

# Environmental Management Performance Report January 2001

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Prepared for the U.S. Department of Energy  
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the  
U.S. Department of Energy under Contract DE-AC06-96RL13200



**United States  
Department of Energy**

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Release Approval      Date

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## INTRODUCTION

The purpose of the Environmental Management Performance Report (EMPR) is to provide the Department of Energy Richland Operations Office's (DOE-RL's) report of Hanford's Environmental Management (EM) performance by:

- Project Hanford Management Contract (PHMC) through Fluor Hanford, Inc. (FH) and its subcontractors,
- Environmental Restoration Contract through Bechtel Hanford, Inc. (BHI), and its subcontractors, and
- Pacific Northwest National Laboratories (PNNL) for Science and Technology support to the EM Mission.

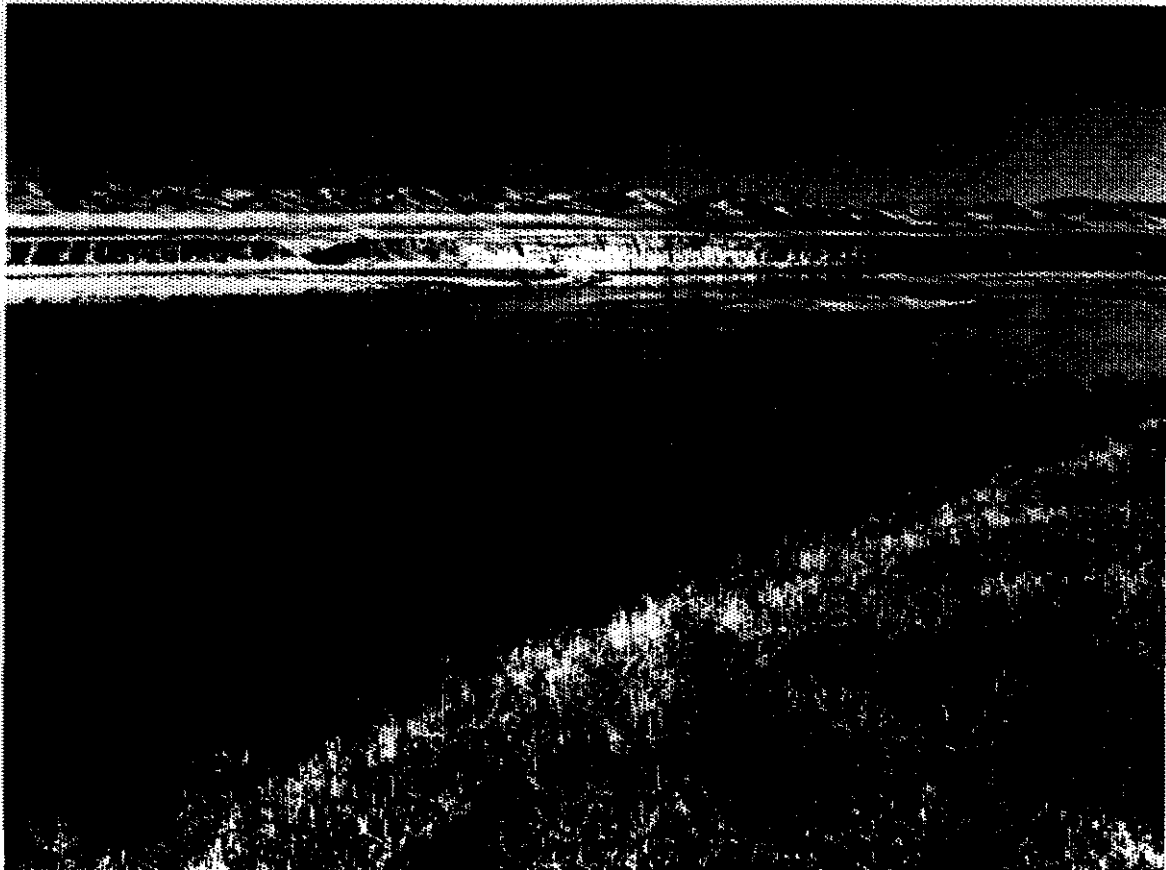
The Office of Safety Regulation of the TWRS Privatization Contractor's reporting responsibilities have been transferred to the Office of River Protection; consequently, a separate report is no longer produced.

This report is a monthly publication that summarizes EM Site performance under RL Operations Office. It is organized by the three sections listed above, with each section containing an Executive Summary and Area Performance Summaries. A glossary of terms is provided at the end of this report for reference purposes.

The report date on the cover reflects the month in which the report is released.



**Project Hanford Management Contractor  
Environmental Management  
Performance Report to  
DOE Richland Operations Office  
January 2001**



**Fluor Hanford**  
A Fluor Global Services Company

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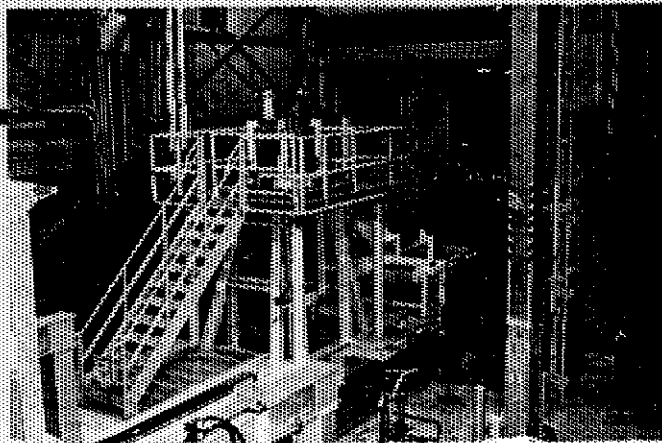
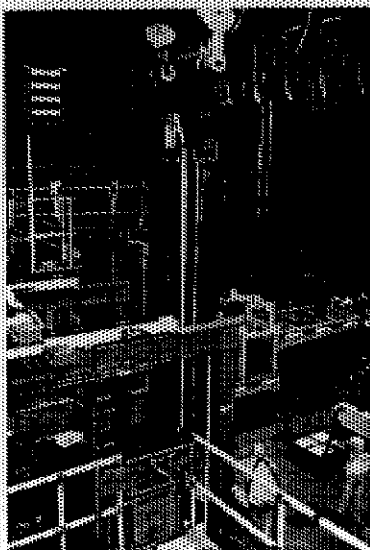
## **INTRODUCTION**

**T**he purpose of this report is to provide the Department of Energy Richland Operations Office (DOE-RL) a monthly summary of the Project Hanford Management Contractor's (PHMC) Environmental Management (EM) performance by Fluor Hanford (FH) and its subcontractors. In addition to project-specific information, it includes some PHMC-level data not detailed elsewhere in the report.

Section A, Executive Summary, provides an executive level summary of the cost, schedule, and technical performance described in this report. It summarizes performance for the period covered, highlights areas worthy of management attention, and provides a forward **look** to some of the upcoming key performance activities as extracted from the PHMC baseline.

The remaining sections provide detailed performance data relative to each individual Project (e.g., Waste Management, Spent Nuclear Fuels, etc.), in support of Section A of the report. Unless otherwise noted, the Safety, Conduct of Operations, and Cost/Schedule data contained herein is as of November 30, 2000. **All** other information is updated as of December 21, unless otherwise noted.

“Stoplight” boxes are used to indicate at a glance the condition of a particular area. Green boxes denote on schedule. Yellows denote behind schedule but recoverable. Red is either missed or unrecoverable.



# **Section A**

## **Executive Summary**



## **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, performance measures, and safety data is current as of November 30. Accomplishments, Issues and Integration items are current as of December 21 unless otherwise noted.

The section begins with a description of notable accomplishments that have occurred since the last monthly 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 next section includes FY 2001 EM Management Commitment High Visibility Project Milestones and Critical Few Performance Measures.

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.

Note: Milestones tracked and reported in this report consist of two Department of Energy levels. In descending order these levels are 1) Department of Energy-Headquarters (HQ), and 2) Richland Operations (RL). Because it is also useful to distinguish milestones based on specific drivers, the Site applies a designation for those milestones created or tracked to meet the requirements of Enforceable Agreements (EAs). When a milestone satisfies both an EA requirement and a milestone level, it is categorized as both. However, in order to avoid duplicate reporting, this report accounts for each milestone only once. Where an overlap exists between EA and a level (i.e., HQ or RL), the milestone is reported as EA. Additionally, Tri-Party Agreement (TPA) Major and Interim milestones are EA milestones. TPA milestones that are not enforceable are called Target milestones and are included in the TPNEA milestone tables found in the applicable Project Sections.

## **NOTABLE ACCOMPLISHMENTS**

### **FIFTH TRU WASTE SHIPMENT TO WIPP COMPLETED**

The fifth shipment of Transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) was completed on November 30, 2000. The shipment contained 42 drums of TRU debris waste from the Central Waste Complex (CWC) inventory. As requested by DOE, the next shipment will be scheduled for early spring.

### **B CELL CLEANOUT CONTINUES**

The 324 Building Deactivation Project staff loaded out two steel waste disposal boxes (SWDBs) and one was shipped to compliant storage. Four of the fourteen SWDBs required to complete B Cell cleanout have now been shipped.

