SUMMARY

The Nuclear Material Stabilization (NMS) mission consists of the Plutonium Finishing Plant (PFP), WBS 1.4.5 (PBS TP05).

NOTE: The Safety, Conduct of Operations, milestone table and Cost/Schedule data contained herein is as of September 30, 2001. Other information is updated as noted through October 12, 2001.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that three milestones (42 percent) were completed on or ahead of schedule, three milestones (42 percent) were completed late, and one milestone (16 percent) is overdue. Further details can be found in the milestone exception report following the cost and schedule variance analysis.

TOP 5 ACCOMPLISHMENTS FOR FY 2001

Safety

On July 31, 2001 the Plutonium Finishing Plant recorded an unprecedented 2 million hours without a lost work day injury. By yearend this record was extended to 2.2 million hours, or 669 calendar days, since the last recorded lost workday injury in December 1999. Additionally, the PFP initiated and successfully implemented six automatic external defibrillators to provide the best possible outcome for victims who suffer Sudden Cardiac Arrest (SCA).

Residues

Packaging of Rocky Flats (RF) ash into Pipe Overpack Containers (POCs) was completed on March 14, 2001. Final shipment of the packaged ash to the Central Waste Complex (CWC) was completed April 3, 2001, well in advance of the April 30, 2001 DOE-HQ milestone (TRP-01-515) completion date.

Plutonium Metals stabilization and packaging

All of the plutonium metals in inventory at the Plutonium Finishing Plant have been stabilized and packaged in 3013 compliant containers (September 26, 2001). This highly significant work completion greatly lowers the overall risk of plutonium storage at Hanford and fulfills a Department of Energy Headquarters (DOE-HQ) milestone commitment (TRP-02-500) to the Defense Nuclear Facilities Safety Board. Plutonium metals were previously stored in thin crimp-sealed metal cans which were subject to a relatively high risk of failure due to the metals corroding and swelling resulting in breaching the storage can. If such failure occurred the result could include personnel radiation dose and would require a very costly clean-up effort. The metals were stabilized by removing excess corrosion products and welding them into an inert stainless steel can. That can was then welded into a second inert stainless steel can for final disposition.

Breakthrough Initiative

The final results of Fluor Hanford's Accelerated Closure Team Phase II review of PFP were analyzed by the NMS Project management team and the RL Materials Disposition Division, incorporated in the June 30 baseline planning update and submitted to RL on June 29, 2001. Seven breakthroughs were identified and incorporated in the project baseline via two Baseline Change Requests that collectively reduce the project life cycle cost estimate by nearly $90 million, avoid an additional $11 million in increased project

costs, accelerate completion of DNFSB 94-1/2000-1 stabilization and packaging by six months, and accelerate remediation of Tank 241-Z-361 by four years. Eleven other, potential breakthroughs were identified for further evaluation and 38 additional improvement opportunities were reported to have potential to accelerate project schedules and reduce costs.

Project W-460

Construction of the stabilization and packaging system in 2736-ZB was completed in September 2001. The Operational Readiness Review (ORR) is scheduled to begin in late October 2001 with hot startup of this system targeted for November 27, 2001. At completion this project is expected to be completed eighteen months ahead of schedule and under total estimated cost. This RL milestone project (TRP-01-502) has been nominated for the national DOE "Project of the Year" award.

ADDITIONAL FY 2001 ACCOMPLISHMENTS

Maintain Safe & Secure SNM

Utilizing material supplied by the PFP, Phase one of the Defense Treaty Reduction Agency for Nondestructive Assay (NDA) measurement of high-grade oxide materials was completed by PNNL. The result of this effort establishes a fingerprint of various oxide materials that will be used to develop NDA measurement technologies for ultimate use in Russia. The Remote Controlled Video Inspection system that will perform video inspections and inventories in radiation areas has been installed. As a result, radiation dose to personnel will be significantly reduced. Successfully demonstrated the foundation of the Canister Monitoring System by coupling magnetic pressure sensors with radio frequency tagging technology on July 17. This demonstration confirmed the system's ability to (1) accurately read internal 3013 container pressure changes, (2) transmit wireless data to a remote computer, and (3) electronically measure 3013 container internal and external temperature changes. Installed new twenty-position storage rack for 3013 containers in Vault 1 and installed six additional twenty-eight position storage racks in Vault 4 for storage of 3013 containers that reduced production congestion from Outer Can Welder (OCW) and thermal stabilization operations. Completed annual inventories of Material Balance Areas 213, 218, 250, and 251.

Maintain Safe and Compliant PFP

The Defense Nuclear Facilities Safety Board (DNFSB) reported this fiscal year they were generally impressed with the turnaround and momentum they had observed in the last two years. They also seemed particularly impressed with the ALARA program responsibilities to identify ways to reduce exposure and will promote this idea throughout the DOE complex. Additionally, the Defense Nuclear Facility Safety Board commended the Nuclear Material Stabilization Project (NMSP) in the areas of Deactivation and Decommissioning planning and closure of Plutonium Vulnerability Assessment actions. The on-site assessment conducted by the Facility Evaluation Board (FEB) assessed the overall performance of the NMSP as satisfactory. Noteworthy practices identified by the FEB include the chemical management system and qualification of drill team members. In January 2001 the Preventive Maintenance Overdue Backlog was at its lowest level in nearly four (4) years (April 1997), and for the first time since June 1999 there were no criticality safety nonconformances during July 2001 of any type (deficiency, infraction, etc.). Installation of the final of 12 backflow preventers was completed April 18, 2001, which closes out milestone activity (TRP-01-511) significantly ahead of the June 2001 RL commitment date. The RL milestone (TRP-01-510) to update to the Integrated Project Management Plan (IPMP) was issued September 5, 2001. This IPMP sets forth the plans, organization and control systems

for managing the Nuclear Material Stabilization Project (NMSP), and includes top-level scope, cost and schedule information.

Stabilization of Nuclear Material

Residues - Repackaging of the 31 plutonium/aluminum (Pu/Al) Alloys Group 1 was initiated on June 11, 2001, and completed on June 19, 2001 thereby completing the residues packaging portion of milestone TRP-01-501, "Complete Plutonium Alloy Stabilization or Shipment." Repackaging of Hanford Ash was initiated on April 9, 2001 and is expected to be completed in January 2002 to support the August 2002 DOE-HQ milestone (TRP-02-504) for shipment to the Waste Isolation Pilot Plant (WIPP). At yearend 122.5 bulk kilograms of Hanford Ash had been repackaged. An additional 297.5 bulk kilograms of Rocky Flats Ash were processed earlier this fiscal year. Activities supporting startup of Sand, Slag, and Crucible repackaging have been initiated to support timely completion of this milestone effort.

