



Section I

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 October 2002.

At this time there are no milestones due in FY 2003. However, approval of Baseline Change Request (BCR) CP03-02-038, "Revise PFP DNFSB Milestones", will change the due dates on two DNFSB milestones. The two milestones are TRP-01-501 on Alloys (due June 30, 2001) and TRP-02-501, on Polycubes (due August 31, 2002). The due dates for both milestones will now occur in FY 2003, specifically 12/31/02 and 3/31/03, respectively. Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that two milestones remain overdue, one from FY 2001 and one from FY 2002 – the alloys and polycube milestones discussed in the preceding sentences.

NOTABLE ACCOMPLISHMENTS

Maintain Safe & Secure SNM WBS 3.3.3.1

A newly procured Antech Calorimeter in Room 639 was provided to the International Atomic Energy Agency (IAEA). The IAEA completed five more days of training and the calorimeter was turned over to the Agency for their use on October 18, 2002. This equipment was certified and accepted by the Agency and is now being used for all measurements of inventory under the IAEA control. Transfers of the mixed oxide (MOX) material <10 Wt% percent to 192 B & C vaults were initiated. The material is being staged for the Residues project.

Maintain Safe and Compliant PFP WBS 3.3.3.2

Approval of the Stabilization and Packaging System Revision form for alloys feedshift was obtained from Washington State Department of Health's (WDOH's). The final draft Tri Party Agreement (TPA) baseline change request (BCR) was signed by RL and forwarded to Environmental Protection Agency (EPA) for their final approval, which is expected in early November. PFP staff supported RL in issuing a letter to the State of Washington Department of Ecology (ECOLOGY) defusing a potential regulatory issue arising from ECOLOGY's inspection of the PFP Underground Storage Tank, by providing a signed affidavit of red dye use in diesel fuel.

Stabilization of Nuclear Material WBS 3.3.3.3

Metals, Alloys, Oxides and Polycubes — During October 94 bagless transfer containers (BTCs) were completed in 234-5Z and 2736-ZB processing areas. A cumulative total of 872 BTCs have been made in the 234-5Z and 2736-ZB facilities as of the end of October. Stabilization of Pu Oxide material, which began in early August, has resulted in the processing of 399 items through October 31. The Process Qualification Application received DOE-HQ approval on October 30, 2002. Implementation of this program is expected by mid November following the scheduled material inventory.

Residues — During the reporting period, 367,106 grams of Sand, Slag and Crucible (SS&C) were packaged into 54 Pipe Overpack Containers (POCs). Processing of SS&C is exceeding the baseline schedule. Ten POCs were shipped to the Central Waste Complex (CWC). The Department of Energy-Headquarters (DOE-HQ) has approved the Safeguards Termination Limit (STL) letter for processing an additional 1500kg bulk oxide/MOX material through the Residues Project. The Supplement Analysis (SA),

SA-9, for the legacy holdup and oxide/MOX was transmitted to RL for approval. RL approved the revision to the Operational Safety Requirements (OSR) to include the dispersible plutonium in Room 172.

Outer Can Packaging — A total of ninety-two 3013 containers were produced during the month of October. A cumulative total of eight hundred and seventy-two 3013 containers have been produced to date.