### **SNF READINESS REVIEWS COMPLETED**

The DOE Operational Readiness Review (ORR) for the Cold Vacuum Drying (CVD) Facility was successfully completed. The first six Multi-Canister Overpack (MCO) fuel baskets, containing a total of 288 fuel elements, were loaded into the first production MCO while it was underwater in the K West (KW) Basin.

### **SNF SHIPMENTS FROM THE RIVER CORRIDOR INITIATED**

The first shipment of irradiated uranium fuel assemblies was successfully moved from the KW Basin to the CVD Facility on December 7, 2000. Following a successful drying cycle at the CVD Facility, the MCO was transported to the Canister Storage Building (CSB) on December 18, 2000 where it entered long-term safe storage in a carbon steel tube in a below-ground vault. This initiated a Tri-Party Agreement commitment to remove approximately 2,300 tons of spent nuclear fuel from the River Corridor, and subsequently place it in safe long-term storage in the Central Plateau.

## **PERFORMANCE DATA AND ANALYSIS**

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

### **FY 2001 Cost and Schedule Performance**

**Cost Performance — FY 2001** year-to-date cost performance reflects a three percent (\$2.1 million) unfavorable cost variance that is within the established +10/-5 percent threshold. Detailed variance analysis explanations can be found in the Project Sections.

**Schedule Performance —** There is a FY 2001 year-to-date 7.6 percent (\$5.8 million) unfavorable schedule variance that is slightly over the established +10/-7.5 percent threshold. Detailed variance analysis explanations can be found in the Project Sections.

## BASELINE PERFORMANCE STATUS

### FY 2001 COST / SCHEDULE PERFORMANCE – ALL FUND TYPES

### CUMULATIVE TO DATE STATUS (\$M)

DATA THROUGH NOVEMBER 30, 2000

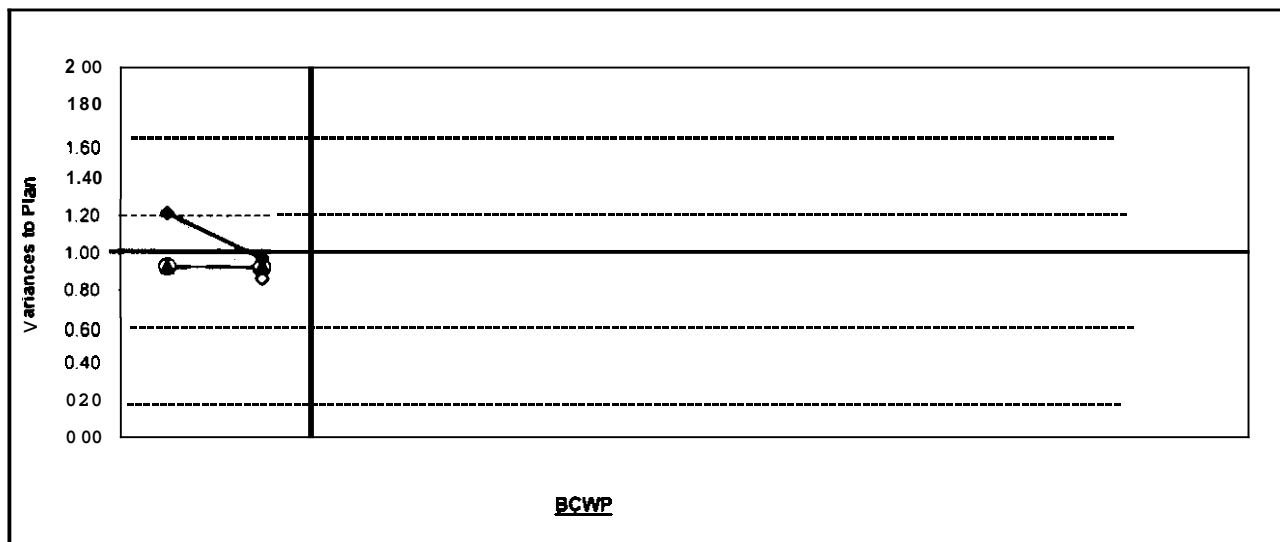
		PEM	Current Fiscal Year Performance (\$ x Million)				
			FVTD			Schedule Variance	Cost Variance
			BCWS	BCWP	ACWP		
<b>The Plateau</b>							
12	Waste Management TP02, WM03-05	99.4	14.3	14.3	12.6	(0.0)	1.6
1.2.4	Analytical Svcs (222-S, HASP, WSCF) WM06	32.1	5.1	4.6	4.3	(0.4) *	0.4
1.4.5	Nuclear Materials Stabilization TP05	106.5	17.2	13.8	14.0	(3.3) •	(0.1)
Subtotal The Plateau		<b>238.0</b>	<b>36.5</b>	<b>32.7</b>	<b>30.9</b>	<b>(3.8)</b>	<b>1.9</b>
<b>The River</b>							
1.4	River Corridor TP01, TP04 TP08, TP10, TP12 TP14	47.8	7.4	5.9	5.1	(1.5)	0.8
1.3	Spent Nuclear Fuel WM01	189.8	20.6	20.5	28.3	(0.1)	(7.8)
1.1.2	Advanced Reactors (EM)	<b>1.5</b>	0.3	0.2	0.1	(0.0) •	0.1
	Technology Development (EM-50)	19.7	3.1	2.6	2.2	(0.6) •	0.4
Subtotal The River		<b>258.8</b>	<b>31.4</b>	<b>29.2</b>	<b>35.7</b>	<b>(2.2)</b>	<b>(6.5)</b>
<b>The Future</b>							
1.9	HAMMER HM01	5.6	0.8	0.8	0.8	(0.0)	0.0
Subtotal The Future		<b>5.6</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>(0.0)</b>	<b>0.0</b>
<b>Multiple Outcomes</b>							
1.5	Landlord TP13	20.3	2.1	2.9	0.7	0.2	2.2
1.8	Mission Support OTOI	24.1	3.4	3.4	3.4	0.0	0.0
1.11 & WM07	National Programs OT02, WM07	3.7	0.5	0.5	0.2	(0.0)	0.3
Subtotal Multiple Outcomes		<b>48.1</b>	<b>6.6</b>	<b>6.9</b>	<b>4.4</b>	<b>0.3</b>	<b>2.5</b>
<b>Total PHMC Projects</b>		<b>550.5</b>	<b>75.4</b>	<b>69.7</b>	<b>71.8</b>	<b>(5.8) •</b>	<b>(2.1)</b>

\* Rounding

**Notes:**

Column headings [Budgeted Cost of Work Scheduled (BCWS), Budgeted Cost of Work Performed (BCWP), etc.] are defined in the glossary at the end of the report. Calculations are based on Project Baseline Summary detail. Waste Management, Analytical Services, River Corridor, and Nuclear Materials Stabilization have included RL-Directed costs (e.g. steam and laundry) in the Project Execution Module (PEM) BCWS. Technology Development does not include ORP/RPP TTPs currently reported in the RL Dataset in PEM.

## FY 2001 COST / SCHEDULE PERFORMANCE INDICES (MONTHLY AND FYTD)



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.93	0.92										
MONTHLY CPI	1.21	0.86										
FYTD SPI	0.93	0.92										
FYTD CPI	1.21	0.97										
MONTHLY BCWS	\$ 29,004	\$ 46,415	\$ 39,622	\$ 49,546	\$ 39,657	\$ 42,294	\$ 43,654	\$ 54,733	\$ 40,847	\$ 41,143	\$ 53,221	\$ 70,393
MONTHLY ACWP	\$ 26,898	\$ 42,760										
MONTHLY BCWP	\$ 22,181	\$ 49,626										
FYTD BCWS	\$ 29,004	\$ 75,419	\$ 115,040	\$ 164,586	\$ 204,243	\$ 246,537	\$ 290,191	\$ 344,924	\$ 385,771	\$ 426,914	\$ 480,135	\$ 550,528
FYTD BCWP	\$ 26,898	\$ 69,658										
FYTD ACWP	\$ 22,181	\$ 71,808										

## 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 **three** milestones were completed on or ahead of schedule and three milestones are overdue. The three overdue milestones are associated with two projects: River Corridor (Section C: 2) and Spent Nuclear Fuel (Section D).

In addition to the FY2001 milestones described above, there is one overdue milestone [Waste Management (Section B: 1)] from FY1999 and one [River Corridor (Section C: 2)] from FY2000. Further details regarding these milestones may be found in the referenced Project Sections.

FY 2001 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."

**Section A –Executive Summary**

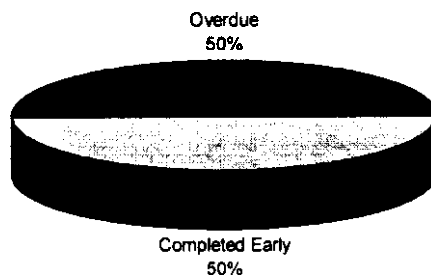
FY 2001 information reflects the Phase 1 MultiYear Work Plans (MYWPs). Changes in both the number and type of milestones from month to month **are the result** of Baseline Change Requests (BCRs) approved during the year.