Oxides/Metals – Processing of plutonium metals was initiated on September 29, 2000, six weeks ahead of the November 10, 2000 RL milestone (TRP-01-508) scheduled start date. Early startup of this RL milestone effort supported the Defense Nuclear Facilities Safety Board (DNFSB) commitment to complete packaging of the metal inventory (TRP-02-500).

Solutions – The Plant Director approved Unrestricted Operations of the Magnesium Hydroxide Precipitation Process (MHPP) on October 16, 2000. Despite several process improvements the solutions stabilization project continued to experience difficulties with $Mg(OH)_2$ processing due to higher than planned quantities of precipitate. To recover schedule, the process was changed from magnesium hydroxide precipitation to oxalate precipitation in August 2001 with emphasis on the more pure plutonium feed material (i.e., product nitrate solutions). A composite total of 603 liters of plutonium solutions were stabilized through the two processes in FY 2001. In addition, authorization to proceed with direct discard was also obtained in September.

Oxalate Precipitation ¾ The change to the oxalate precipitation process was successfully implemented on August 22, 2001.

Direct Discard ¾ The Direct Discard process was initiated on September 26, 2001. Ten liters of solution were processed and made disposition ready by the end of the fiscal year. Additionally, a Tri Party Agreement (TPA) milestone has been established to complete this task by March 2002.

Disposition of Nuclear Material

Startup operation of the Outer Can Welder (OCW) was initiated on April 10, 2001. This achievement made Hanford the first site in the DOE complex to comply with the new DOE plutonium packaging standard. Through September 30, 2001, the Outer Can Welder has produced 358 DOE-STD-3013 containers.

Deactivation

RL approval of the PFP Safety Analysis Report (SAR) addendum for the Miscellaneous Underground Storage Tank 241-Z-361 was received. Effective with this approval, the FSAR addendum supercedes the existing Justification for Continued Operation (JCO), brings closure to the Unreviewed Safety Question (USQ) regarding tank characterization and hazard analysis, and removes flammable gas controls due to very low concentrations of combustible gases. The 241-Z-361 Tank Characterization Report was completed ahead of schedule on June 28, 2001.

ACCOMPLISHMENTS DURING THIS REPORTING PERIOD

Maintain Safe & Secure SNM

RL authorized resumption of operations in the afternoon of September 12, 2001 following the Hanford Site Evacuation the preceding day due to the terrorist attacks on the east coast. The annual inventory of Material Balance Areas (MBA) 218, 250, and 251 was completed and reconciled. Procedure development for the Remote Controlled Video Inspection system that will be utilized during the polycube stabilization campaign in December 2001 was initiated. Installation of protective shielding on eight International Atomic Energy Agency (IAEA) cameras to improve imaging by minimizing the radiation effect on the electronics was completed.

Maintain Safe and Compliant PFP

The August NMS fiscal year spend costs predicted year-end costs to be $103,817K, including Project W-460 line item costs. The year-end actual costs came in at $103,517K, which was within $300K (3/10ths of one percent) accuracy. The model for testing the 291-Z-1 airflow was completed and planning for replacement of the probe is underway. Several steam maintenance work packages to return steam to the facility this winter were completed. All but three ZSR DOS testing procedures were changed from active recall to perform upon request designation. A ZSR procedure is being developed to perform ZSR filter flow testing instead of DOS testing.

Stabilization of Nuclear Material

Residues ¾ Repackaged 31,463 grams bulk of Hanford ash into 24 Pipe Overpack Containers (POCs) during September. The revision to the Safety Analysis Report for Packaging (SARP) for the Group 1 Pu/Al alloys was approved and the POC containing the Group 1 Pu/Al alloys were shipped to the Central Waste Complex (CWC). Actions associated with the Corrective Action Reports (CARs) from the Carlsbad Field Office (CBFO) audit of PFP were completed. The electrical heat source for the calibration of the calorimeter was received. A turnover inventory of vaults 192B and 192C to the Residues Project staff that is expected to improve material transfers.

Oxides/Metals ¾ The total number of bagless transfer cans created in fiscal year 2001 was 394 including eleven alloys stabilized and packaged. The development and testing of the Thermal Treatment Furnace Load-Out system (Hot-Box) was completed by PNNL. Fabrication of the test equipment for thermal stabilization of high chloride oxides was completed with exception of final interface with the test furnace. A test plan is under development and testing is expected to begin in October. This is work being done by PNNL and supported by the Nuclear Material Focus Area. Potential locations for installation of TGA test equipment in the RMC/RMA line were evaluated and HA-20MB selected. A schedule for the design, procurement and installation was prepared which showed a completion date of February 20, 2002.

Polycubes ¾ Completion of criticality analysis for polycube processing was given a higher priority and significant progress made, however it was not completed due to the last minute need to consider a large volume "pusher" can for sphinctering in the pewter cans used to transport the polycubes. The schedule for readiness activities for polycube processing was updated and the work reinvigorated.

Solutions ¾

- **Oxalate Precipitation ¾** Monthly production was 102 liters thru the hot plates, exceeding the planned rate of 83 liters. The cumulative FY 2001 is 733 liters thru the hot plates versus a planned rate of 764 liters. The totals are a combination of liters processed through the $Mg(OH)_2$ and oxalate precipitation process. An average of 6.3 columns were precipitated per available working day for the month (BCR baseline assumes 6 columns/day processed via the oxalate precipitation process).

- **Direct Discard ¾** This improved process yields a much lower precipitate volume and doesn't require the full capacity of the thermal equipment. As a result, there may be excess furnace and processing capacity.

Disposition of Nuclear Material

Forty-nine (9 Alloys, 40 Hanford Ash) POCs were shipped to the Central Waste Complex in September. The ACCESS database necessary to meet the electronic data base requirements of DOE Order 3013 for PU metal and Pu metal alloys was completed in August and entry of data was completed in September. Work on additional program components necessary to accommodate oxide data being entered into the database is complete. Debugging of the reporting side of the software is underway and data entry of oxides from metal brushing has been initiated. The initial draft of the characterization document for oxides with less than 30 percent plutonium was completed and circulated for internal peer review. A request to prepare and submit a FY 2002 Materials Management Plan using the FY 2001 formats was received. The submission to RL is due November 16, 2001.

