

INTRODUCTION

This section provides an executive level summary of the performance information covered in this report and is intended to bring to Management’s attention that information considered to be most noteworthy. All cost, schedule, milestone commitments, and safety data is current as of February 29. Accomplishments, Issues and Integration items are current as of March 21 unless otherwise noted.

The section begins with a description of notable accomplishments that have occurred since the last report and are considered to have made the greatest contribution toward safe, timely, and cost-effective clean up. Following the accomplishment section is an overall fiscal year-to-date summary analysis addressing cost, schedule, and milestone performance. Overviews of safety ensue. The next segment of the Executive Summary, entitled Critical Issues, is designed to identify the high-level challenges to achieving cleanup progress.

The Key Integration Activities section follows next, highlighting PHMC activities that cross contractor boundaries and demonstrate the shared value of partnering with other Site entities to accomplish the work. Concluding the Executive Summary, a forward-looking synopsis of Upcoming Planned Key Events is provided.

NOTABLE ACCOMPLISHMENTS

- As of March 17, 2000 a total of 201 cans of Plutonium oxides and sludges have been stabilized through thermal stabilization (28 items since last report).
- Progress is nearly complete on the installation of three additional muffle furnaces for thermal stabilization of oxides and on installation of the Mg(OH)₂ process system glove boxes for Pu Solution Stabilization.
- Welding of all 220 Canister Storage Building (CSB) standard storage tubes necessary for fuel removal from K Basins was completed.
- The Facility Evaluation Board completed the 222-S and WSCF laboratories’ audit and issued the final FEB report in February 2000, with improvements in 9 of 10 areas and an overall rating of “3”.
- A total of 154 boxes (645 cubic meters) of mixed low-level waste have been shipped to ATG. This waste volume represents an effective Central Waste Complex storage volume reduction of 1,325 cubic meters due to waste over-packing. ATG has completed treating, and Hanford has accepted back for disposal, twenty-five (25) macro-encapsulated waste containers totaling 66 cubic meters of waste as planned (data as of March 30, 2000).
- Progress continues toward Accelerated Deactivation of the 327 Facility. The removal of ~116 of ~300 sample cans from Dry Storage was completed.
- The 324 Building team completed its first shipment since the fall of 1998 when a grout container was shipped to the 200 Area Low Level Burial Ground (LLBG). This shipment closes out all waste characterization and packaging, and shipping issues that have confronted the 324 team for the past 1½ years.

- The Project Management Institute’s Regional Project of the Year Award was presented to the 300 Area Fuel Supply Shutdown Waste Acid Treatment System (WATS) Resource Conservation and Recovery Act of 1976 (RCRA) Closure Project.

PERFORMANCE DATA AND ANALYSIS

The following provides a brief synopsis of overall PHMC Environmental Management (EM) cost, schedule, and milestone performance.

FY 2000 Cost and Schedule Performance

Cost Performance — Fiscal-year-to-date (FYTD) cost performance reflects a two percent (\$5.4 million) unfavorable cost variance that is within the established +10/-5 percent threshold.

Schedule Performance — There is a FYTD eight percent (\$18.2 million) unfavorable schedule variance.