**TOTAL ALL HANFORD PROJECTS**

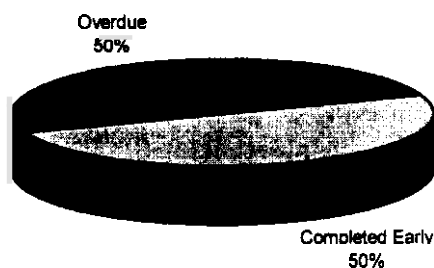
**MILESTONE ACHIEVEMENT**

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	1	0	5	0	7
DOE-HQ	0	0	0	0	0	2	1	3
RL	2	0	0	2	9	28	1	42
<b>Total Project</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>9</b>	<b>35</b>	<b>2</b>	<b>52</b>

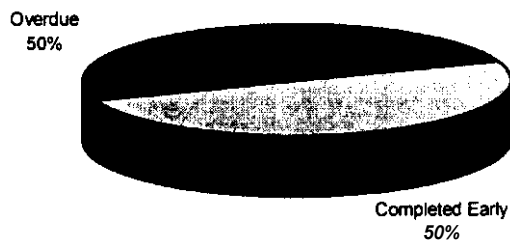
**Total Project ( M D )**

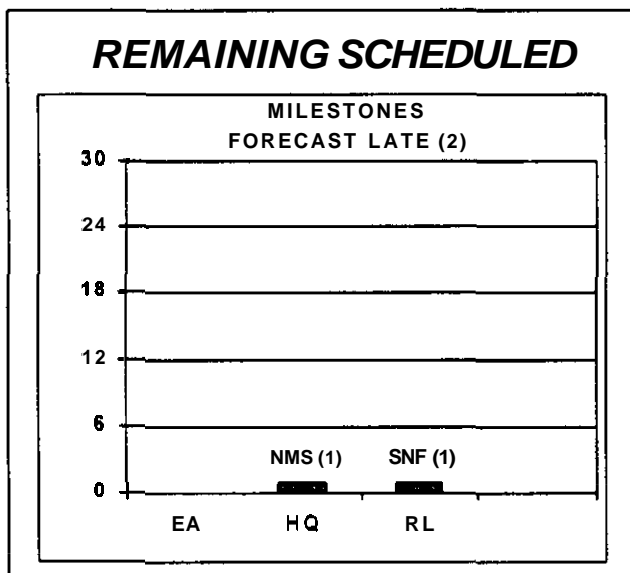
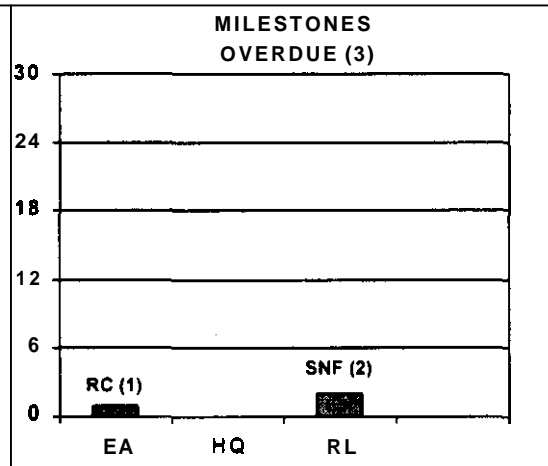
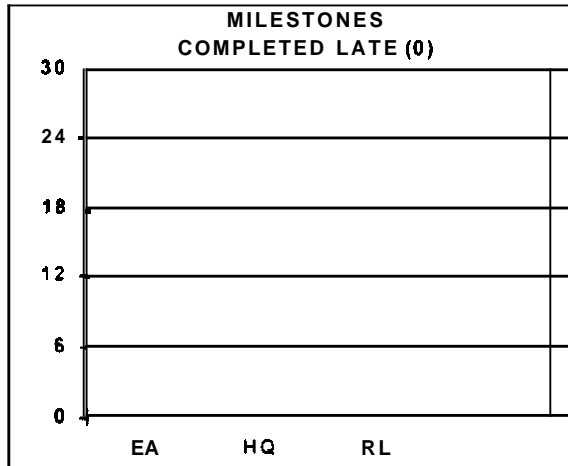


**RL**



**Enforceable Agreement**





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**

Fluor Hanford co-sponsored an Integrated Safety Management Lessons Learned Workshop with the theme, Charting the Future of ISM: Sharing Achievements, Successes and Challenges. This Workshop was conducted December 5 - 6, 2000, in Pasco, Washington, and drew upon specific implementing experiences from all segments of the Department. Workshop activities focused on sustaining the momentum achieved in institutionalizing ISM and highlighted the **role** of the worker in sustaining ISM effectiveness at the activity level.

Project specific control charts for OSHA Recordable Case Rates, Lost Away Workday Case Rates, and DOE Safety Cost Index levels and trends are provided monthly **for** the senior management Performance Management Meeting. A brief summary of project performance is provided in this report.

The Waste Management Project (WMP) has accumulated 1.6 million safe work hours as of the end of November. The reduction WMP achieved in its OSHA Recordable Case Rate is holding, and this indicator is stable at the revised baseline of 1.8 cases per 200,000 hours.

The Analytical Services Project (ASP) has accumulated over 600,000 safe work hours since December 1999. The ASP OSHA Recordable Case Rate appears **to** be stable, but at a level well above the 0.9 goal.

The Nuclear Material Stabilization Project (NMSP) is approaching **1.2** million safe work hours since the last new case with days away from work. The NMSP OSHA Recordable Case Rate is stable at a rate less than 1.0.

The River Corridor Project (RCP) has exceeded **1.4** million safe work hours since their last new Lost Away case. A new baseline for the RCP OSHA Recordable Case Rate was established. There have been no new cases in the past three months since the significant increase in the RCP OSHA Recordable Case Rate in the summer of 2000.

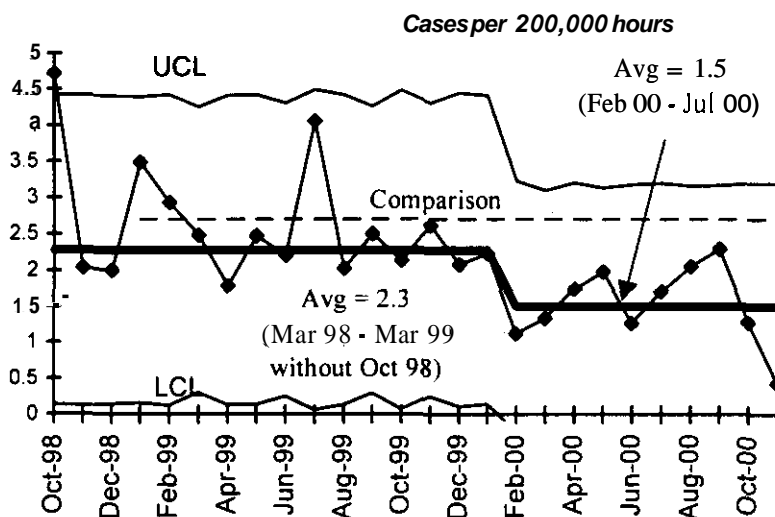
The Spent Nuclear Fuels Project (SNFP) has achieved 2 million safe work hours. The SNFP OSHA Recordable Case Rate had shown signs of improvement, but has since returned to the baseline of 2.5 cases per 200,000 hours, nearly three times the FH goal of 0.9.

The Landlord Project has exceeded one and a quarter million project safe hours.

Due to space constraints, FY 1996 through FY 1998 data are not portrayed on the following graphs.

## Total OSHA Recordable Case Rate

Green



FY 2000 = 1.9

FY 2001 to date = 0.9

DOE Complex Contractor

Comparison Average = 2.7 (CY99)

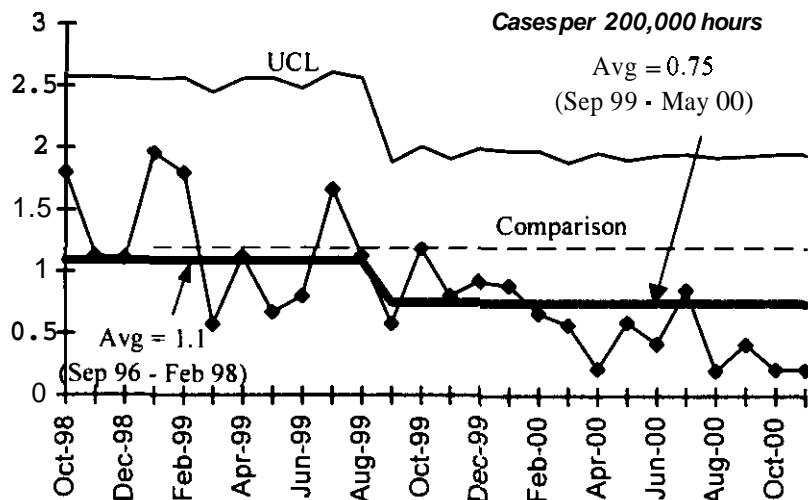
Recent data have been stable within the new 1.5 baseline. The FH Team continues to look for opportunities for injury reduction in the areas of ergonomics and lacerations.

FH implemented a program to target an OSHA Recordable Case Rate of 0.9. The Fluor Global Services goal is 1.0. This is in line with Fluor's corporate value of safety and our commitment to the safe clean-up of the Hanford Site.

A team continues to work on Health Physics Technician ergonomics, focusing upon work practices and equipment. HPT's are the leading source of injuries, and these are primarily ergonomically related. Actions are being taken to address human factors issues with equipment and the aging workforce through the cooperation of the HPT's, their management, ES&H, and HEHF.