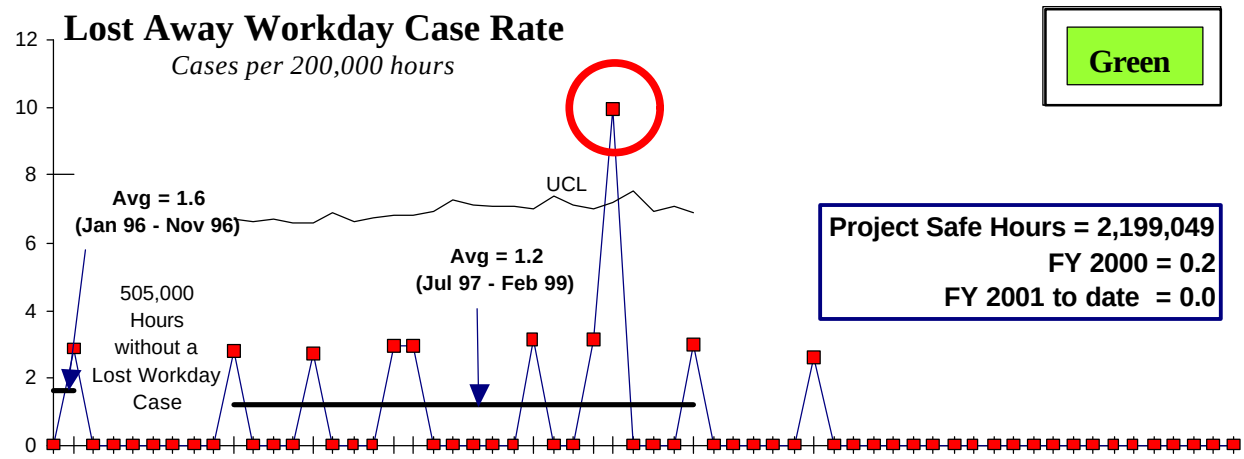
Project W-460

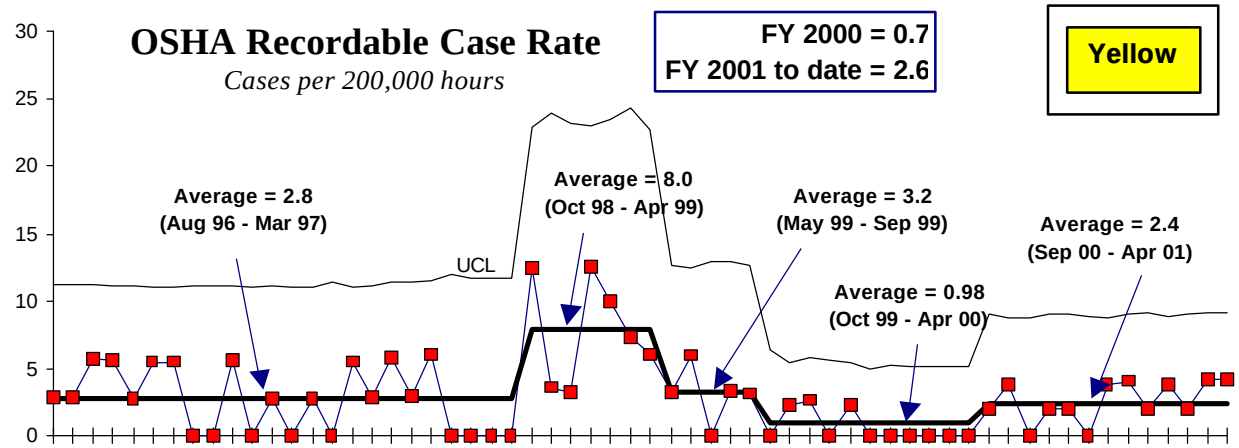
All construction is complete. All Acceptance Test Procedures (ATPs) and required re-testing have been completed including the now installed Thermal Gravimetric Analysis (TGA) units. Daily startup/progress meetings are being held to status progress towards completion of hot start-up. Due to the terrorist attack and the subsequent stoppage of foreign flights, the delivery of the units was late by 10 days. As a result the hot start up date for the project is now November 27. Turnover to operations occurred on September 28 including the installed and tested TGA units. The Statement of Work (SOW) for the final portion of W-460, the security entrance, has been completed and reviewed by the appropriate parties. Comments are being incorporated. The contract should be in place the second week of October with the work being completed in November. All items on the master punch list for the project have, or are being closed and verified by AI. Project documentation and files are being compiled to support the ORR and project closeout.

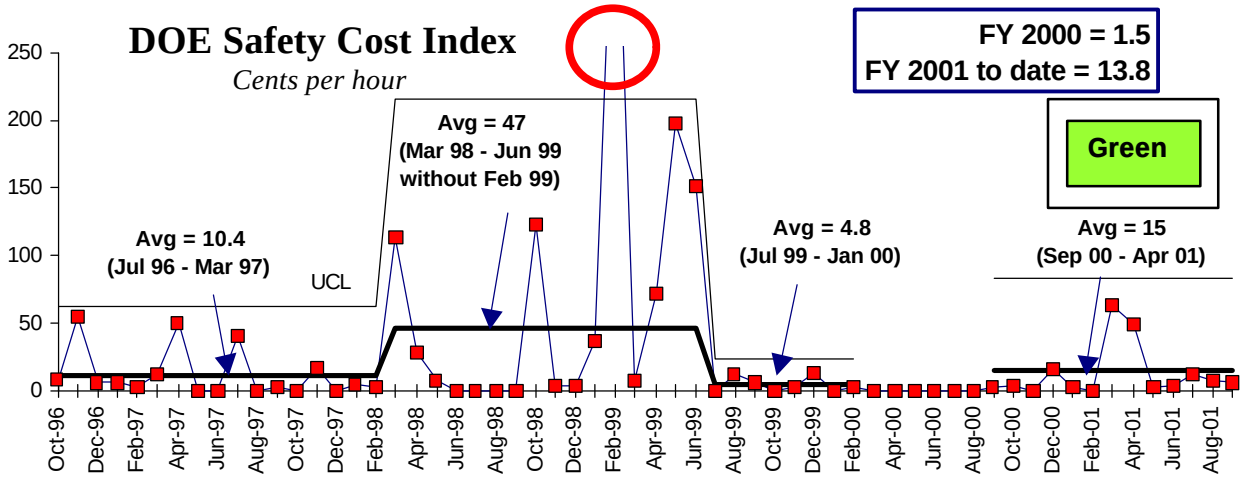
Alloys- Stabilization and packaging of the oxide form of alloys will resume when a residual moisture measurement technology is available. Plans and schedules are being developed.