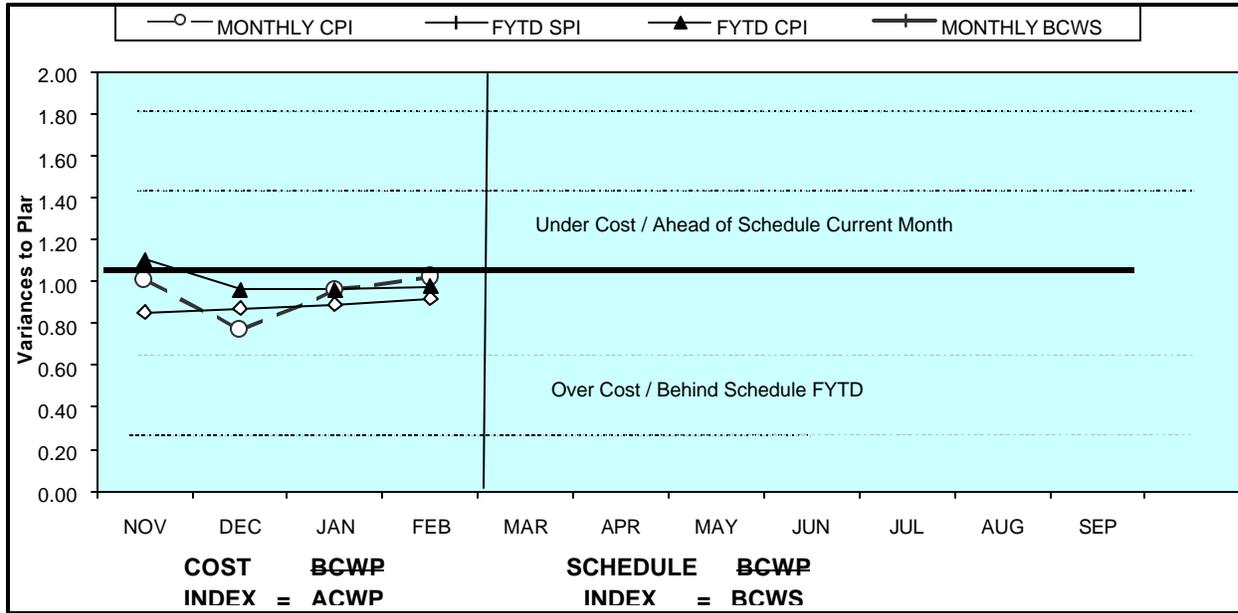
Data Through February 2000

	PEM	Current Fiscal Year Performance (\$ x Million)				
		FYTD			Schedule Variance	Cost Variance
		BCWS	BCWP	ACWP		
1.2 Waste Management TP02,WM03-05	110.1	40.7	37.2	37.9	(3.5)	(0.7)
1.2.4 Analytical Svcs (222-S,HASP,WSCF) WM06	27.8	11.1	10.8	11.5	(0.3)	(0.7)
1.3 Spent Nuclear Fuel WM01	195.1	71.3	70.9	82.3	(0.4)	(11.4)
1.4.5 Nuclear Materials Stabilization TP05	126.2	52.3	43.5	40.5	(8.8)	3.0
1.4 River Corridor TP01,TP04,TP08,TP10,TP12,TP14	59.9	21.0	20.7	20.9	(0.4)	(0.2)
1.5 Landlord TP13	14.3	5.0	4.2	2.1	(0.8)	2.1
1.8 Mission Support OT01, OT04	43.4	18.0	15.6	14.0	(2.4)	1.7 *
1.9 HAMMER HM01	5.5	2.1	2.1	2.1	0.0	0.1
1.12 Advanced Reactors (EM)	1.5	0.5	0.5	0.5	0.0	0.0
PHMC EM Clean-Up Projects	583.7	222.1	205.5	211.8	(16.6)	(6.4)
1.11 National Programs OT02-03, OT06, WM07	5.8	1.7	1.7	1.3	0.0	0.4
Technology Development (EM-50)	23.4	9.0	7.3	6.7	(1.7)	0.6
Total Other Projects	29.2	10.7	9.0	8.0	(1.7)	1.0
Total PHMC Projects	612.9	232.7	214.4	219.8	(18.2)	(5.4)

Notes: Column headings (BCWS, BCWP, etc.) are defined in the glossary at the end of the report. Calculations are based on Project Baseline Summary detail. Waste Management and Nuclear Materials Stabilization have included RL-Directed costs (e.g. steam and laundry) in the PEM BCWS. Advanced Reactors (EM) have included steam.

The following Cost/Schedule and Variance to Plan chart provides an overall graphical view of fiscal year to date performance and cost and schedule performance indicators.