Disposition of Nuclear Material WBS 3.3.3.4

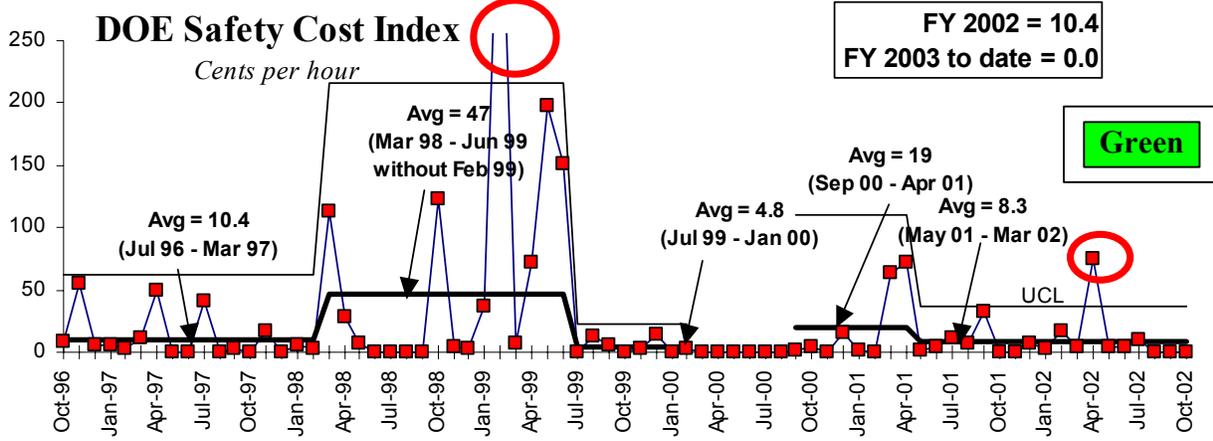
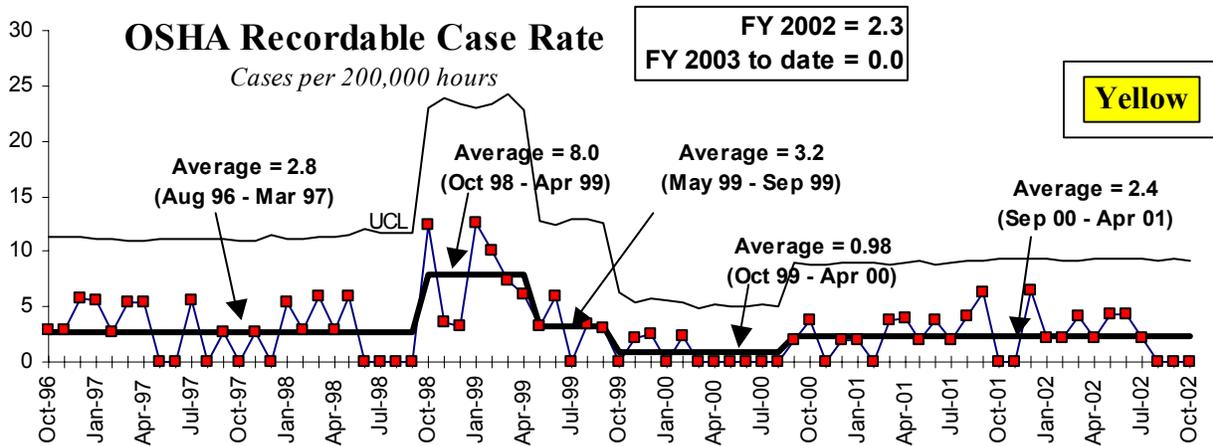
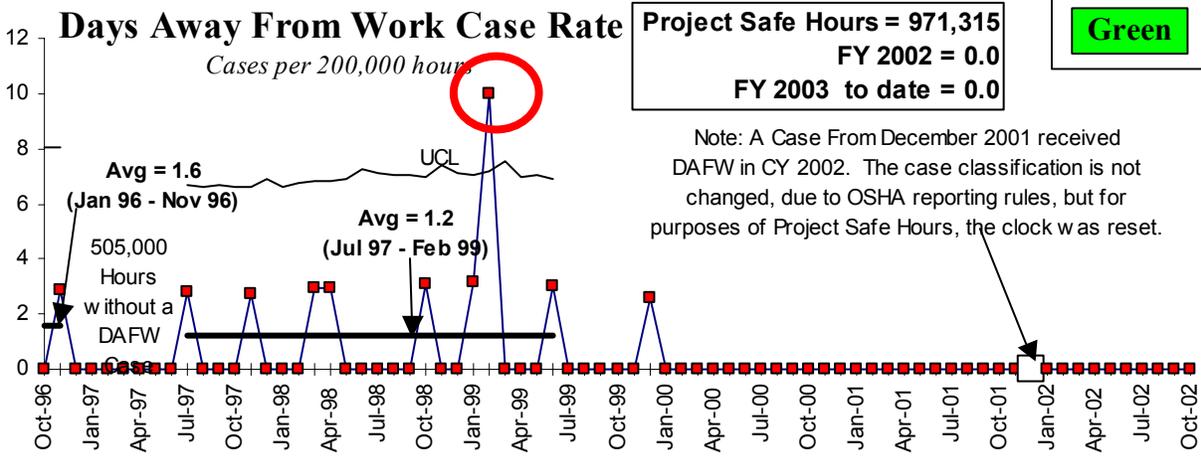
DOE Albuquerque is working to certify the SafKeg Shipping container to enable PFP to start making shipment to Lawrence Livermore National Laboratory (LLNL), which will count as de-inventory. The certification for the Safkeg has slipped due to the Safety analysis report for packaging (SARP) not being approved. The earliest we now could make the shipment would be after the first of calendar year 2003. The date for personnel from the Kansas City DOE Plant and Los Alamos National Laboratory (LANL) to visit Hanford has slipped and no new date has been set to certify PFP as a SafKeg user.

