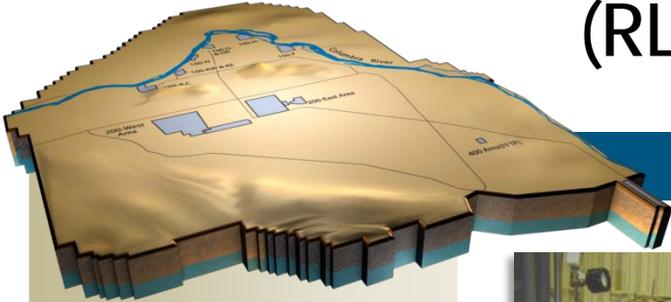


Section A

Nuclear Materials Stabilization and Disposition of PFP (RL-0011)



Monthly Performance Report

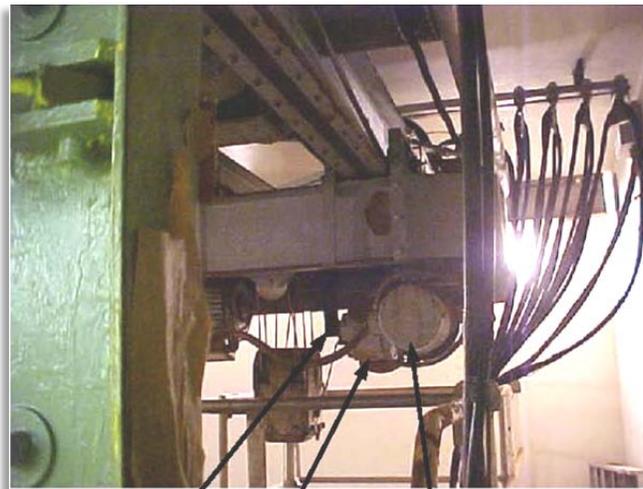
J.W. Long
Vice President and
Project Manager for
PFP Closure Project



**Workers Removing
Hydraulic Lines from
Glovebox HC-15 A/B/C
in Room 228B.**

July 2011
CHPRC-2011-07, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PRF Canyon Crane



Trolley Belt

Trolley
Clutch

AC Trolley Motor.
Gear box is located
behind the motor

PROJECT SUMMARY

The Plutonium Finishing Plant (PFP) Project continues to maintain PFP facilities compliant with authorization agreement requirements.

American Recovery and Reinvestment Act (ARRA)

Removal of plutonium-contaminated process equipment continued as a top priority in readying the PFP Complex for demolition, with a particular focus on removal of gloveboxes and associated piping and ductwork from the process and lab areas. Glovebox Deactivation, Decommission, Decontamination, and Demolition (D&D) is complete in the backside vault rooms, Standards Laboratory, Analytical Laboratory, and the Radioactive Acid Digestion Test Unit (RADTU). A total of 130 gloveboxes have been removed to date with Recovery Act Funds. Of these, 117 have been shipped out of PFP for treatment or disposal and one has been set aside and staged for size reduction and disposal as transuranic (TRU) waste. Two gloveboxes (179-4 and 179-6) were shipped to an offsite treatment facility for size reduction.

The work to complete electrical isolation of the 2736ZB complex was completed by PFP personnel. Balance of Site personnel have completed verification and air gapping of conduits between the buildings for three of the six buildings. These include 2721-Z, 2731-ZA and 2736-ZC. Radiologically clean demolition equipment has been deployed and is staged awaiting demolition of the three buildings. Protective boxes have been fabricated and installed to protect vital equipment during demolition.

The final two gloveboxes (179-1 and 188-1) were removed from the Plutonium Process Support Laboratories (PPSL). This completes removal of all 116 gloveboxes and hoods in the three PFP laboratories and backside vault rooms of 234-5Z, which is now undergoing general area clean out. Seven rooms were inspected and verified as complete in support of the Key Performance Parameter for 234-5Z Ready for Demolition (KPP-1).

Glovebox removal work is ongoing in the Remote Mechanical A (RMA) and Remote Mechanical C (RMC) Lines. Gloveboxes HA-15, HA-16BS and HA-16CS were removed. A large airlock was removed from the west end of the HC-2 conveyor, enabling work to begin on preparing the 60'-long conveyor glovebox for removal from Rooms 230A, 230B, and 228C. External isolations and process equipment removal continued. Significant radiation dose rates and high contamination levels are challenging the D&D teams in these areas.