SAFETY

Through September 30, 2001, there were 669 calendar days (exceeding 2.2 million staff hours) since the last recorded lost workday injury. There has however, been an increase in the OSHA recordable case rate. Management staff has increased its presence in the field during all shifts to address this recent trend.







ISMS STATUS

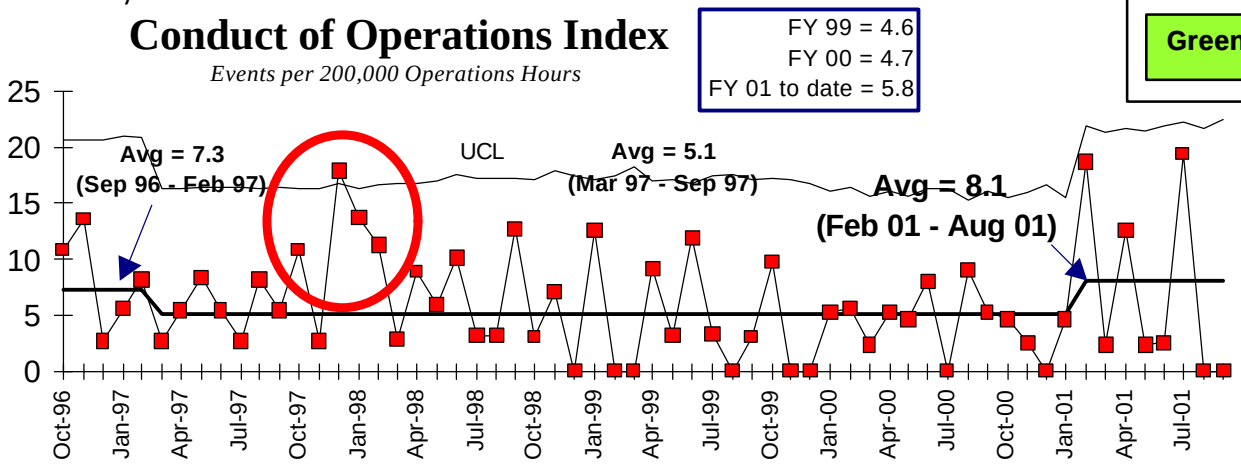
Green

Preparations for the Voluntary Protection Plan "Star" status application are on going.

CONDUCT OF OPERATIONS

Green

Efforts continue to reemphasize the Integrated Safety Management System (ISMS) theme in completing work safely.



BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Nothing to report.

Opportunities for Improvement

- Working with the Thermal Project on the cleanout of glovebox HA-20MB. Cleanout of the glovebox will provide data to validate the use of the Segmented Gamma Scan Assay System (SGSAS) for measurement of the SS&C and provide the Thermal Project a location for installation of the TGA.

UPCOMING ACTIVITIES

Disposition of Nuclear Material – Begin hot startup of the 2736-ZB Stabilization and Packaging System (W-460) by November 27, 2001.

MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	1	0	0	0	0	0	0	1
DOE-HQ	0	0	1	1	0	0	0	2
RL	2	0	2	0	0	0	0	4
Total Project	3	0	3	1	0	0	0	7

Only TPA/EA milestones and all FY2001 overdue and forecast late milestones are addressed in this report. Milestones overdue are deleted from the Milestone Exception Report once they are completed. The following chart summarizes the FY2001 TPA/EA milestone achievement and a Milestone Exception Report follows. The last milestone table summarizes the first six months of FY 2002 TPA/EA milestones.

FY2001 Tri-Party Agreement / EA Milestones			
M-083-07 (TRP-01-515)	**"Complete Repackaging & Shipping of Rocky Flats Ash to the CWC"**	**Due April 30, 2001 –** Completed on April 3, 2001.	Green
M-083-08 (TRP-01-516)	**"Complete Requirements to Ship Rocky Flats Ash to WIPP"**	A change package has been approved that reschedules FH and RL negotiations with the regulators to begin November 2001. Efforts are underway to relocate this milestone with Waste Management.	Green
DNFSB Commitments			
M-IP-114 (TRP-01-501) R94-01	**"Ship Alloys to SRS or Complete Stabilization of Alloys"**	**Due June 30, 2001 –** Packaging of metal alloys into 3013 containers was completed July 13, 2001. Additionally, all metal items were similarly packaged by month end. Pipe-n-go packaging of residue alloys was previously completed during June 2001. However, completion of this activity is currently on hold pending a new moisture measurement method.	Green
M-IP-110 (TRP-02-500)	**"Complete Packaging of Metal Inventory"**	**Due August 31, 2001 –** The repackaging of the remaining plutonium (Pu) metals inventory into 3013 outer cans was completed September 26, 2001.	Green
M-IP-106 (TRP-01-500) (R94-01)	**"Complete Stabilization & Packaging Plutonium Solutions"**	**Due December 31, 2001 –** Baseline Change Request FSP-2001-064 was approved that extends completion of this workscope from December 31, 2001 to July 31, 2002. The DOE-HQ DNFSB Recommendation 2000-1 Implementation Plan (IP) has now been revised to reflect the July completion. A BCR will be issued to formally change this DOE-HQ milestone date from December 2001 to July 2002.	Green

MILESTONE EXCEPTION REPORT

Overdue – 1

Number/WBS	Level	Milestone Title	Baseline Date	Forecast Date
TRP-01-501 1.4.5	**HQ**	Ship Alloys to SRS or Complete Stabilization of Alloys	06/30/2001	TBD

