CV $	CV %	BAC
PBS CP03 WBS 3.3.3.1	Maintain Safe and Secure SNM	3,242.9	3,514.6	3,585.0	271.7	8.4%	(70.4)	-2.0%	4,359.5
PBS CP03 WBS 3.3.3.2	Maintain Safe and Compliant PFP	21,403.1	21,630.1	21,298.5	227.0	1.1%	331.6	1.5%	26,698.6
PBS CP03 WBS 3.3.3.3	SNM Stabilization	23,227.2	24,544.5	19,206.7	1317.3	5.7%	5337.8	21.7%	28,625.9
PBS CP03 WBS 3.3.3.4	Disposition SNM	3,415.8	3,491.9	2,621.0	76.1	2.2%	870.9	24.9%	4,245.0
PBS CP03 WBS 3.3.3.5	Disposition PFP Facility	1,195.8	1,254.6	1,281.5	58.8	4.9%	(26.9)	-2.1%	1,385.6
PBS CP03 WBS 3.3.3.6	PFP Project Management and Support	14,177.4	14,454.0	14,825.2	276.6	2.0%	(371.2)	-2.6%	11,271.9
	Total:	**$66,662**	**$68,890**	**$62,818**	**$2,228**	**3.3%**	**$6,072**	**8.8%**	**$76,587**
PBS CP03 WBS 3.3.3.7	W-460 PuSH Line Item Support	425.6	3,485.0	545.2	3,059.4	718.8%	2,939.8	84.4%	2,326
	Total:	**$67,088**	**$72,375**	**$63,363**	**$5,287**	**7.9%**	**$9,012**	**12.5%**	**$78,912**

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 (+$0.2M) is within the reportable threshold.
Impact: None.
Corrective Action: None.

3.3.3.3 SNM Stabilization

Description and Cause: The six 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 100 percent 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 five 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: (+$9.0M)

3.3.3.1 Maintain Safe & Secure SNM

Description and Cause: The two percent unfavorable cost variance (-$0.07M) 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 (+$0.3M) continues to be within the reportable threshold.
Impact: None.
Corrective Action: None.

3.3.3.3 SNM Stabilization

Description and Cause: The twenty-two 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 twenty-five 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 two percent unfavorable cost variance (-$0.03M) 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 staff is being hired to support accelerated PFP Decommissioning activities.

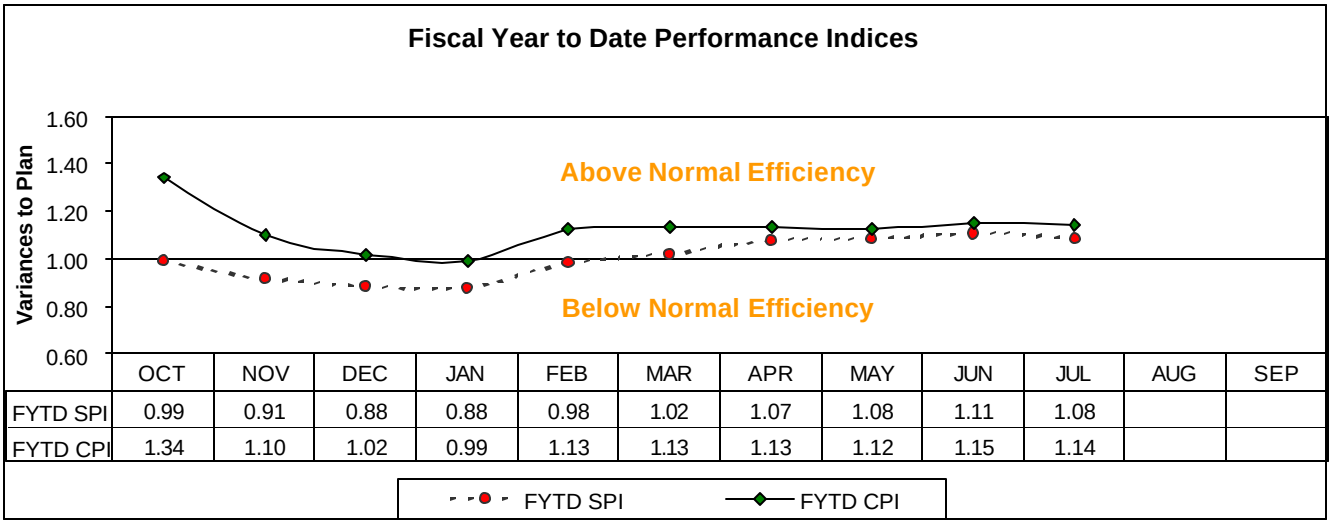
3.3.3.6 PFP Project Management & Support

Description and Cause: The three percent unfavorable cost variance (-$0.4M) continues to be within the reportable threshold.
Impact: None.
Corrective Action: None.