Work was resumed to remove highly contaminated process solution transfer lines from throughout the 234-5Z building, and 11 feet of piping was removed, bringing the total removed to date to 502 feet. Process vacuum system piping removal remains on hold in support of high-priority KPP 234-5Z Ready for Demolition work scope in the process and lab areas, and total removed remains at 1,210 feet. Insulator crews removed 201 feet of asbestos from piping and ductwork, bringing the total linear footage completed at PFP with Recovery Act funds to 14,654 feet.

As the pace of D&D work has accelerated at PFP, so have waste generation rates. CHPRC has now shipped approximately 3,415 cubic meters of waste from PFP with support from Recovery Act funds, including 2,747 cubic meters of low level and mixed low level waste, 641 cubic meters of TRU waste, and 27 cubic meters of nonradioactive waste.

Work to remove more than 200 contaminated HEPA filters from deactivated filter rooms 311 and 316 has been delayed until resources can be made available from the vault complex.

Base

236Z Plutonium Reclamation Facility – The Standard Waste Box (SWB) containing pencil tank assembly 20 (Tank 20) was shipped to the Central Waste Complex (CWC). Size reduction of pencil tank assembly 24 (Tank 24) was completed and the segments placed into an SWB. The last two segments of pencil tank assembly 17 (Tank 17) were sealed out and placed into a SWB. Size reduction of pencil tank assembly 23 (Tank 23) was completed and the segments are ready for seal-out of the canyon.

On Sunday, July 24, 2011, the canyon crane failed during movement to retrieve the counter balance to install on the Tank 23 strongback. A loud noise was heard from inside the canyon when the crane motion switch was moved to either the east or west directions. Troubleshooting activities were initiated.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
		➤ Actions to achieve target		
11-EMS-PFP-OB1-T1	Broaden spill mitigation efforts at PFP	Reduce opportunity for hydrocarbon spills		100% Complete
		➤ Evaluate additional controls	12/31/2010	Complete
		➤ Standardize controls for SOWs	3/31/2011	Complete
		➤ Evaluate alternate fuel options	6/30/2011	Complete
11-EMS-PFP-OB2-T1	Reduce number of private vehicles used for commuting to/from PFP	Ben Franklin Transit (BFT) bus service		100% Complete
		➤ Conduct survey	12/31/2010	Complete
		➤ Summarize survey results	3/1/2011	Complete
		➤ Obtain cost estimate	5/1/2011	Complete
		➤ Report to management	7/1/2011	Complete
11-EMS-PFP-OB3-T1	Materials Redeployment	Redeployment of unused and contaminate free items		85% Complete
		➤ Review release procedures	12/31/2010	Complete
		➤ Evaluate excess practices	3/31/2011	Complete
		➤ Evaluate procurement practices	6/30/2011	Complete
		➤ Document 3 successes	9/30/2011	

TARGET ZERO PERFORMANCE

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	
Total Recordable Injuries	0	4	
First Aid Cases	18	98	ARRA -7/5 Employee experienced pain in their right elbow. (22085) ARRA -7/11 Employee experienced pain in their left arm and elbow. (22107) ARRA -7/11 Employee received an abrasion to the top of their head. (22103) ARRA -7/12 Employee received an abrasion to their ear. (22110) ARRA -7/12 Employee received a cut to their right ring finger. (22118) ARRA -7/13 Employee experienced dizziness while in a HCA. (22113) ARRA -7/14 Employee received a contusion to their nose. (22120) Base -7/14 Employee received a laceration to right index finger. (22121) ARRA -7/15 Employee experienced pain in their left knee. (22124) ARRA -7/19 Employee received a contusion to their right hand. (22133) ARRA -7/19 Employee experienced neck pain. (22143) ARRA -7/19 Employee experienced strain to neck. (22142) ARRA -7/20 Employee received a contusion to their pinky finger. (22148) ARRA -7/20 Employee experienced strain to their shoulder and wrist. (22146) ARRA -7/21 Employee experiences pain to right foot. (22153) Base -7/25 Employee experienced pain to their right knee. (22154) ARRA -7/28 Employee experienced pain in their back. (22167) ARRA -7/29 Employee received a sprain to their right ankle. (22168)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

11.02 Maintain Safe and Compliant PFP – Base

- Revision seven of the PFP D&D Documented Safety Analysis (DSA) and Technical Safety Requirements (TSRs) was transmitted to RL for approval on June 28th. The revisions contain numerous annual update changes, including changes to close the leak path factor Justification for Continued Operations (JCO). The revision also addresses a number of the EM-23 findings and observations identified during an assessment that was performed in November 2010.

11.05 Disposition PFP Facility – Base

Plutonium Reclamation Facility (PRF)

- Size reduction of Pencil Tank 24 in the Plutonium Reclamation Facility was completed. The segments placed into a SWB, and dispositioned.
- Size reduction of Tank 23 was completed and the segments are ready for seal-out of the canyon.