**FY 2000 Cost / Schedule Performance
 Cumulative to Date Status**



FY 2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.91	0.80	0.91	0.94	1.02							
MONTHLY CPI	1.60	1.01	0.77	0.96	1.02							
FYTD SPI	0.94	0.85	0.87	0.89	0.92							
FYTD CPI	1.29	1.11	0.96	0.96	0.98							
MONTHLY BCWS	\$ 32,596	\$ 55,173	\$ 43,048	\$ 45,561	\$ 57,746							
MONTHLY BCWP	\$ 29,526	\$ 44,175	\$ 39,136	\$ 43,015	\$ 58,630							
MONTHLY ACWP	\$ 18,464	\$ 43,727	\$ 50,940	\$ 44,783	\$ 57,414							
FYTD BCWS	\$ 31,193	\$ 86,366	\$ 129,414	\$ 174,975	\$ 232,721							
FYTD BCWP	\$ 29,464	\$ 73,639	\$ 112,775	\$ 155,790	\$ 214,420							
FYTD ACWP	\$ 22,892	\$ 66,619	\$ 117,559	\$ 162,342	\$ 219,756							

MILESTONE PERFORMANCE

Milestones represent significant events in project execution. They are established to provide a higher level of visibility to critical deliverables and to provide specific status about the accomplishment of these key events. Because of the relative importance of milestones, the ability to track and assess milestone performance provides an effective tool for managing the PHMC EM cleanup mission.

FYTD milestone performance (Enforceable Agreement [EA], U.S. Department of Energy-Headquarters [DOE-HQ], and RL) shows that 22 of 29 approved baseline milestones (76 percent) were completed on or ahead of schedule, 2 milestones (7 percent) were completed late, and 5 milestones (17 percent) are overdue. The five overdue milestones are associated with three projects: Nuclear Material Stabilization—two, Environmental Management (EM)-50—two, and Mission Support—one. These overdue milestones do not share a common cause.

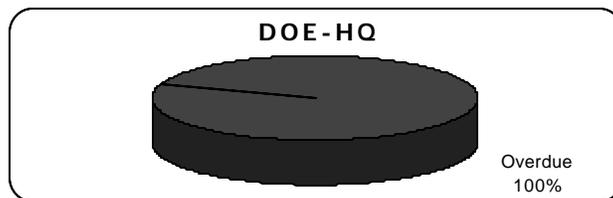
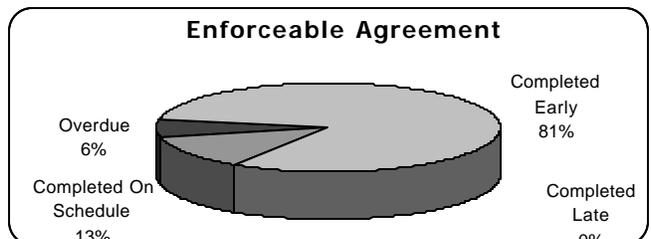
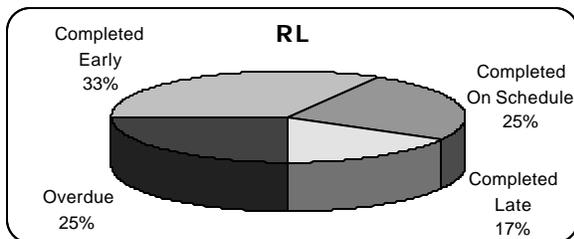
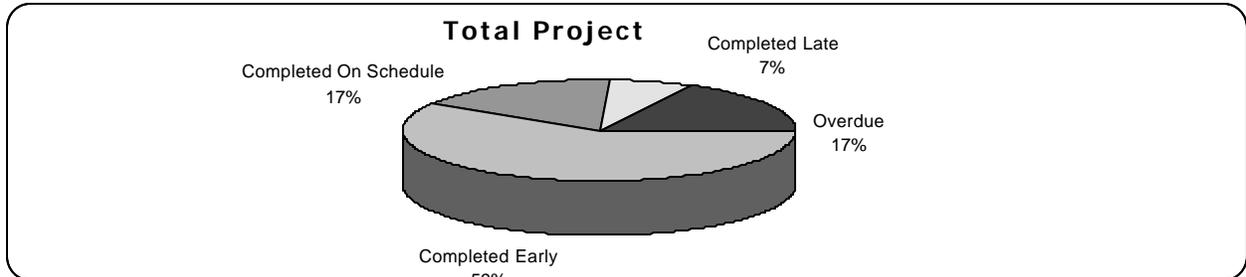
PHMC Environmental Management Performance Report – April 2000
Section A –Executive Summary

In addition to the FY2000 milestones described above, there are three overdue milestones from the prior fiscal year (FY1999). Further details regarding these milestones may be found in the Project Sections.