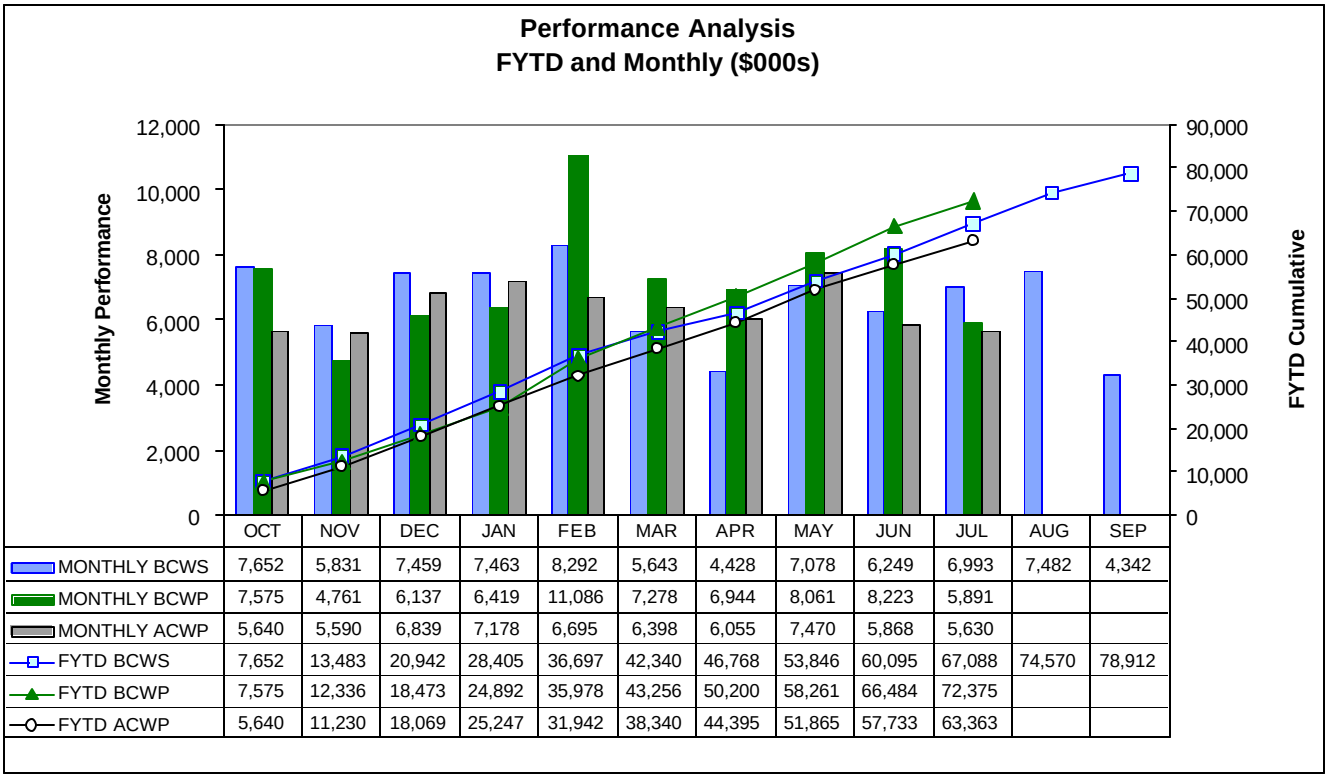
3.3.3.7 W-460 PuSH Line Item Support

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)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
FYTD SPI	0.99	0.91	0.88	0.88	0.98	1.02	1.07	1.08	1.11	1.08		
FYTD CPI	1.34	1.10	1.02	0.99	1.13	1.13	1.13	1.12	1.15	1.14		



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY BCWS	7,652	5,831	7,459	7,463	8,292	5,643	4,428	7,078	6,249	6,993	7,482	4,342
MONTHLY BCWP	7,575	4,761	6,137	6,419	11,086	7,278	6,944	8,061	8,223	5,891		
MONTHLY ACWP	5,640	5,590	6,839	7,178	6,695	6,398	6,055	7,470	5,868	5,630		
FYTD BCWS	7,652	13,483	20,942	28,405	36,697	42,340	46,768	53,846	60,095	67,088	74,570	78,912
FYTD BCWP	7,575	12,336	18,473	24,892	35,978	43,256	50,200	58,261	66,484	72,375		
FYTD ACWP	5,640	11,230	18,069	25,247	31,942	38,340	44,395	51,865	57,733	63,363		

FUNDS MANAGEMENT
FYTD FUNDS VS SPENDING FORECAST ($000)

	FH Funds Reallocation	FYSF	Variance
3.3.3 Plutonium Finishing Plant			
CP03			
Project Completion - Operating	**$ 84,553**	**$ 82,896**	**$ 1,657**
- Line Item	**$ 570**	**$ 545**	**25**
Total	**$ 85,123**	**$ 83,441**	**$ 1,682**

[Status through July 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

There are no technical issues at this time.

Regulatory, External, and DOE Issues and DOE Requests

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)		
FH-2002-008	8/13/01	MYWP Bridge		N/A		At RL
CP03-02-014, R1	6/26/02	SRS Acceptance Criteria #2		479	7/10/02	Approved
CP03-02-017	3/6/02	Integrated Surveillance Program		$196	7/18/02	Approved
FH-2002-010	2/28/02	Revise Labor Rates		$2,590		At RL
FH-2002-011	2/20/02	10 CFR 830 Implementation		- 0 -	7/8/02	Rejected
CP03-02-023	2/20/02	Revise WIPP/WAC Requirements		$62	7/18/02	Approved
CP03-02-026	2/28/02	Escalate FY 2002 P3 File				At FH
CP03-02-028	4/15/02	IAEA Security Upgrades		$45	7/10/02	Approved
CP03-02-030	5/20/02	Rebaseline NMS Program		$3,000		At RL
FH-2002-002	5/15/02	Revise Laundry Allocation		$243	7/26/02	Approved
CP03-02-032	6/30/02	Transfer FY 2002 Solutions Scope		- 0 -		In Development
CP03-02-034	7/1/02	Revise Stabilization Schedule		- 0 -		In Development