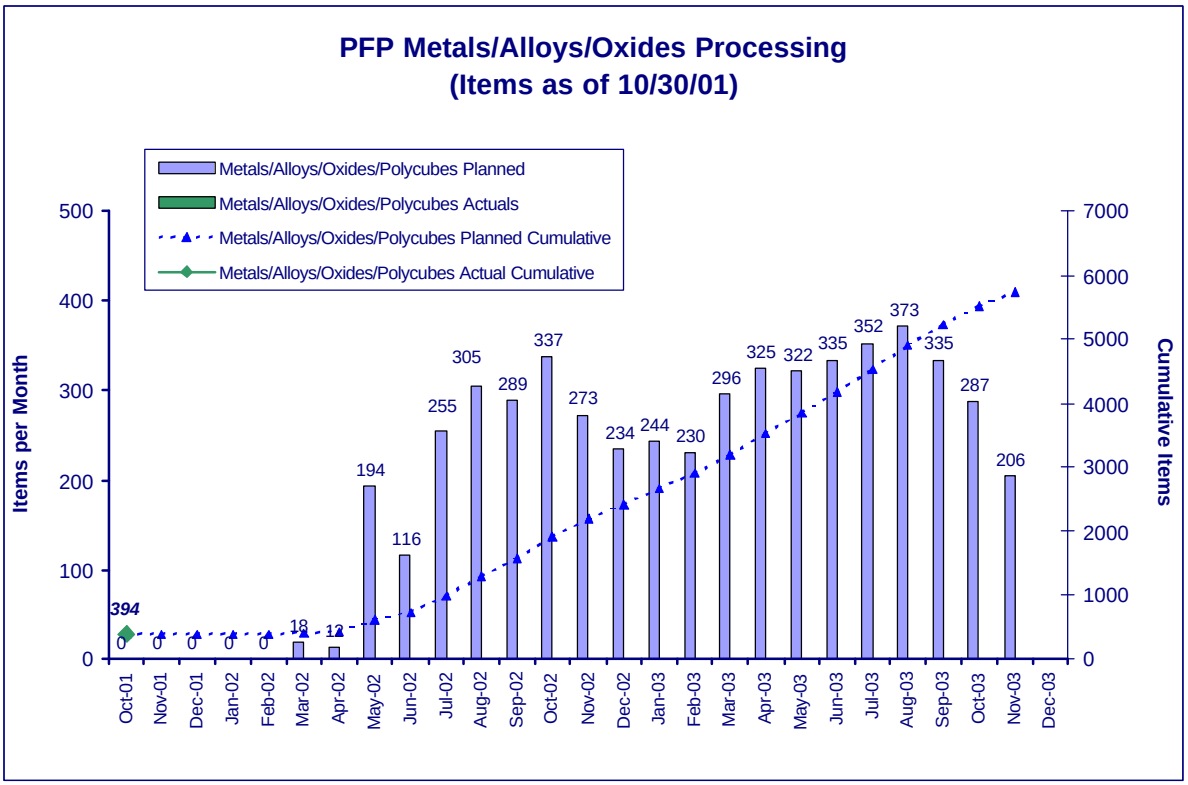
Cause: Completion of this activity is on hold pending a new moisture measurement method.
Impact: Currently being evaluated. A lack of an approved moisture measurement system could be significant.
Corrective Action: FH, RL, and other sites throughout the DOE complex are currently investigating alternate moisture measurement technologies.

FY 2002 Tri-Party Agreement / EA Milestones

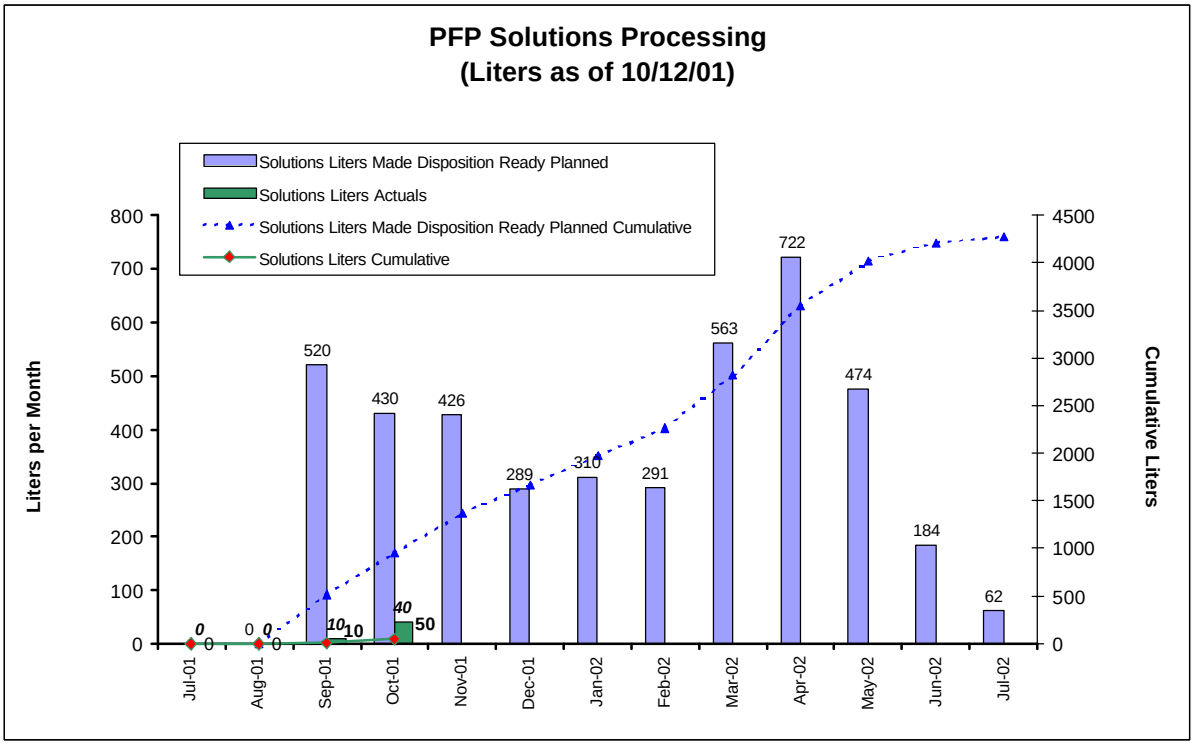
Number	Milestone Title	Status
	Nothing to report at this time.	