## OSHA LOST/RESTRICTED WORKDAY CASE RATE

Green



FY 2000 = 0.64

FY 2001 to date = 0.21

DOE Complex Contractor Comparison  
Average = 1.2 (CY99)

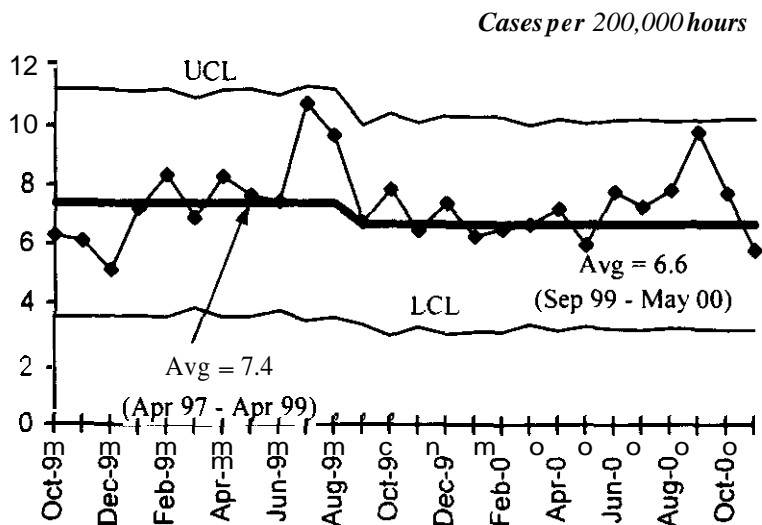
Data continue to be at or below the current baseline average established for September 1999 - May 2000, but is not yet a significant trend. If next month is below average, it will be 10 of 11 months in a row below average, which is significant.

The FH Team has accumulated over 10.9 million safe work hours since mid-December 1999 without any new lost away workday cases.



## First Aid Case Rate

**Green**



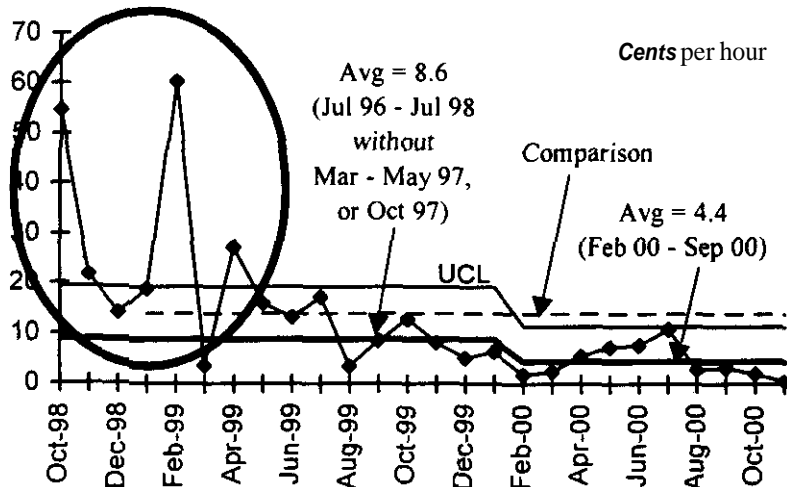
First Aid Rate undergoes seasonal cycles. Increases occur in warmer weather due to insect and animal encounters, and due to wind related minor injuries. First Aid case rate has remained relatively stable, a good indicator that injuries are not being under-reported.

There was a nearly significant increase in September 2000, but the increase appears to be primarily related to summer increases in insect and wind hazards. Past activities to increase awareness of wind hazards and actions to control insects and animals appear to be having an effect.

The hazard of receiving wind-borne debris in eyes when working outdoors has considerably increased due to the bare, exposed sand left by the Hanford wildfire.

## DOE Safety Cost Index

**Green**



FY 2000 = 6.1

FY 2001 to date = 1.2

Contractor Comparison Average = 13.9(CY99)

This indicator has had new average and control limits calculated reflecting recent significant decreases in the cost index. This decrease is primarily related to the reduction in Lost Away workday injuries.

Past data continue to be corrected as further days accumulate on any work restrictions or lost days.

## CRITICAL ISSUES

- INABILITY TO MEET TPA MILESTONE ON B CELL CLEANUP**

The schedule for completing B Cell cleanup was impacted primarily due to technical/mechanical issues (high-dose SWDBs, 30-ton crane and 3-ton crane repairs, and Safety Analysis Report revision) and needed operational improvements, as well as a reduction in the amount of overtime previously planned in the baseline schedule. FH, in concert with RL and Ecology, has prepared a recovery schedule that factors in the lost schedule and also

predicts future schedule impacts. See the River Corridor Project Section C: 2 for more information.

## **EM MANAGEMENT COMMITMENT MILESTONES**

EM Management Commitment Milestones are currently being negotiated and will be reported when approved.

## **CRITICAL PERFORMANCE INCENTIVES**

The following table portrays the incentives contained in the new contract extension, and are not reflected in all the Project Sections of this report. Reporting relating to the revised incentives for all Projects will begin with the next report.

<b>Performance Measure</b>	<b>Data Through December 2000</b>
<b>Spent Nuclear Fuel:</b>	
<b>Measure</b> – Transfer K-Basin Facility to River Corridor Contractor Remove spent fuel by July 31, 2004	Green
<b>300 Area Cleanup:</b>	
<b>Measure</b> – Accelerate 300 Area cleanup	Green
<b>Measure</b> – Support River Corridor Project contract transition	Green
<b>200 Area Facility Disposition:</b>	
<b>Measure</b> – Disposition surplus buildings and rolling stock	Green
<b>Waste Management:</b>	
<b>Measure</b> – Treat and Dispose MLLW	Green
<b>Measure</b> – Certify TRU waste and ship to WIPP	Green
<b>Measure</b> – Complete physical activities necessary to store K-Basins sludge at T-Plant	Green
<b>Measure</b> – Complete contractor readiness assessment (T-Plant)	Green
<b>Measure</b> – Prepare T-Plant to support M-91 activities	Green
<b>Plutonium Stabilization:</b>	
<b>Measure</b> – Pu metal oxides/other types dispositioned All Pu bearing materials stabilized by May 31, 2004	Green
<b>Measure</b> – PFP Deactivation	Green

Yellows noted above are behind schedule but recoverable. Red is either missed or unrecoverable.

## **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.

- Waste Management (WM) continues working with RL, DOE-HQ and other Sites to develop and define Hanford's role in disposing of waste from other sites.

- Analytical Services continues to support ORP efforts to establish required analytical support for Waste Treatment Plant (WTP) design and operation.
- Techniques for improving the precipitate processing are being worked jointly by staff members of the Plutonium Process Support Laboratories and Pacific Northwest National Laboratory. A meeting has been held with PNNL to select the characterization and material pretreatment methods to remove chlorides prior to processing.
- Through involvement with the National Facility Deactivation Initiative, Hanford, Rocky Flats, and Savannah River submitted a joint proposal focused on deployment of large equipment size reduction systems. DOE-HQ/EM-50 plans to announce the selection of the winning proposals by the end of December 2000.
- Spent nuclear fuel (SNF) final disposition interface activities, including Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Program implementation, is ongoing with the National SNF Program.
- The SNF Project and Waste Management Project continued preparations for K Basins' sludge removal and Shippingport (PA) Pressurized Water Reactor Core 2 SNF removal.

## **UPCOMING PLANNED KEY EVENTS**

The following key events are extracted from the authorized baseline and are currently expected to be accomplished during the next several months. Most are Enforceable Agreement (EA), HQ or DNFSB Milestones.

### **Waste Management:**

- Accelerate Readiness at T Plant to Receive and Store Spent Nuclear Fuel K Basin Sludge -
  - Complete procedures, training, and Operations Readiness Review (ORR) by June 2001.
  - Complete entire deck clearing in FY 2001.
  - Complete safety basis documentation and long lead procurements in FY 2001.
  - Install handling, drying and loading equipment in FY 2001.

### **Nuclear Materials Stabilization:**

- Receive delivery of the 2736-ZB BTS and Outer Can Welder (OCW) during the second quarter of FY 2001.
- Complete repackaging of Pu metal inventory (inner cans) by March 31, 2001.
- Complete modifications to one vault cubicle by April 2, 2001.
- Complete repackaging and shipping of Rocky Flats Ash to the Central Waste Complex (CWC) by April 30, 2001.
- Initiate polycube stabilization in third quarter of FY 2001.
- Complete stabilization of plutonium alloys by June 30, 2001.

**River Corridor Project:**

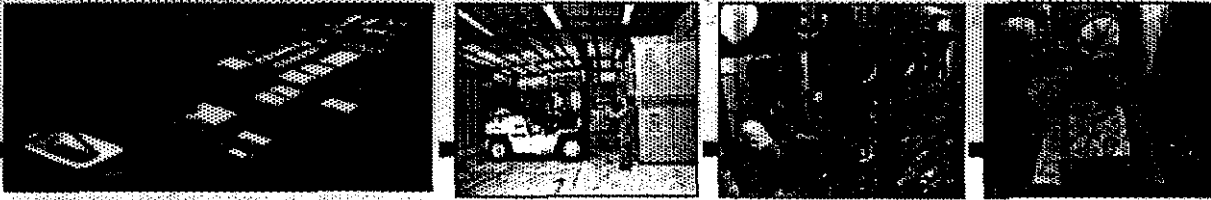
- Complete Facility Evaluation Board review during first quarter of FY 2001.
- Implement technical update of 324 Authorization Basis (Safety Analysis Report) by January, 2001 and implement technical update of 327 Authorization Basis (Basis of Interim Operation) by May, 2001.
- Complete Removal of 324 Building Radiochemical Engineering Cell (REC) B Cell Mixed Waste (MW) and Equipment by March 30, 2001.
- Begin 224-T facility initial entry and characterization by early March 2001.
- Complete shipment of approximately 235 metric tons of excess uranium billets and approximately 5 metric tons of uranium dioxide to the DOE Portsmouth site in Ohio by March 31, 2001 and disposition approximately 140 metric tons of surface contaminated uranium fuel by June 30, 2001.
- Complete shipment of B Cell mixed and low-level waste to the 200 Areas by July 31, 2001.