11.05 Disposition PFP (234-5Z) Facility – ARRA

- In Remote Mechanical A Line Room 235B, the cleanout of the large four level glovebox HA-23S continued. The first application of Aspigel chemical decontamination agent was completed for the first level of glovebox HA-23S.
- In RMA Line Room 235A-1, the external isolation of gloveboxes HA-14S, HA-14P, HA-14DC, neared completion while the removal of internal process equipment from HA-14DC and HA-14CC was initiated.
- In RMA Line Room 235A-3 the external isolation and removal of internal process equipment for gloveboxes HA-8A, HA-8B, HA-9C, HA-9D, and HA-9E was started.
- In RMC Line Room 230A, electrical isolations were completed and the mechanical isolation and size reduction and removal of internal components for glovebox HC-21C continued.
- In RMC Line Room 230B, the HC-2/3 airlock was removed and the removal of the internal conveyor chain and guide rails for HC-2 was started.
- In RMC Line Room 228A, the team completed removal of the chain conveyor from Glovebox HC-1 and began size reducing the remaining conveyor guide rails.
- In RMC Line Room 228B, the work team continued mechanical isolations and process equipment removal from Glovebox HC-15 A/B/C. During this period all of the hydraulic lines to Glovebox HC-15 A/B/C were drained and removed.
- In RMC Line Room 228C, mechanical isolations and process equipment removal from Gloveboxes HC-17 SBB, DC, and P continued. Also, electrical isolations for gloveboxes HC-18M and HC-18BS were initiated.
- In RMC Line Room 227, the second and last transfer-tube flange assembly was removed from inside of the 227-T Hood. Mechanical isolation work has commenced on glovebox 227-S.

Analytical Laboratory

- Bulk Area Cleanup activities for the lab continue. This involves removal of miscellaneous equipment and piping, which will prepare the lab area for demolition.

PPSL

- The 188-1 glovebox was removed from the facility and turned over to the Solid Waste organization for shipment to PermaFix Northwest (PFNW) for size reduction as TRU waste. This was the last remaining glovebox in the PPSL.
- Bulk Area Cleanup activities for the PPSL lab have now commenced. This involves removal of miscellaneous equipment and piping, which will prepare the lab area for demolition.

Disposition PFP (234-5Z) Facility

- Process vacuum piping removal is 30 percent complete with 1,210 total feet removed.
- A total of 502 feet of chemical piping transfer line has been removed.
- 201 feet of asbestos-containing materials on piping was removed during the month of July bringing the total to 14, 654 feet of asbestos removed to date.

2736Z/ZB Vault Complex

- Electrical services including isolation and air gapping for the 2736Z/ZB Complex and buildings 2721-Z, 2731-ZA and 2736-ZC were completed..

PFP Facility Modifications

- Completed installation of the Waste Route Platform Extension for Door 107.

MAJOR ISSUES

Issue – On Sunday, July 24, 2011, the trolley on the PRF canyon crane failed during movement to retrieve the counter balance to install the Tank 23 strongback. A loud noise was heard from inside the canyon when the crane motion switch was moved to either the east or west directions.

Corrective Actions – Troubleshooting activities were initiated and corrective actions will be identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk

● Working - No Concerns Increased Confidence
● Working - Concern No Change
● Working - Critical Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
RL-0011/WBS 011				
PPF-003, Structural Decontamination Required Prior to Demolition; PFP-015, Conditions or Contamination Causes Greater Cleanup Than Planned	Facility sampling and characterization	●	↔	No new discoveries were identified during July.
PPF-004, Risk of PRF Canyon D&D cost/schedule growth; PFP-009: Problems with Aging Building Systems/Components Impacts D&D	Complete detailed planning/engineering for D&D of PRF canyon, particularly pencil tank removal and canyon decontamination. Perform critical system reliability assessments; procure critical spares; maintain existing redundancies; repair or replace equipment as failures occur and complete planned facility modifications.	●	↓	The PRF canyon crane, a critical resource in dispositioning pencil tanks and other equipment in the canyon, failed late in the month, apparently as a result of an electrical malfunction. Planning is underway for manned entry into the canyon to troubleshoot and repair the system.
PPF-036: Loss of Contamination Control	Rigorous routine radiological surveillance program and contamination control measures.	●	↔	Only a few, relatively minor contamination events were experienced during July, and the consequences of these events were largely mitigated by the more conservative radiological controls implemented in PFP's D&D work packages and RMA/RMC Line area access requirements.
PRC-025: Workforce Disruptions; PFP-035: Jurisdictional Issues Impact Planned Labor; PFP-042, Increased Attrition Impacts Availability of Qualified Resources	Risk has historically been accepted without mitigation.	●	↔	As workforce restructuring approaches, PFP continues to experience higher than normal levels of attrition and an increasing number of grievances and jurisdictional assignments of work adversely affecting schedule and cost performance. Absenteeism has also increased, and there is a noticeable decrease in acceptance of overtime. Critical positions are being backfilled where necessary, and CHPRC management is working with HAMTC leadership to develop jurisdictional implementation plans.