Disposition PFP Facility WBS 3.3.3.5

The National Environmental Policy Act (NEPA) Categorical Exclusion (CX) was prepared and transmitted to RL on October 1, 2002. The Notice of Construction (NOC) for 232-Z was prepared and transmitted to RL on October 14, 2002. The 232-Z New Source Review was prepared and transmitted to RL on October 31, 2002. The Documented Safety Analysis for 232-Z decommissioning was prepared and submitted to RL for approval on October 31, 2002. Work Package development and field holdup removal activities continued this period on 234-5Z building. Work package development concentrated on future removal work on glovebox HC-9B with the FMP preparation. Legacy holdup removal activities included removal of approximately seventy-five percent of the HC-7C glovebox piping, pumps, and mass flow meter. Chemical Vulnerability Mitigation Activities continued as part of Equipment Removal the month of October, removing the Oxalic Acid and Sodium Hydroxide piping to these respective tanks. Activities also included Oxalic Acid and Sodium Hydroxide tank scraping and clean out of remaining material in preparation for tank removal next period. Chemical Vulnerability Mitigation Activities commenced in 236-Z on the removal of the B-Acid line between MT-5 in room 41 and the B-Acid tank within room 40. A Supplemental Analysis (SA) to the PFP Environmental Impact Statement (EIS) has been accepted and signed off by RL this month authorizing Pipe-N-Go disposition as an acceptable path for 'less than STL' legacy holdup waste as a replacement for the EIS analyzed 'Cementation' process.

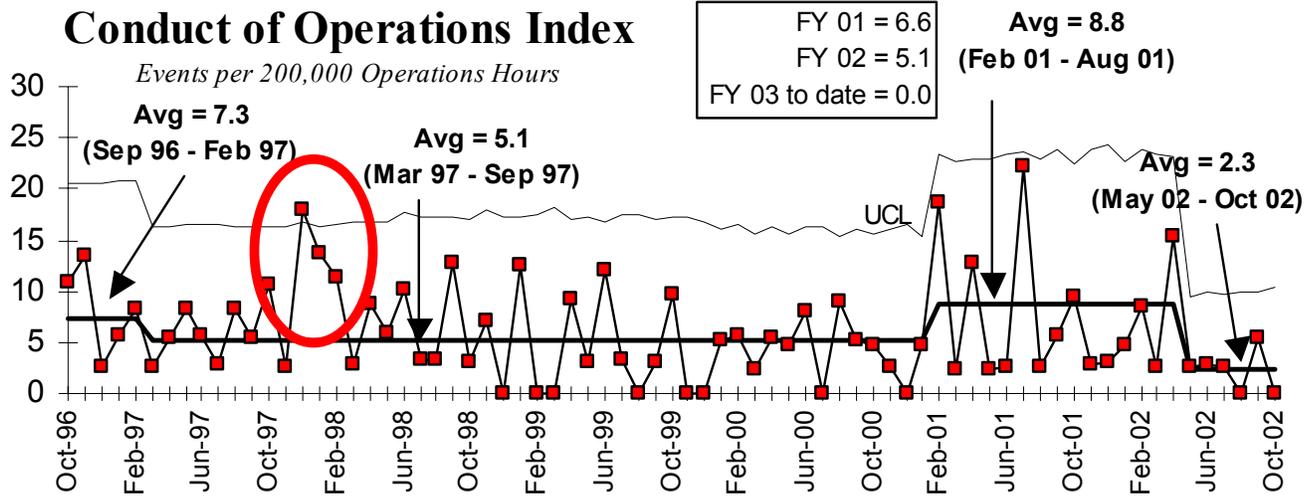
Safety

There have now been 971,315 project safe hours since the last recorded workday injury in December 2001.