**Spent Nuclear Fuels:**

- Submit Tri-Party Agreement (TPA) Change Request for Milestone M-34-06-T01 "Initiate K West Basin spent nuclear fuel canister cleaning operations" December 2000. Change request submitted and denied; new forecast date for completion of the milestone is August 31, 2001.
- a Complete KE Basin Integrated Water Treatment System definitive design in April 2001.
- Submit Annual Debris Report to Department of Ecology/Environmental Protection Agency (EPA) in May 2001.
- Continue receipt of MCO shipments through FY 2001.

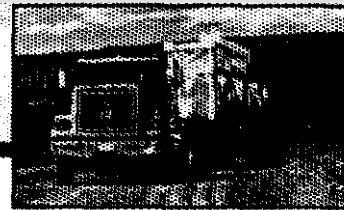
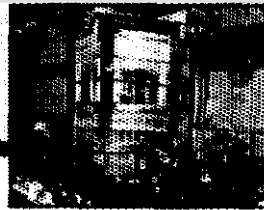
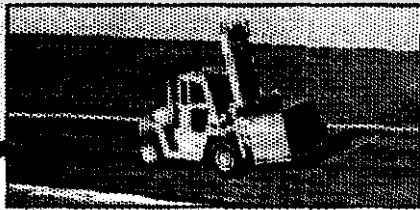
**Landlord**

- Complete Project L-309, "Replace Main Water Lines" by January 2001.
- a Complete installation of a chlorine containment system for Project L-303, "200 West Area Chlorine Mitigation" by January 31, 2001.



# The Plateau

Transitioning the central plateau for long-term waste management is a **key** part of the Hanford vision. Determining the disposition of the “**canyon**” facilities, deactivating the Plutonium Finishing Plant and disposing of solid waste are the desired outcomes. Projects included in The Plateau are Waste Management, Analytical Services, and Nuclear Material Stabilization.



# **Section B:1**

## ***Waste Management***

### **PROJECT MANAGERS**

G.H. Sanders, RL  
(509) 376-6888

E.S. Aromi Jr., WMH  
(509) 372-1033

## **SUMMARY**

Waste Management consists of the Solid Waste Storage and Disposal. Project Baseline Summary (PBS) WM03, Work Breakdown Structure (WBS) 1.2.1; Solid Waste Treatment. PBS WM04, WBS 1.2.2; Liquid Effluents - 200 Area, PBS WM05, WBS 1.2.3.1; and the Waste Encapsulation and Storage Facility, PBS TP02, WBS 1.4.2.

PBS WM05 is divided between WBS 1.2.3.1, Liquid Effluents (200 LEF) and WBS 1.2.3.2, 310 TEDF/340 Facility (**300** LEF). The **310** TEDF/340 Facility work scope is included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope remains in Waste Management. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the Waste Management Project (WMP), which has the majority of the work scope and funding.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of November 30, 2000. Other data is updated as noted.

## **ACCOMPLISHMENTS**

A collaborative effort with FH, DOE and the Regulators is ongoing to restructure the Waste Management Strategic Plan using new waste stream-oriented logic. The plan includes interfaces with other Site projects and incorporates the Hanford Vision 2012. The Plan identifies external drivers, technology insertion points, key strategies, key decisions and dates, and key customer interfaces. Similar efforts have been initiated for other FH Projects.

The fifth shipment of transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) was completed on November 30, 2000. The shipment contained 42 drums of TRU debris waste from the Central Waste Complex (CWC) inventory originally generated at the Plutonium Finishing Plant (PFP) Facility. No cask alignment issues were encountered during the loading operation. As requested by DOE, the next shipment will be scheduled for early spring. This will avoid shipment during poor weather conditions and allow campaigning of shipments from Hanford (i.e., two or more shipments in succession).

The first shipment of mixed low-level waste (MLLW) for thermal treatment to Allied Technology Group (ATG) was completed in November 2000. Through December 21, 2000, 16.6 cubic meters (m<sup>3</sup>) of waste had been shipped.

Six million gallons of wastewater were processed through the Effluent Treatment Facility (ETF) FYTD through November 30, 2000. From October 1, 2000, through December 19, 2000, 7.8 million gallons of wastewater were processed supporting the Environmental Restoration Contract 200-UP-1 Groundwater project.

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Processing completed at the Waste Receiving and Packaging Plant (WRAP) —

	Thru 11/30/00	Thru 12/13/00
Nondestructive Examination (NDE) on Drums	260	328
NDE on Boxes	2	2
Nondestructive Analysis (NDA) on Drums	165	218
TRU Glovebox (GB) Visual Exam - Drums	0	0
TRU GB Repackaged Drums	1	6
Low Level Waste (LLW) Glovebox Drums	0	0

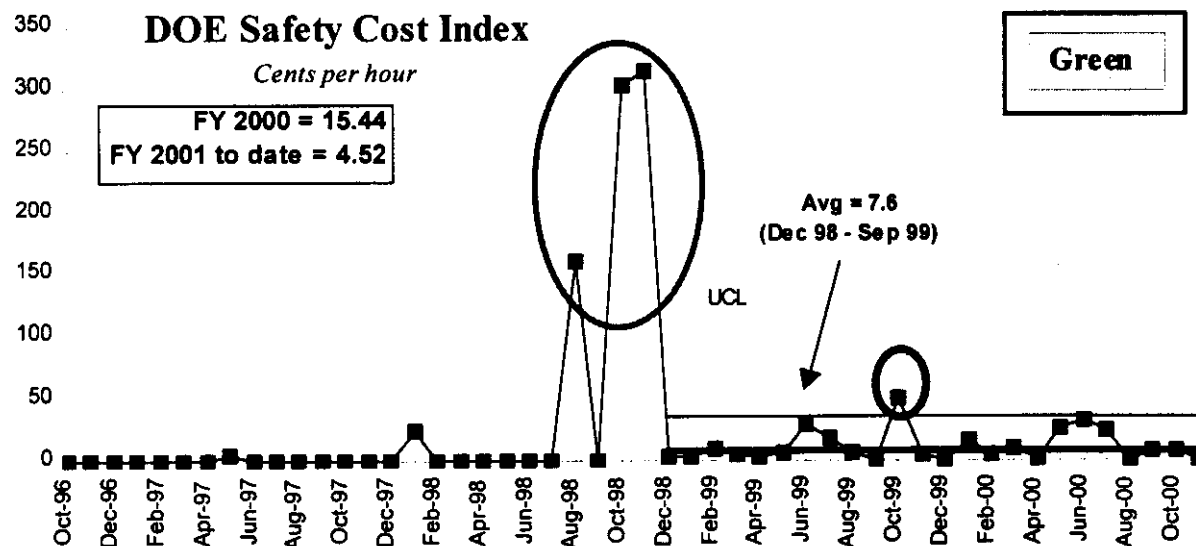
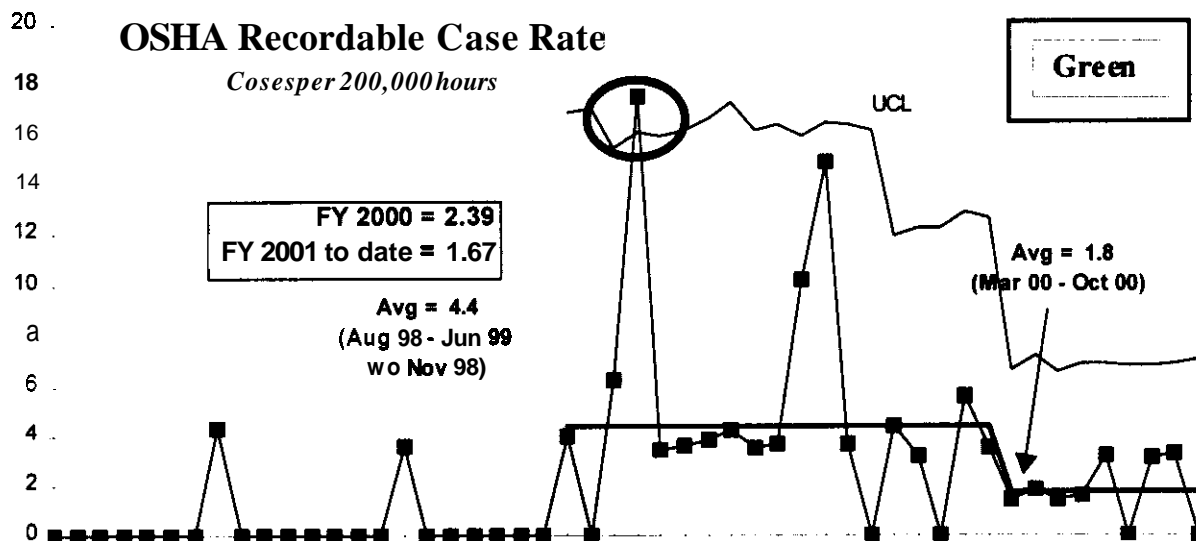
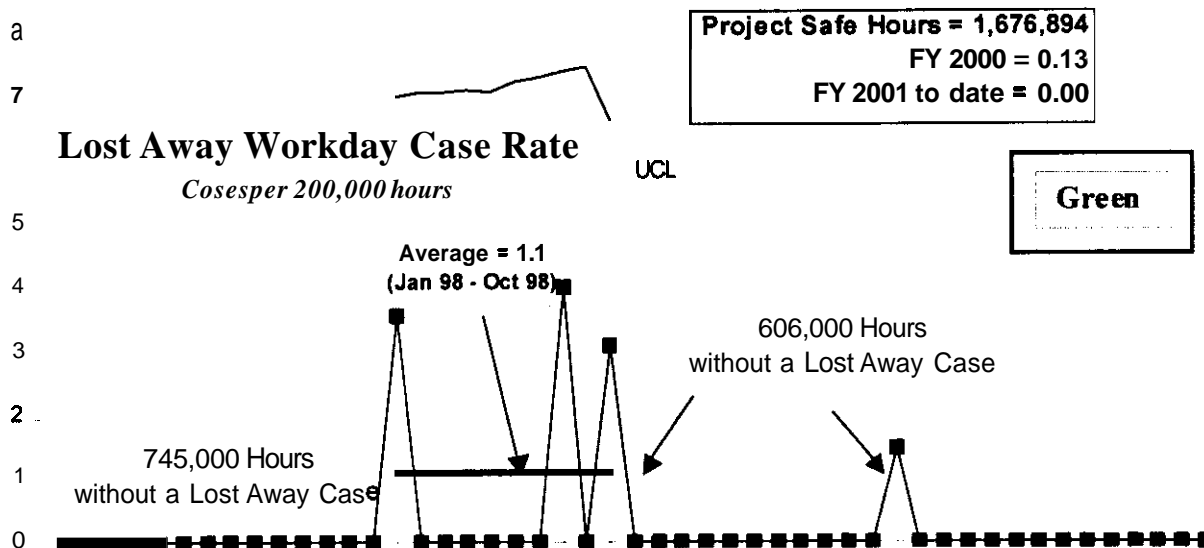
## **SAFETY**