FY 2000 information is depicted graphically below and on the following page. For additional details related to the data in the graphs and prior year milestones, refer to the relevant project section titled “Milestone Exception Report.”

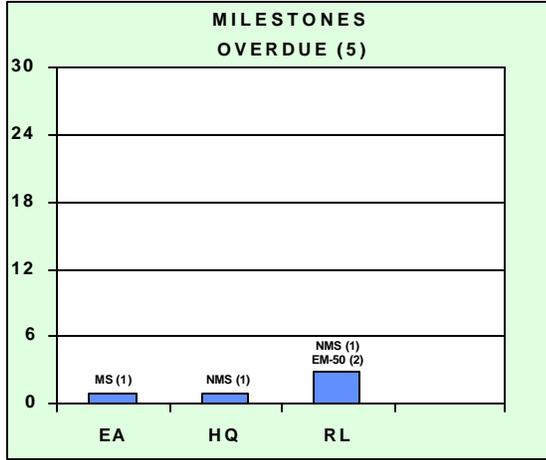
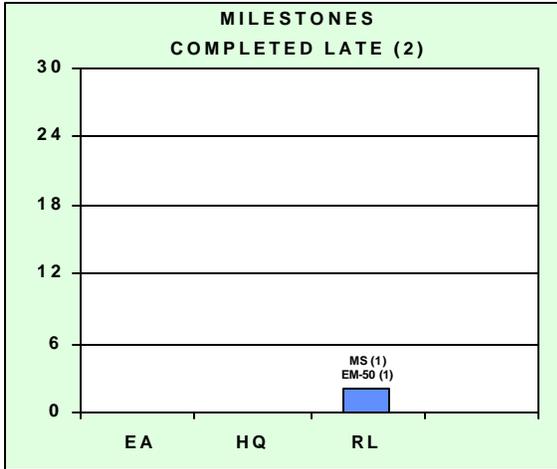
FY 2000 information reflects the current approved baseline. Changes in both the number and type of milestones from month to month are the result of Baseline Change Requests (BCRs) approved during the year.

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2000
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	13	2	0	1	0	17	0	33
DOE-HQ	0	0	0	1	0	3	0	4
RL	4	3	2	3	0	49	1	62
Total Project	17	5	2	5	0	69	1	99