CONDUCT OF OPERATIONS

Green



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. DOE-HQ has approved the Safeguards Termination Limit (STL) letter for processing 1500 Kg bulk oxide/MOX through the Residues Project, awaiting RL transmittal of the approved STL.

Opportunities for Improvement

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 comment resolution on the Process Qualification package was completed in August and the document revised, support data collected and transmitted to DOE-RL for approval. The Process Qualification Application received DOE HQ approval on October 30, 2002. Implementation of this program is expected by mid November following the scheduled material inventory. (This is the last report on this item).

UPCOMING ACTIVITIES

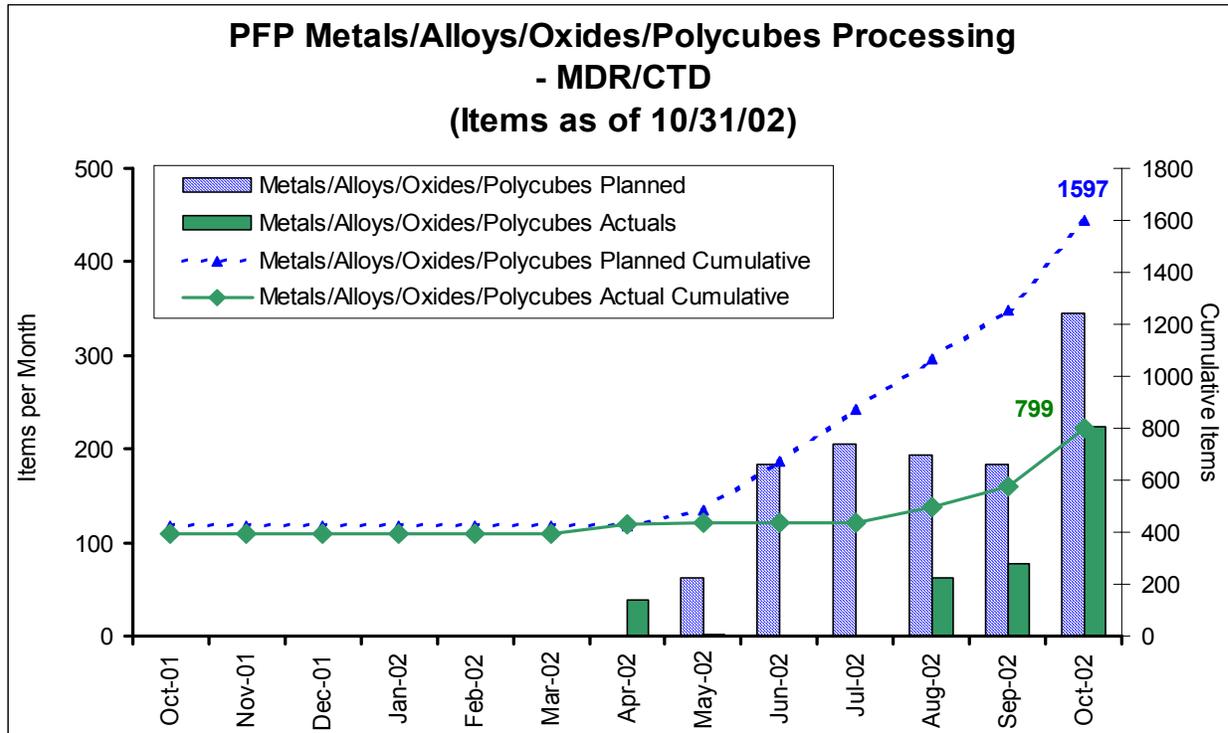
Nothing significant to report.