The Waste Management Project (WMP) had accumulated 1.6 million safe work hours as of the end of November. The reduction WMP achieved in its OSHA Recordable Case Rate is holding, and this indicator is stable at the revised baseline of 1.8 cases **per** 200,000 hours. A new baseline was established for the OSHA Recordable Case Rate at 1.8 cases per 200,000 hours, due to recent significant reductions in the case rate.

During the month of November, the WMP experienced no Restricted Workday Cases, six first aid cases, two "report only" (no symptoms) case and one "not job related" case. The Lost/Restricted workday case rate has been below average seven months in a row.

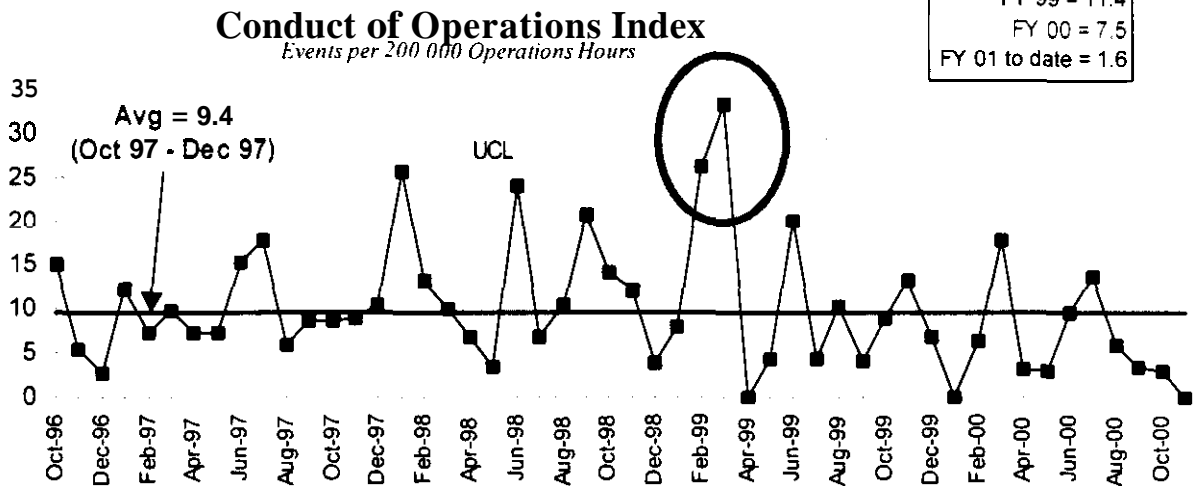


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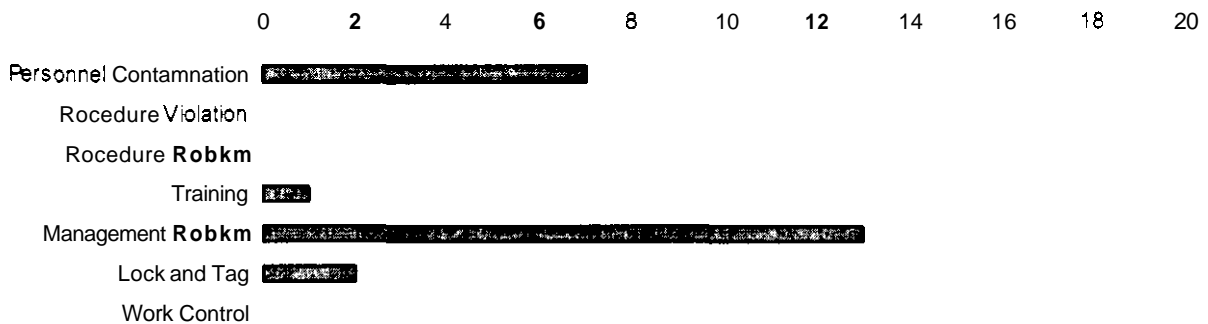


## CONDUCT OF OPERATIONS / ISMS STATUS

**Green**



### Number of Reports Past 12 Months



## ISMS STATUS

**Green**

### Completed Activity:

The National Integrated Environmental, Safety and Health Management System (ISMS) Conference in December was a resounding success. Attendance was well over the expected level, and included representatives from RL, DOE-HQ, and DOE prime contractors from across the complex.

### Planned Actions:

Configuration Control of the Waste Management Project (WMP) portion of the ISMS Description document will be detailed and distributed as part of the Project level "sustain and maintain" efforts. The WMP will implement its Sustain and Maintain Plan for ISMS when approved.

The proposed plans for the upcoming Facility Evaluation Board (FEB) reviews within WMP will be evaluated for probable areas of concern and continuous process improvement.

HNF-PRO-2701, "Authorization Agreements/Authorization Envelopes," has an ISMS Phase II

action to be revised by December 30, 2000. A WMP-led team has prepared a draft (which is a total revision of the procedure) to be reviewed by both RL and DOE-HQ representatives. The procedure is on track to be issued as scheduled.

## **BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT**

### **Breakthroughs**

Nothing to report at this time.

### **Opportunities for Improvement**

**Green**

**Mixed Waste Focus Area** — Waste Management continues to work with the Mixed Waste Focus Area (Robotics Product Line) on a technology development/demonstration activity at Hanford. The details of a demonstration/deployment of size-reduction technologies are being worked out. Initial plans are for a demonstration of size reduction at T Plant during FY 2001, using commercial technologies to size-reduce the PUREX Towers' TRU currently stored on the canyon deck. This activity supports development of technologies for later application in the M-91 Facility, and also supports clearing the deck for sludge receipt. The Mixed Waste Focus Area will provide funding for the activity.

A *Commerce Business Daily* (CBD) Request for Information notice ("Demonstration of Innovative and Improved Technologies for Size Reduction and Remote Material Handling") was published on November 28, 2000. Pacific Northwest National Laboratory (PNNL), the lead laboratory for this effort, received numerous contacts from potential vendors indicating interest in this procurement effort. Approximately fifteen vendors visited the Site on December 13, 2000, and were given details of the demonstration scope and a tour of T Plant, where the demonstration is planned.

## **UPCOMING ACTIVITIES**

**Remote-Handled TRU Project Management Plan (PMP)** — Support RL in its meetings with the Washington State Department of Ecology (Ecology) addressing Ecology's disapproval of the PMP.

### **Accelerate Readiness at T Plant to Receive and Store SNF K Basin Sludge** —

- Complete entire deck clearing in FY 2001.
- Complete safety basis documentation and long lead procurements in FY 2001.
- Install handling, drying and loading equipment in FY 2001.
- Complete procedures, training, and Operations Readiness Review (ORR) by June 2001 complete Shippingport (PA) fuel movement out of T Plant in FY 2002.

**Land Disposal Restriction (LDR) Report** — The legal appeal over the Final Determination continues. Mediation meetings are being held, as well as sub-group meetings at the working

**Section B: I - Waste Management**

level, to attempt to define acceptable format and data content. Support will be provided as necessary to these activities. PNNL is assisting in the preparation of the **2001 LDR** report. Preparation efforts have been initiated, but are time compressed given the ongoing changes resulting from the mediation activities.