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled (BCWS)	Budgeted Cost of Work Performed (BCWP)	Actual Cost of Work Performed (ACWP)	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
ARRA	11.8	8.5	9.7	(3.3)	-28.0	(1.2)	-14.0
Base	<u>2.4</u>	<u>2.2</u>	<u>2.8</u>	<u>(0.2)</u>	-7.5	<u>(0.6)</u>	-26.8
Total	14.2	10.7	12.5	(3.5)	-24.6	(1.8)	-16.6

Numbers are rounded to the nearest \$0.1M

ARRA

CM Schedule Variance: (-\$3.3M/-28.0%)

Current month unfavorable schedule variance is primarily a result of delays in completing D&D of 234-5Z, deferred D&D work resulting from resources reassigned to focus on higher priority KPP glovebox removal work scope and preparing the 2736-Z/ZB complex for demolition. The 234-5Z process and lab area D&D delays are a result of inability to staff the planned three shifts of overtime, shortage of critical (Millwright) resources impacting critical path work, more stringent radiological controls, and longer duration due to difficulty in laboratory bulk area cleanup.

CM Cost Variance: (-\$1.2M/-14.0%)

Current month unfavorable cost variance is primarily a result of higher cost to execute the D&D 234-5Z work scope as a result of delays, difficulty, and encountered inefficiencies. Higher cost has also resulted from additional resources required to bring the Z/ZB complex to a Cold and Dark status and higher use of MSA brokered craft to support D&D.

Base

CM Schedule Variance: (-\$0.2M/-7.5%)

Current month schedule variance is within reporting threshold.

CM Cost Variance: (-\$0.6M/-26.8%)

Current month unfavorable cost variance is primarily due to continued surveillance/monitoring and maintenance of vital systems required to support D&D, which were planned to be deactivated earlier in the Fiscal Year. In addition, four HPTs (one per shift) have been added to support MinSafe Operations A/B/C/D shifts.

Contract-to-Date (\$M)

WBS 011/ RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
ARRA	246.1	236.4	240.7	(9.8)	-4.0	(4.4)	-1.9	295.9	285.5	10.4
Base	150.3	149.2	150.7	(1.1)	-0.8	(1.5)	-1.0	344.8	366.6	(21.8)
Total	396.4	385.5	391.4	(10.9)	-2.8	(5.9)	-1.5	640.7	652.1	(11.4)

Numbers are rounded to the nearest \$0.1M

ARRA

CTD Schedule Performance: (-\$9.8M/-4.0%)

Negative schedule variance is within reporting thresholds.

CTD Cost Performance: (-\$4.4M/-1.9%)

Favorable cost variance is within reporting thresholds.

Base

CTD Schedule Variance (-\$1.1M/-0.8%)

The schedule variance is within reporting thresholds.

CTD Cost Variance (-\$1.5M/-1.0%)

The negative cost variance is within reporting thresholds.

Variance at Completion (-\$11.4M/-1.2%)

An unfavorable Base variance at completion results from the cost impact of extending D&D of 236-Z and 242-Z into FY13 due to team reassignments to support higher priority RMA/RMC KPP glovebox removal and the continued surveillance/monitoring and maintenance of vital systems required to support D&D, which were planned to be deactivated.

Contract Performance Report Formats are provided in Appendix A and Appendix A-1.

Estimate at Completion (EAC)

The BAC and EAC include FY2009 through FY2018, the PRC contract period.

The EAC changes from June to July, for both ARRA and Base, are within reporting thresholds.

FUNDS vs. SPEND FORECAST (\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	FY2011		
	Projected Funding	Spending Forecast	Spend Variance
ARRA	163.1	140.7	22.4
Base	41.7	36.2	5.5

Numbers are rounded to the nearest \$0.1M

Funds/Variance Analysis

Funding includes FY2010 carryover and FY2011 new Budget Authority.

Critical Path Schedule

Critical Path analysis can be provided upon request.

Baseline Change Requests

None.

MILESTONE STATUS

None at this time.

SELF-PERFORMED WORK

The Section H. clause entitled, "Self-Performed Work," is addressed in the Monthly Report Overview.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None identified at this time.