PERFORMANCE OBJECTIVES

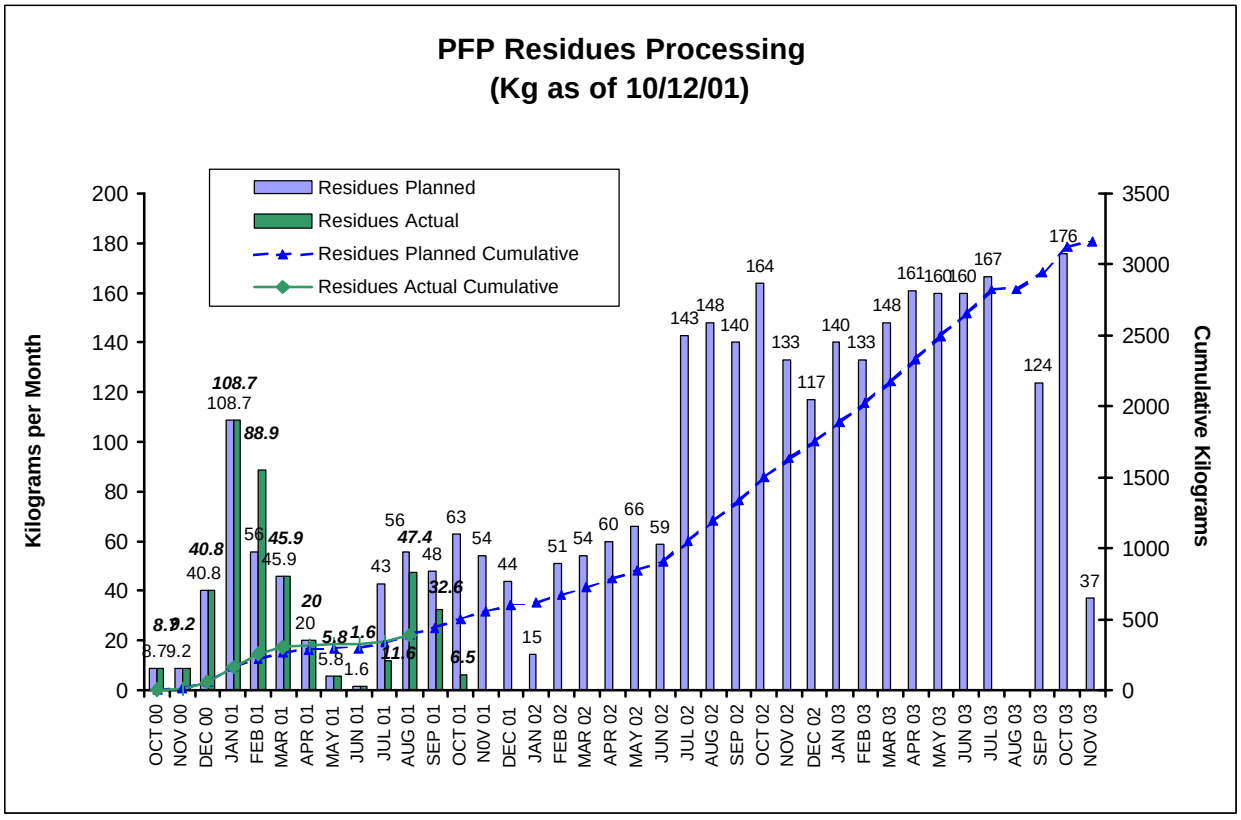
OXIDES/METALS/POLYCUBES STABILIZATION



SOLUTIONS STABILIZATION



RESIDUE STABILIZATION



Repackaging of Hanford ash is currently one month behind the baseline schedule due to recent problems with the Segmented Gamma Scan Assay System.

FY 2001 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS – ($000)

By PBS		FYTD BCWS	BCWP	ACWP	SV	%	CV	%	BAC
WBS 1.4.5 PBS TP05	PFP Deactivation	$ 115,247	$ 108,263	$ 110,322	$ (6,984)	-6%	$ (2,059)	-2%	$ 115,247
	Total	$ 115,247	$ 108,263	$ 110,322	$ (6,984)	-6%	$ (2,059)	-2%	$ 115,247

FY TO DATE SCHEDULE / COST PERFORMANCE

The current schedule and cost variances continue to remain relatively stable.

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: (-$7.0M)

Nuclear Materials Stabilization Project- 1.4.5/TP-05

Variance Cause: The current six percent unfavorable schedule variance is primarily attributable to Project W-460, disqualification of the Super Critical Fluid Extraction (SFE) system as a measurement of residual moisture for stabilized metal and alloy materials, continuing problems with the Segmented Gamma Scan Assay System (SGSAS) that has impacted residue processing, delayed shift to use of the five furnaces for thermal stabilization of product from the Mg $(OH)_2$ process due to a lack of an approved moisture measurement method and delays in direct discard startup.

Impact: Expedient resolution of the SFE issue is necessary to preclude further impure oxide, solutions and alloys processing impact. Completion of alloys processing will be deferred to FY 2002 to allow identification and implementation of alternative SFE technologies for moisture measurement. Work scope carry over to complete alloys processing is estimated at approximately $350K. Recovery of the solutions stabilization project is expected by December 31, 2001.

Corrective Action: A recent shift to an oxalate precipitation process using high plutonium purity feed allows for use of the Loss On Ignition (LOI) method for moisture measurement and permits thermal stabilization through the furnaces, rather than wait for a replacement moisture measurement method. Additionally, the direct discard of low plutonium concentrated solutions was initiated on September 26, 2001 that is expected to improve performance. Project W-460 construction has been completed. The schedule variance caused by the SGSAS problems is expected to be recovered with additional processing efficiencies and limited overtime.

COST VARIANCE ANALYSIS: (-$2.1M)

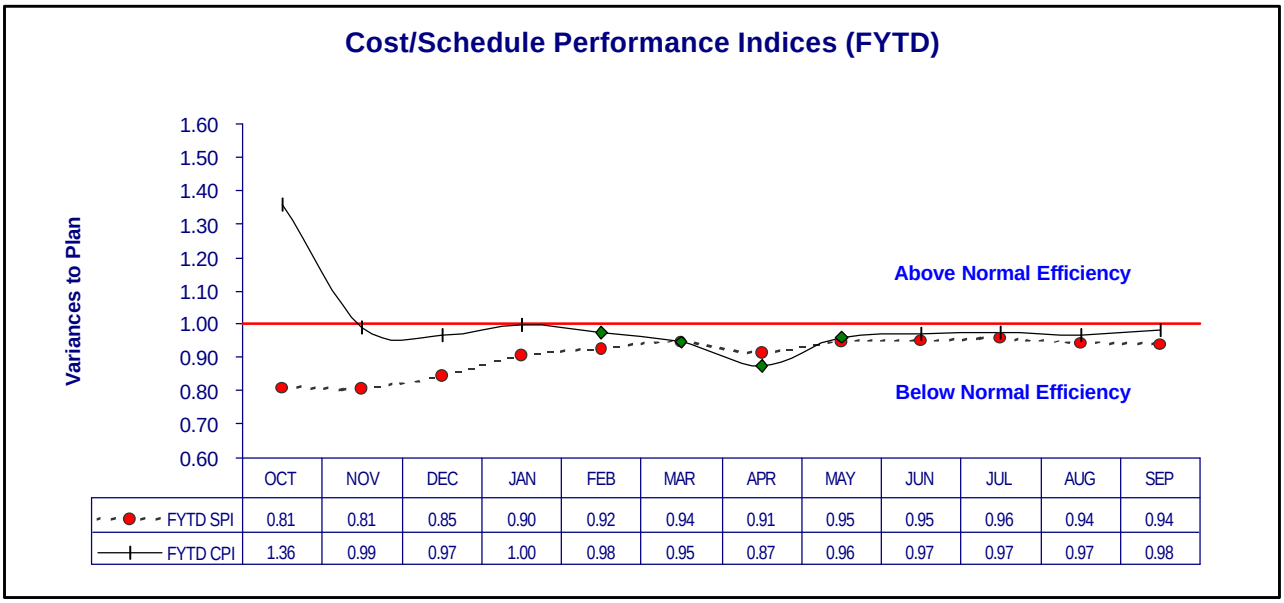
Nuclear Materials Stabilization Project- 1.4.5/TP-05