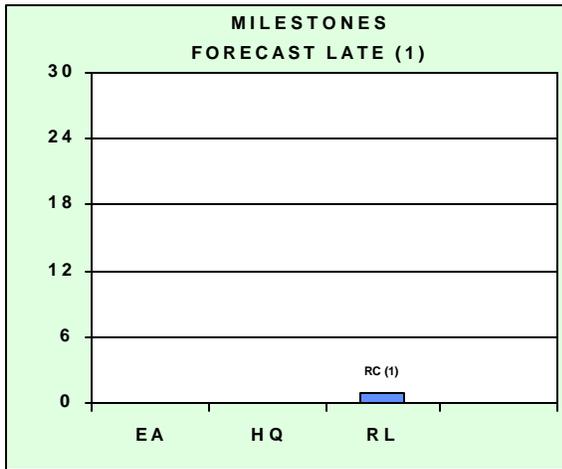


M I L E S T O N E E X C E P T I O N S

FISCAL YEAR TO DATE



REMAINING SCHEDULED



These charts provide detail by project and milestone level / type for milestones

- Completed Late
- Overdue
- Forecast Late

- Detailed information can be found in the individual project sections

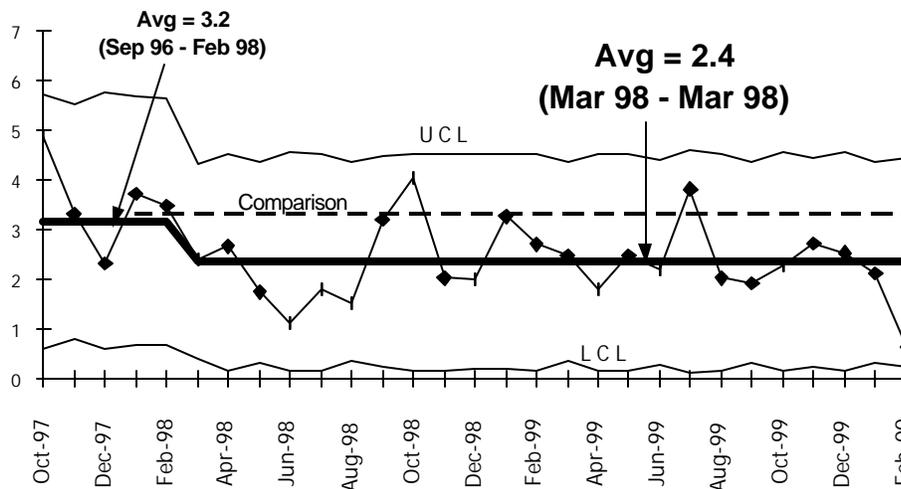
SAFETY OVERVIEW

The focus of this section is to document trends in occurrences. Improvements in these rates are due to the efforts of the PHMC workforce as they implement the Integrated ES&H Management System (ISMS), work towards achieving Voluntary Protection Program (VPP) “star” status, and accomplish work through Enhanced Work Planning (EWP). Safety and health statistical data is presented in this section.

SIGNIFICANT SAFETY AND HEALTH EVENTS

Rates have been stable for nearly two years. This safety performance plateau has been recognized by the safety organizations, and Fluor Hanford kicked off its Integrated Safety Approach initiative on December 6, 1999 in order to take safety performance to a new level. This initiative focuses on the "people side" of accident prevention.

Total OSHA Recordable Case Rate



PHMC

FY 1999 = 2.5

FY 2000 = 2.0

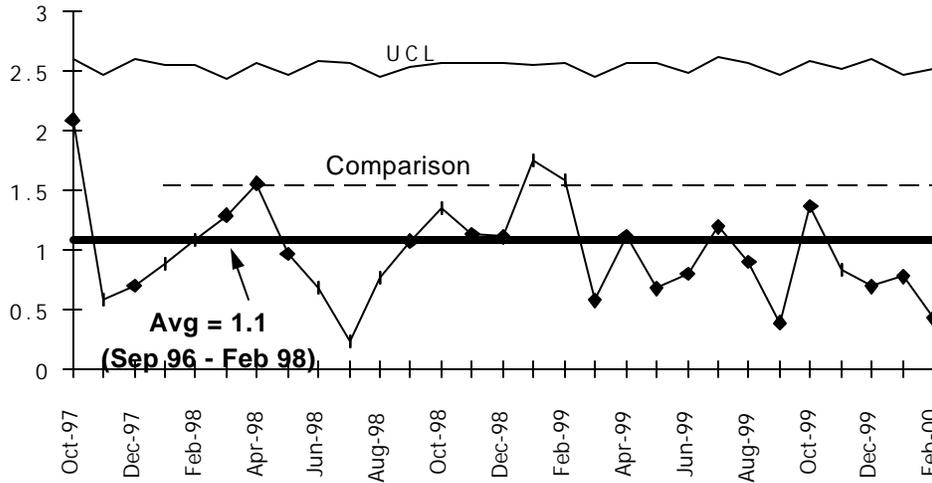
Contractor Comparison

Average =3.3

This indicator had a nearly significant decrease in February.

There were only 3 recordable cases, a new low record for the PHMC. Consolidation of the projects under Fluor Hanford, and actions taken at the end of FY 1999 to look at injury sources appears to be having an effect.