**FY TO DATE COST PERFORMANCE (\$M):**

	BCWP	ACWP	VARIANCE
Waste Management	\$14.3	\$12.6	\$1.6*

**FY TO DATE SCHEDULE PERFORMANCE (\$M):**

	BCWP	BCWS	VARIANCE
Waste Management	\$14.3	\$14.3	\$0.0

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

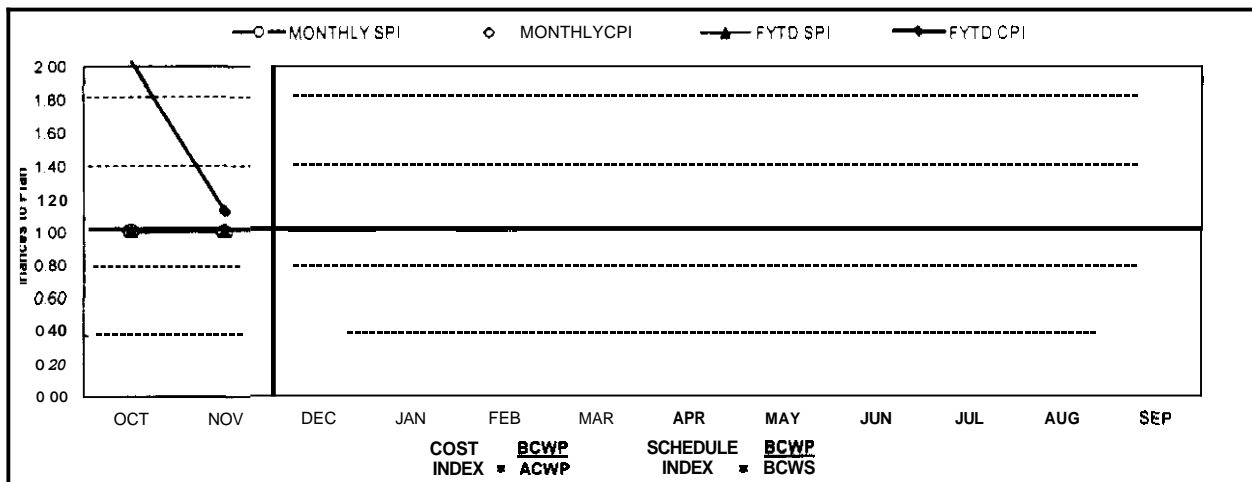
<b>Green</b>
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		FYTD							
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM
PBS WM03	Solid Waste Storage &	\$ 3,734	\$ 3,726	\$ 3,126	\$ (8)	0%	\$ 600	16%	\$25,278
WBS 1.2.1	Disposal								
PBS WM04	Solid Waste Treatment	\$ 4,882	\$ 4,933	\$ 4,541	\$ 51	1%	\$ 392	8%	\$36,168
WBS 1.2.2									
PBS WM05*	Liquid Effluents -	\$ 4,066	\$ 4,029	\$ 3,393	\$ (37)	-1%	\$ 636	16%	\$27,249
WBS 1.2.3	200/300 Area								
PBS TP02	WESF	\$ 1,589	\$ 1,568	\$ 1,587	\$ (22)	-1%	\$ (19)	-1%	\$10,721
WBS 1.4.2									
Total		\$ 14,272	\$ 14,256	\$ 12,647	\$ (16)	0%	\$1,609	11%	\$ 99,416

PBS WM05 includes the 300 Area Liquid Effluent, which is part of the River Corridor Project.  
 RL-Directed costs (steam and laundry) are included in the Project Execution Module (PEM) BCWS

## COST/SCHEDULE PERFORMANCE INDICES (MONTHLY AND FYTD)

Green



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	1.00	1.00										
MONTHLY CPI	2.03	0.89										
FYTD SPI	1.00	1.00										
FYTD CPI	2.03	1.13										
MONTHLY BCWS	\$ 5,413	\$ 8,859	\$ 7,667	\$ 9,062	\$ 7,441	\$ 7,915	\$ 8,089	\$ 10,685	\$ 7,558	\$ 7,536	\$ 9,780	\$ 9,411
MONTHLY BCWP	\$ 5,426	\$ 8,829										
MONTHLY ACWP	\$ 2,671	\$ 9,976										
FYTD BCWS	\$ 5,413	\$ 14,272	\$ 21,940	\$ 31,001	\$ 38,443	\$ 46,357	\$ 54,447	\$ 65,131	\$ 72,689	\$ 80,225	\$ 90,005	\$ 99,416
FYTD BCWP	\$ 5,426	\$ 14,256										
FYTD ACWP	\$ 2,671	\$ 12,647										

October FYTD Cost Performance Indices (CPI) in the above chart reflects anomalies associated with FY 2001 start-up.

## COST VARIANCE ANALYSIS: (+\$1.6M)

### WBS/PBS

### Title

#### 1.2.1/WM03

#### Solid Waste Storage & Disposal

**Description/Cause:** The favorable cost variance of \$0.6M (16 percent) was primarily due to vacancies, which are caused by delays in hiring and issuance of contracts per Senior Management.

**Impact:** No impact.

**Corrective Action:** Labor underruns will be used for the Requirements Initiatives Integration Team (RIIT) reductions.

#### 1.2.2/WM04

#### Solid Waste Treatment

**Description/Cause:** The favorable cost variance of \$0.4M (8 percent) was primarily due to delays in hiring, a fee accrual lower than budget, and staff supporting the Spent Nuclear Fuel (SNF) Operations Readiness Review (ORR).

**Impact:** No impact.

**Corrective Action:** No corrective action required.

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**1.2.3.1 /WM05** Liquid Effluents

Description/Cause: The favorable cost variance of \$0.6M (16 percent) was primarily due to staff vacancies and delays in issuing contracts.

Impact: No impact.

Corrective Action: The labor underruns will be used for the RIIT Team reductions. Contract costs will start coming in December and January.

**1.4.2/TP02** WESF

Description/Cause: The unfavorable cost variance of \$0.02M (1 percent) was within the established threshold.

Impact: No impact.

Corrective Action: No corrective action required.

**SCHEDULE VARIANCE ANALYSIS: (\$0.0M)**

**WBS/PBS**

**Title**

**1.2.1/ WM03** Solid Waste Storage & Disposal

Description /Cause: The unfavorable schedule variance of \$0.01M (0.2 percent) was within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

**1.2.2/ WM04** Solid Waste Treatment

Description /Cause: The favorable schedule variance of \$0.1M (1 percent) was within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

**1.2.3.1/ WM05** Liquid Effluents

Description /Cause: The unfavorable schedule variance of \$0.04M (1 percent) was within the established threshold.

Impact: No Impact

Corrective Action: No corrective action required.

**1.4.2/ TP02** WESF

Description /Cause: The unfavorable schedule variance of \$0.02M (1 percent) was within the established threshold.

Impact: No Impact.

Corrective Action: No corrective action required.

## **ISSUES**

### **Technical Issues**

None.

### **DOE/Regulator/External Issues**

**Report for Hanford Land Disposal Restrictions (LDR) for Mixed Wastes —** Mediation efforts on LDR issues are in progress, with settlement of the legal issues possible. Preparation of the 2001 LDR report, in accordance with the expected settlement, is underway. The 2001 LDR report is due to the regulators by April 30, 2001, in accordance with Tri-Party Agreement milestone M-26-01, "Annual Hanford Land Disposal Restrictions Report." The mediation/negotiation process is causing a late start on preparing the report. (Report content is still being defined.) It may not be possible to meet the April 30 due date. A "110 day notification" under the Tri-Party Agreement process is being prepared to inform the regulators of this possibility. This notification preserves some rights and limits enforcement. A change request to move the April milestone date will be provided if and when it becomes necessary.

**Hanford Facility RCRA Permit —** Ongoing permit modifications include the corrective action transfer from the Hazardous and Solid Waste Amendments (HSWA) portion to the Dangerous Waste (DW) portion of the permit, updating the HSWA portion of the permit, Modification E of the DW portion, and Modification F of the DW portion.

The corrective action portion was appealed by DOE-HQ. Subsequently, Ecology and DOE-HQ settled on the appeal. The corrective action permit conditions will be placed out again for public comment. The HSWA portion update is expected to be finalized once the corrective portion becomes effective.

Modification E is expected to be issued in January 2001. DOE-HQ expects to appeal Modification E due to the excessive detail imposed by the draft permit conditions.

Modification F is being delayed until completion of Modification E. Modification E will incorporate the Central Waste Complex and the 616 Non-radioactive Dangerous Waste Storage Facility (NRDWSF) Closure Plan into the RCRA Permit.

**Remote-Handled TRU Project Management Plan (PMP) —** Ecology disapproved the PMP (Tri-Party Agreement milestone M-91-03) on August 14, 2000, due to the submittal not meeting the requirements set forth in Section 11.5 of the Tri-Party Agreement. Internal meetings with RL have been ongoing, and meetings with Ecology occurred in mid-September. A path-forward for resolution of Ecology's concerns with the PMP is being developed based on these discussions.

**Burial Ground Draft Part A —** A Notice of Deficiency (NOD) was received on the Low Level Burial Grounds Draft Part A that was submitted as part of the Part B Working Draft Permit Application. Of significance is that Ecology is requiring that the permit boundaries remain the

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same as those submitted in the original Part A submitted in 1985. If this comment were accepted, some burial grounds currently managed by Bechtel Hanford, Inc., as well as some low-level-only burial grounds, would be included in the permit. A WMP response is due within 60 days.