Variance Cause: The current two percent unfavorable cost variance is primarily attributable to late completion of Rocky Flats Ash processing, early operational difficulties with the reliability of the 234-5Z Bagless Transfer System (BTS) that extended metal stabilization and the disqualification of an approved residual moisture measurement technology to support completion of the alloys stabilization campaign. Higher than planned cost for development of the Fire Hazards Analysis and increased subcontract requirements to support recovery of Project W-460 construction are also a contributing factor. Factors mitigating this unfavorable variance include staffing underruns, efficiencies in completing the safety analysis, environmental documentation and permitting supporting polycube stabilization, and allocation of FY 2000 unearned fee and indirect variance distribution.

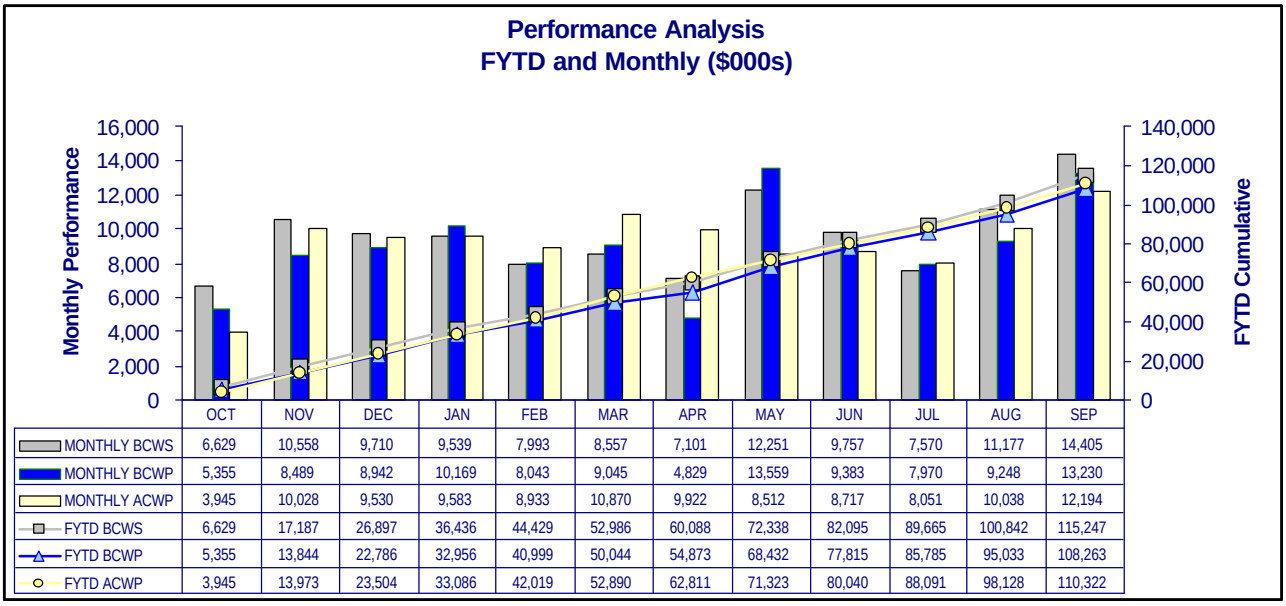
Impact: The costs associated with late completion of Rocky Flats Ash are non-recoverable.

Corrective Action: Repair and alignment of the 234-5Z BTS unit has demonstrated improved operational reliability. Cost control actions limiting overtime, subcontract costs and material purchases have proven to be effective.

SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
FYTD SPI	0.81	0.81	0.85	0.90	0.92	0.94	0.91	0.95	0.95	0.96	0.94	0.94
FYTD CPI	1.36	0.99	0.97	1.00	0.98	0.95	0.87	0.96	0.97	0.97	0.97	0.98



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY BCWS	6,629	10,558	9,710	9,539	7,993	8,557	7,101	12,251	9,757	7,570	11,177	14,405
MONTHLY BCWP	5,355	8,489	8,942	10,169	8,043	9,045	4,829	13,559	9,383	7,970	9,248	13,230
MONTHLY ACWP	3,945	10,028	9,530	9,583	8,933	10,870	9,922	8,512	8,717	8,051	10,038	12,194
FYTD BCWS	6,629	17,187	26,897	36,436	44,429	52,986	60,088	72,338	82,095	89,665	100,842	115,247
FYTD BCWP	5,355	13,844	22,786	32,956	40,999	50,044	54,873	68,432	77,815	85,785	95,033	108,263
FYTD ACWP	3,945	13,973	23,504	33,086	42,019	52,890	62,811	71,323	80,040	88,091	98,128	110,322

FUNDS MANAGEMENT
FUNDS VS ACTUAL COSTS ($000)
FY 2001

Green

		FY 2001 Funds	FY 2001 Actual Costs	Uncosted
1.4.5	**Nuclear Material Stabilization**			
	TP05			
	Project Completion - Operating	$ 95,604	$ 91,867	$ 3,737
	Line Item/Other	$ 12,175	$ 11,821	$ 354
	Total	$ 107,779	$ 103,688	$ 4,091

[Status through September 30, 2001]

NOTE: Funds and Actuals include RFS workscope not shown in the performance baseline.

ISSUES

Technical Issues

Issue: Moisture measurement of stabilized oxides via supercritical fluids extraction was disapproved for use by RL. Completion of stabilization and packaging of plutonium alloys is contingent upon installation and testing of alternate moisture measurement equipment.