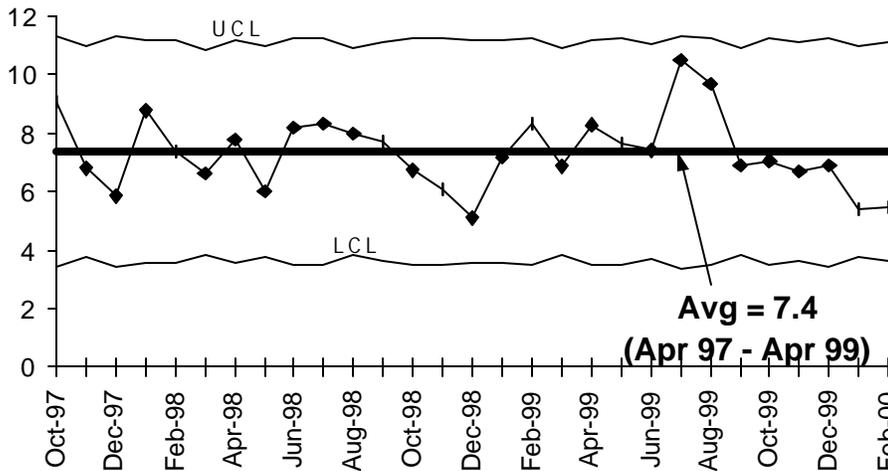
OSHA LOST/RESTRICTED WORKDAY CASE RATE



PHMC

FY 1999 = 1.0
 FY 2000 to date = 0.8
 Contractor Comparison Average = 1.5
 The data have been stable for the past two years. Most of the recent months (over the past year) have been well below average, a hopeful sign of potential improvement.

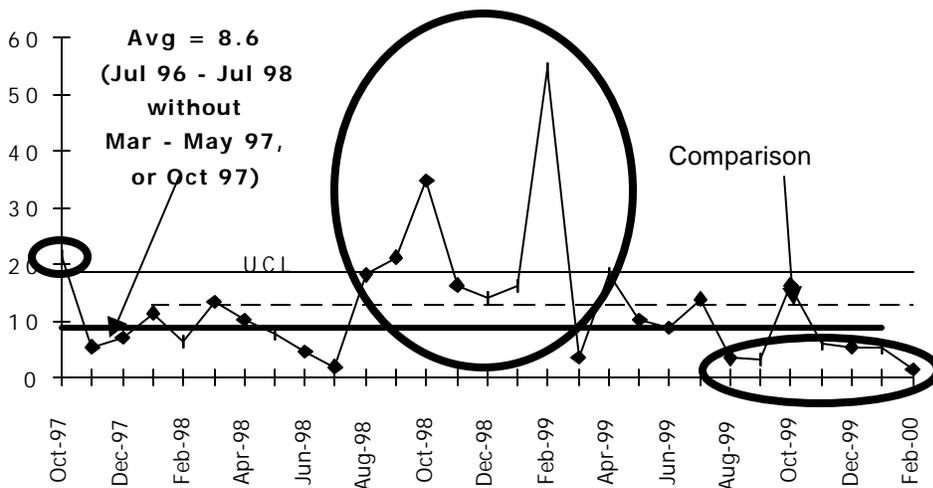
First Aid Case Rate



PHMC

First Aid Rate undergoes seasonal cycles. Increases occur in warmer weather due to insect and animal encounters, and due to wind related minor injuries. The First Aid Rate has remained relatively stable; a good indicator that injuries are not being under-reported.

DOE Safety Cost Index



PHMC
 FY 1999 = 16
 FY 2000 to date = 6.7
 Contractor Comparison
 Average = 12.8
 There has been a long term cycle over the past three years of decreases for 7 to 9 months, followed by increases. Past 6 of 7 months have been one standard deviation below average, a significant decrease. New average and control limits will be calculated when the data stabilize.

CRITICAL TECHNICAL ISSUES

- **324 FACILITY BEHIND SCHEDULE**

The 324 Building Fire Hazards Analysis (FHA) revision supporting the 324 Building Safety Analysis Report (SAR) update resulted in revised combustible load limits. An implementation plan has been developed that allows either 1) work to continue while maintaining revised combustible load limits or 2) implements compensatory measures, such as establishing a fire watch, eliminating ignition sources, and shutting off lights when not needed. This change will not cause a schedule impact, but it may create a cost impact to work in progress. Evaluation of alternative fire suppression capabilities to allow an increase in combustible load limits continues.