MILESTONE ACHIEVEMENT

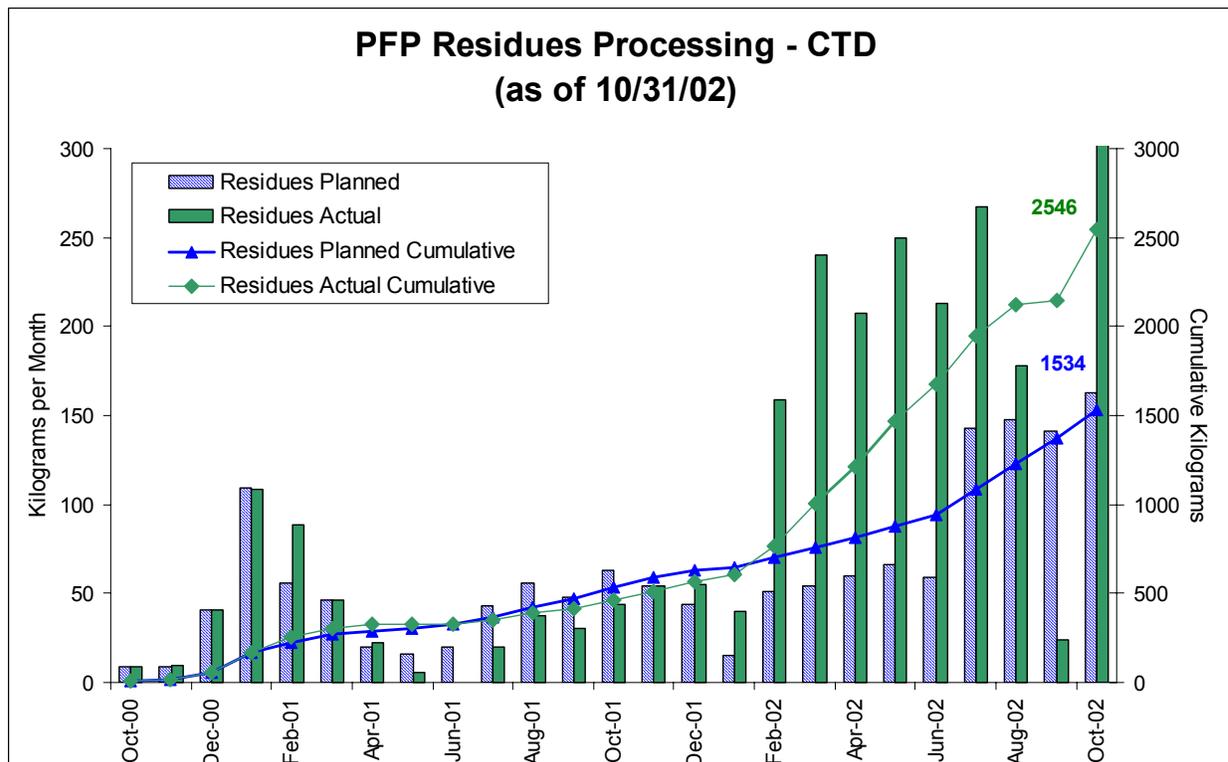
Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status/ Comments
TRP-01-501	Package Alloys for disposition to WIPP. Brush and package remaining alloys.	DNFSB	6/30/2001		12/31/2002	On schedule to meet revised DOE IP date of 12/31/02
TRP-01-502	Complete Installation of the Bagless Transfer 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			On Schedule
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