Impact: As a result, there is no approved method for moisture testing of all the various categories of stabilized oxides. Completion of alloy processing will be carryover work scope for next fiscal year and will be completed within 60 days on approval of a moisture measurement method. Analysis is continuing to determine the full impact of this change.

Corrective Action: The Thermal Gravimetric Analyzer (TGA) has been identified as an alternative plutonium oxide moisture measurement system replacing the Supercritical Fluid Extraction system that was previously disqualified by RL. Two TGAs were delivered and installed in 2736-ZB the week of September 23rd. This change, documented via Baseline Change Request FSP-01-069, and approved by RL, extends completion of the 2736-ZB Bagless Transfer System installation milestone to October 1, 2001. Additionally, three TGAs will be procured for installation in glovebox 20-MB in 234-5Z. These are expected to be available for service by March, 2002.

Issue: The current behind schedule condition for the Procurement activity of approximately 200 1st generation magnetically coupled pressure gauges and radio frequency devices (3013 Canister Monitoring System) are critical to the Bagless Transfer System/Outer Can Welder packaging schedule.

Impact: The procurement of these units must be accelerated to support packaging requirements (i.e. no retrofit of 3013 containers and additional material movements within vault operations).

Corrective Action: Purchase Orders for procurement of magnetically coupled pressure gauges (PUCKS) and radio frequency devices (PODS) are expected to be let in late October 2001 with delivery expected in late January 2002. Fabrication and delivery of this equipment is expected to more than double during the year with an expected FY 2002 delivery of approximately 1600 units.

Issue: The surface weld porosity of 3013 outer containers exceeds American Society of Mechanical Engineer (ASME) Boiler and Pressure Vessel Code, Section VIII standards of .040-inch diameter for this material.
Impact: A number of 3013 outer containers may need to be repackaged to meet ASME standards.
Corrective Action: Preliminary test results from a study conducted by the Savannah River Site indicate the geometric void space between the outer can wall and lid to be suspect. Efforts are underway to identify methods to reduce the gap. The final criteria for weld acceptance will need to be negotiated between SRS and FH.

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

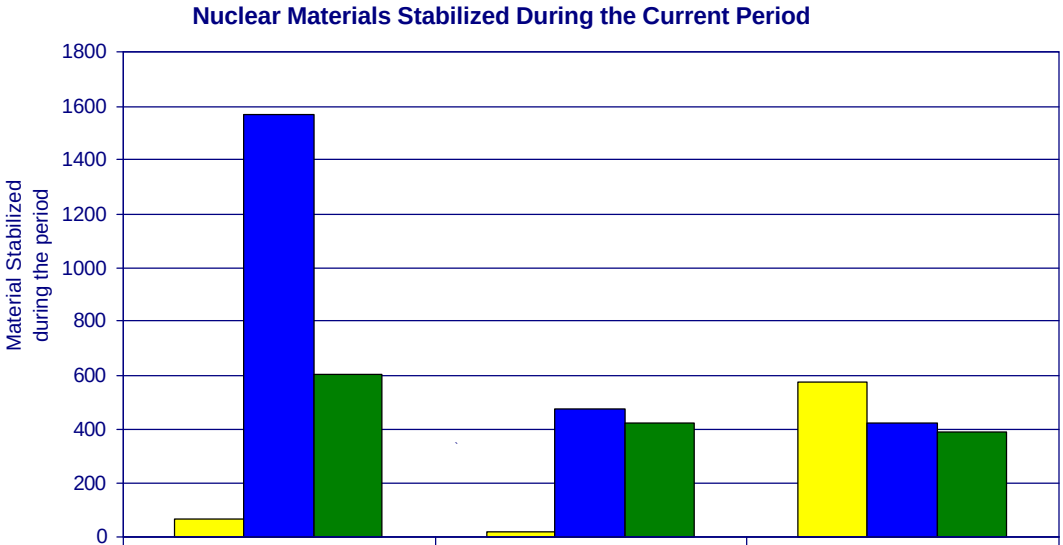
BCR NUMBER	DATE ASSIGNED	BCR TITLE	FY 01 IMPACT	SCH	TECH	DRAFT COPY	TO FH	FH APPROVAL	DOE-RL APPROVAL
FSP-2001-070	16-Aug-01	SRS Acceptance Criteria	$424	X	X	24-Sep-01	24-Oct-01	01-Oct-01	Not Required
FSP-2001-073	18-Sep-01	TGA Moisture Measure. Resolution	$140	X	X	24-Sep-01	24-Oct-01	01-Oct-01	Not Required
FSP-2001-074	18-Sep-01	Rebaseline Project W-460	$1,815	X	X	01-Oct-01	24-Oct-01	24-Oct-01	Pending

KEY INTEGRATION ACTIVITIES

- PFP met with General Electric (GE) Vallecitos representatives on September 20, 2001 and finalized a plan for transporting a fuel pin to Hanford later this year. This will assist GE Vallecitos with the final step in their nuclear material deinventory. Received approval from DOE to accept fuel pin subject to submittal and approval of categorical exclusion.

- PFP coordination with Lawrence Livermore National Laboratory (LLNL) to ship requested oxide material (81 kg) to that facility at no cost continues. Meetings between DOE, LLNL and PFP to finalize transportation, container, and shipping agreements have resulted in agreement to tentatively ship this material in June 2002. Additional updates will be provided as negotiations progress.

Nuclear Materials Stabilized During the Current Period



	Plutonium Solution (L)	Plutonium Residue (Kg)	Plutonium Metal/Alloys (Containers)
FY00 Actual	67	17	574
FYTD Planned	1569	473	423
FYTD Actual	603	420	394

Plutonium Solution: The solutions stabilization project continued to experience difficulties with $Mg(OH)_2$ processing due to higher than planned quantities of precipitate. The process has been changed from magnesium hydroxide precipitation to oxalate precipitation with emphasis on the more pure plutonium feed material (i.e., product nitrate solutions). This shift in process methodology was documented in baseline change request FSP-2001-064. In addition, authorization to proceed with direct discard was also obtained in September.

Plutonium Residues: Additional characterization and nondestructive assay equipment calibration problems have delayed completion of Hanford Ash packaging.

Plutonium Metal/Alloys: The stabilization and packaging of all plutonium metals in inventory was completed on September 25, 2001. This completes DNFSB milestone TRP-02-500, due August 31, 2001. Alloys stabilization was not completed due to disapproval by DOE on June 15, 2001, of the supercritical fluid extraction moisture measurement method. Alternate technology, such as thermogravimetric analysis (TGA), is being tested and is the methodology of choice at this time. TGA equipment is being installed.