- **CERTIFICATION OF HANFORD'S TRU PROJECT NECESSARY TO INITIATE WASTE SHIPMENT TO WIPP**

Delays in performing the closeout audit impact the ability to ship waste to WIPP. The contractor continues working with the Carlsbad Area Office, the Environmental Protection Agency and the New Mexico Environment Department to achieve WIPP certification of Hanford's TRU Project. Plans are to achieve WIPP Certification and initiate TRU shipments in May 2000.

- **CRACK DISCOVERED ON B PLANT W-059 DUCT REPLACEMENT**

Due to the crack discovered in the duct replacement, the completion of B Plant turnover Memorandum Of Agreement (MOA) may be delayed. All prerequisite actions for the cracked exhaust duct testing are complete, and negotiations are ongoing with FH, RL, and BHI on corrective actions.

KEY INTEGRATION ACTIVITIES

The following are the key technical integration activities that are currently underway and cross project/contractor lines. These activities are being addressed by inter-discipline and inter-project groups and demonstrate that Hanford Site contractors are working together to accomplish the EM Clean up mission.

- Spent nuclear fuel (SNF) final disposition interface activities, including OCRWM QA Program implementation, ongoing with National SNF Program.
- SNF Project fuel removal acceptance criteria and conceptual design reviews for 324 Building (B Cell) ongoing with River Corridor Project.
- K Basins sludge removal and Shippingport (PA) Pressurized Water Reactor Core 2 SNF removal implementation activities ongoing with Waste Management.
- Nuclear Material Stabilization Project continues working with PNNL on activities associated with the $Mg(OH)_2$ process in order to accelerate the solution stabilization process, and polycube stabilization issues (gathering data for the SAR).
- Analytical Services continues to support BNFL efforts to establish required analytical support for glassification operations.
 - In the longer term, BNFL could utilize unused space at WSCF for cold run test support and process laboratory analytical equipment testing.
 - The 222-S laboratory, with some refurbishment might become a low cost option to a new large-scale laboratory associated with the glassification facility.

UPCOMING PLANNED KEY EVENTS

The following Key events are extracted from the authorized baseline and are currently expected to be accomplished during the next eight months. Most are EA, HQ or DNFSB Milestones.

Waste Management:

- 242A Evaporator Operations -- Conduct 242-A Evaporator Campaign beginning in April 2000, including the additional volume to support the River Protection Project.
- MLLW Treatment -- Treat 1,160 cubic meters (includes 100 cubic meters stretch) of MLLW at ATG by August 2000; return Land Disposal Restriction compliant waste for disposal.
- Suspect TRU Waste Retrieval -- Retrieve 400 drums of suspect TRU waste from the Low-Level Burial Grounds by September 2000 (Stretch).
- Accelerate Readiness to Receive Spent Nuclear Fuel K Basin Sludge -- Clear three sections of the T Plant Canyon deck in FY 2000 and complete entire deck clearing by FY 2001. Develop design requirements by September 2000 for acceptance of K Basin sludge at T Plant.

Spent Nuclear Fuels:

- Complete integrated subsystem testing of the CVD facility by the end of May 2000.
- Deliver first shipment of Multi-Canister Overpacks (MCOs) and baskets by June 1, 2000.
- Complete Cask Loadout System (CLS) startup testing by mid-June 2000.
- Begin DOE Operational Readiness Review for fuel removal by mid September 2000. Begin K West Basin fuel removal, drying & storage operations by November 30, 2000.

River Corridor Project:

- Complete all B Plant closeout activities by March 2000.
- Complete ISMS verification of Phase I & II readiness activities by May 15, 2000.
- Issue the final report for the 300 Area Waste Acid Treatment System (WATS) Resource Conservation and Recovery Act (RCRA) Closure Activities by September 2000.
- Complete Removal of 324 Building Radiochemical Engineering Cell (REC) B Cell Mixed Waste (MW) and Equipment by November 2000.

Nuclear Materials Stabilization:

- Begin Pu solution stabilization via $Mg(OH)_2$ in FY 2000.
 - Deliver glove boxes and equipment for installation by April 11, 2000.
 - Complete ORR and training activities.
- Startup Cementation operations in the 4th quarter of FY 2000.
- Complete W-460 Facility Design by April 2000.
- Begin metal stabilization processing in November 2000.