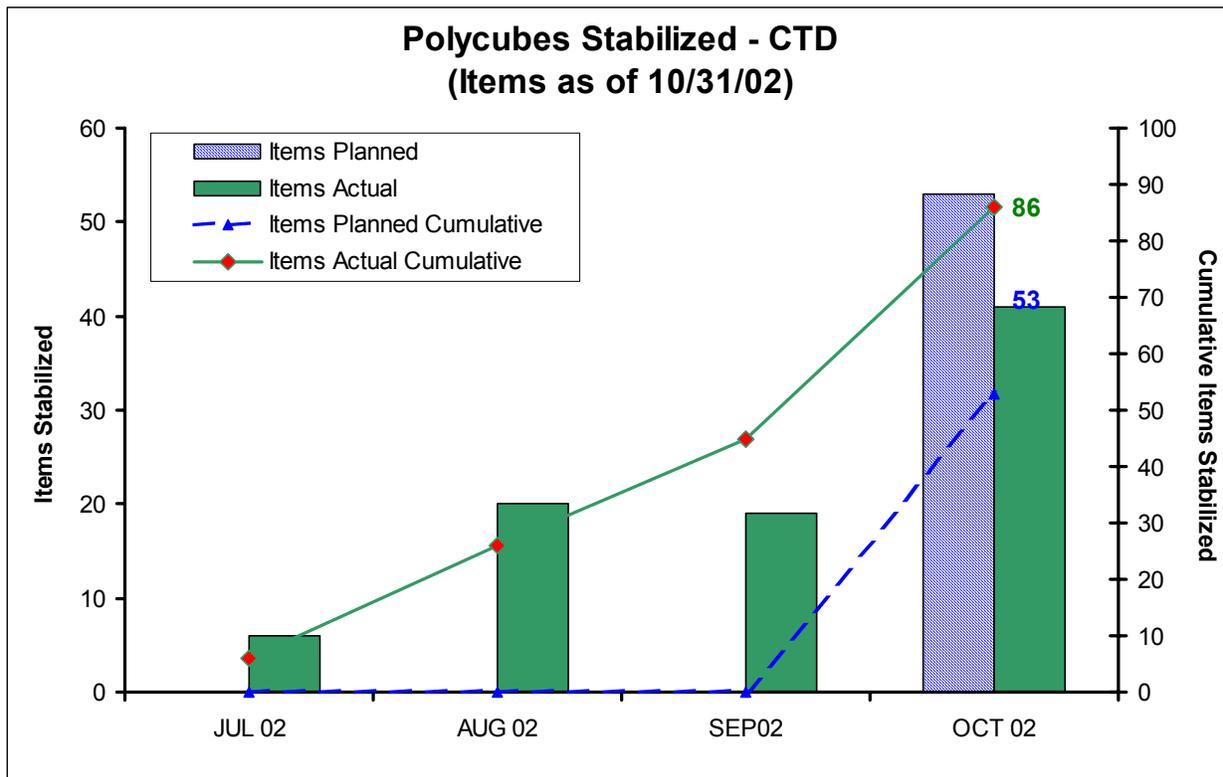
METALS/ALLOYS/OXIDES STABILIZATION



RESIDUE STABILIZATION



POLYCUBE STABILIZATION



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 salts has begun and PNNL has now completed a total of 42 furnace cycles. The knockout pot (two inch diameter section of pipe filled with ceramic packing) was not effective in removing the low-density precipitated salt from the off gas and spiral wound filters in the off gas line plug after three furnace cycles. Pleated filters with three times the surface area will be tested to determine if more furnace cycles can be completed before the filters plug. Fluffy salt deposits in the PNNL test furnace off gas line need to be removed after three furnace cycles to prevent plugging. Hard salt deposits build up in the Inconel 690 pipe through the furnace wall and need to be removed after ~eight furnace cycles. PFP pipefitters are working on techniques to remove the hard salt deposits after visiting the PNNL lab and obtaining pieces of off gas piping with the hard salt deposits. Fabrication up mockup glovebox at the Fluor Federal Services (FFS) shop has begun; PNNL has begun fabrication of columns for mockup. Review comments on the design criteria document are being dispositioned.

Regulatory, External, and DOE Issues and DOE Requests

Issue: Need approval of the Process Qualification package for the 2736-ZB processing system so that Loss on Ignition (LOI)/Thermal Gravimetric analysis (TGA) analysis may be performed on a sampling of canned items rather than each canned item.

Impact: Impacts execution of accelerated schedule and cost.

Corrective Action: The Process Qualification Application received DOE-HQ approval on October 30, 2002. Implementation of this program is expected by mid-November following the scheduled material inventory. (This is the last report on this issue).

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR No.	Date Originated	Description	Impact		Date Action Taken	Status
			Days	Dollars (\$000s)		
FH-2001-008	8/13/01	MYWP Bridge - FY 2002		N/A	10/10/02	Conditional Approval
CP03-02-030, R1	5/20/02	Accelerate D&D Planning		\$3,000	10/29/02	Disapproved
CP03-02-034	7/26/02	Revise Stabilization Schedule		- 0 -	10/29/02	Disapproved
CP03-02-038	8/12/02	Revise DNFSB Milestones		- 0 -		Approved by FH 10/8/02 - at RL
FH-2002-018	9/3/02	Mega BCR - Unicall Rates		TBD		At FH
CP03-03-001	9/23/02	Upgrade Personnel Monitoring Equipment		- 0 -	10/10/02	Approved