**Impacts of Waste Management PEIS and ROD** — The Waste Management Programmatic Environmental Impact Statement (PEIS) was issued on February 25, 2000. The Record of Decision (ROD) for low-level waste and mixed low-level waste will affect Hanford's disposal role for the Complex and may have significant impact on disposal volumes and rates at Hanford DOE-HQ and Ecology negotiations continue; impacts depend upon the results of these negotiations.

## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT	DATE		FY00 COST IMPACT \$000	T E C H	DATE TO CCB	CCB APRYD	APRVD APRVD	CURRENT STATUS
WM-2000-015	7/26/00	WMP FY 2001 MYWP Revision	\$0		8/31/00	9/25/00		At DOE-RL
FH-2001-001	9/12/00	Base Ops Reduction for PHMC Projects	(\$5,036)	X				At DOE-RL
FH-2001-002	9/25/00	FY2001 Fee Reduction to 90%	(\$740)					At DOE-RL
FH-2001-003	9/25/00	FY2001 Addition of High Priority Workscope	\$5,639	X				At DOE-RL
WM-2000-001	10/12/00	FY01 Bare Ops reductions	(\$863)		12/19/00			At CCB
WM-2000-002	11/6/00	FY00 Carryover	\$3,471	X				Draft
WM-2000-003	11/29/00	242A Backflow preventer	\$18					Appvd by E Aromi 11/30
FSP-2001-016	12/6/00	FY01 WESF Base Ops reductions	(\$50)					Appvd by E Aromi 12/11
FSP-2001-017	12/7/00	FY00 WESF Carryover	\$780		12/19/00			
<b>IONS</b>								
WM-AWA001 Rev 1	12/7/00	FY 2001 LDR scope	\$1,000	X	12/7/00	12/7/00	12/7/00	



## MILESTONE ACHIEVEMENT

Green

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	0	0	0	0	0	3	0	3
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	1	0	1
<b>Total Project</b>	0	0	0	0	0	4	0	4

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.

### FY 2001 Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
<b>M-91-11-T01 (A2G-01-103)</b>	Submit LLWM Facility ES/FDC to Ecology	<b>Due 12/31/00</b> – Change request due to delete milestone
<b>M-91-12 (A2G-01-104)</b>	Initiate Thermal Treatment of CH-LLMW	<b>Due 12/31/00</b> – Thermal treatment of Hanford waste is planned to begin on December 26, 2000. Since demonstration of sustained thermal treatment will not be realized by the end of December, credit for completion of the M-91-12 milestone will not be taken. The forecast for M-91-12 completion is currently in February 2001.
<b>M-91-13 (A1C-01-001)</b>	Initiate Disposal of CH-LLWM	<b>Due 06/30/01</b> – Completed 9/15/1999
<b>M-91-18 (WMP-01-001)</b>	Transmit T-Plant Sludge Storage Conceptual Design to Ecology	<b>Due 06/29/01</b> – On Schedule
<b>M-26-05H (WMH-00-006)</b>	Preo Biennial Tritium Treatment Technology Evaluation reort	<b>Due 08/31/01</b> – On Schedule

### DNFSB Commitments

	Nothing to report at this time.	
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## MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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**OVERDUE – 0**

**FORECAST LATE – 0**

**FY 1999 OVERDUE – 1**

TRP-98-709	RL	Complete Hot Cell Deactivation	03/31/99	03/30/01
1.4.2		WESF Facility (A-E)		

Number	Milestone Title	Status

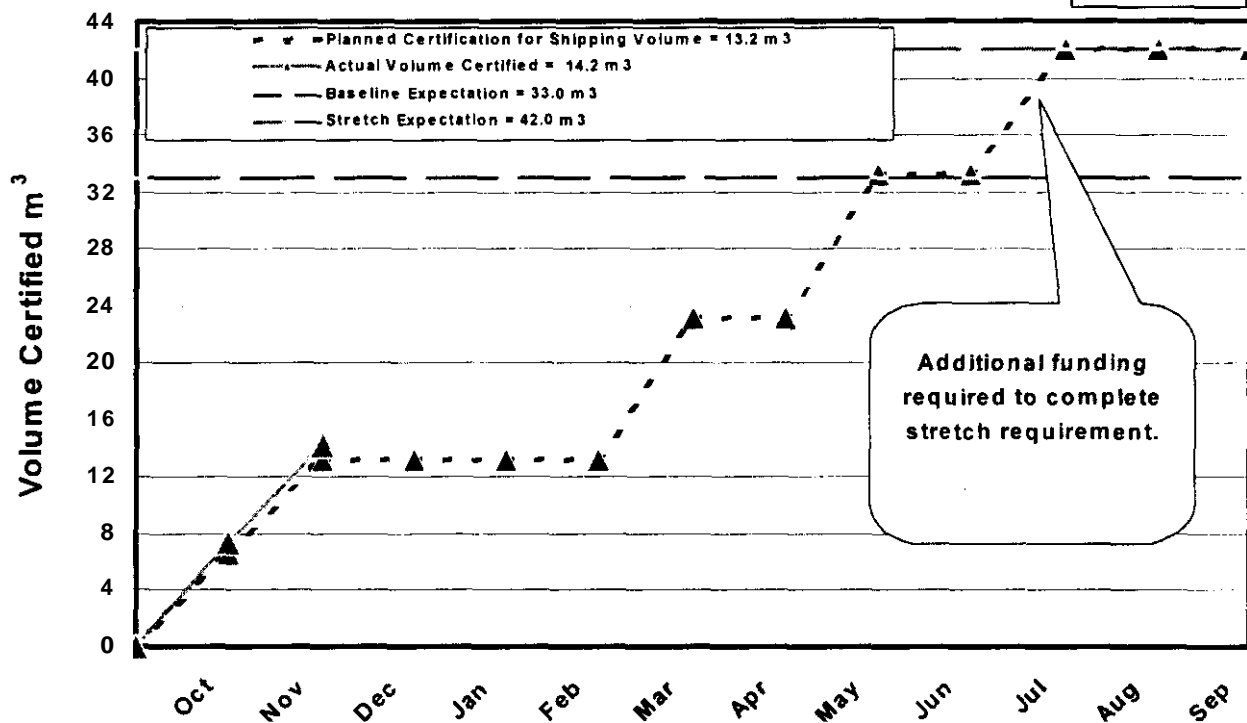
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## PERFORMANCE OBJECTIVES

*NOTE: Recently finalized Performance-Based Incentives (PBIs) have not been incorporated into the information below. New PBIs, as well as other changes associated with the Fluor contract extension, will be reflected next reporting period.*

## TRU CERTIFICATION FOR SHIPPING

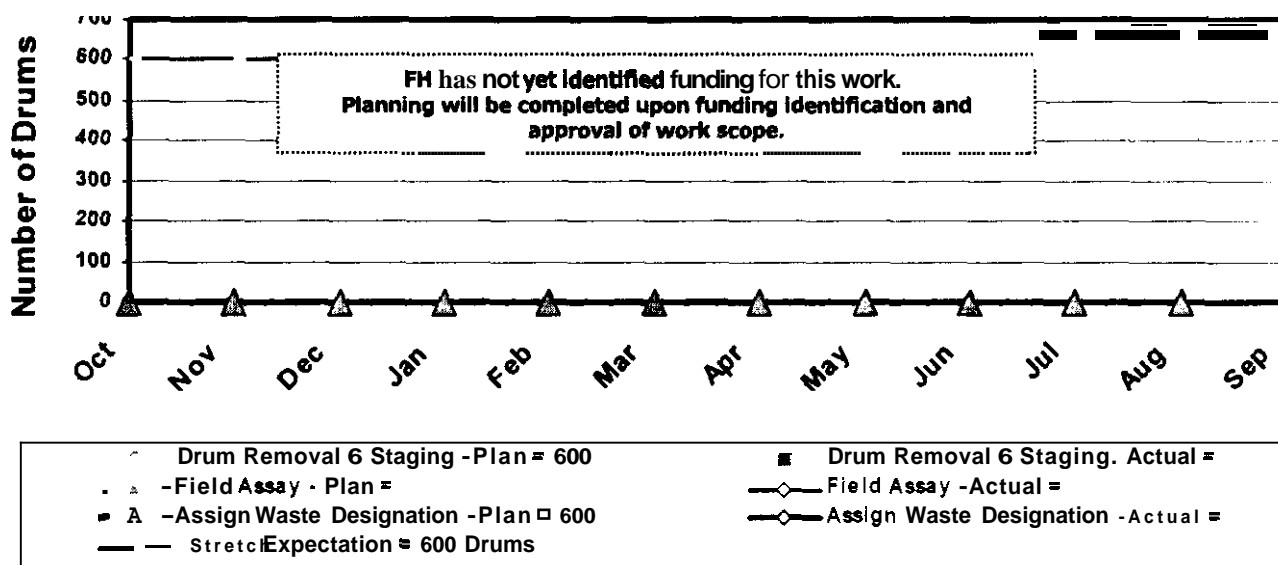
Green



**Action Plans:** On track and currently ahead of schedule. Through November 2000, 14.2 m<sup>3</sup> TRU waste certified for shipping.

## RETRIEVED/STORED SUSPECT TRW

Green



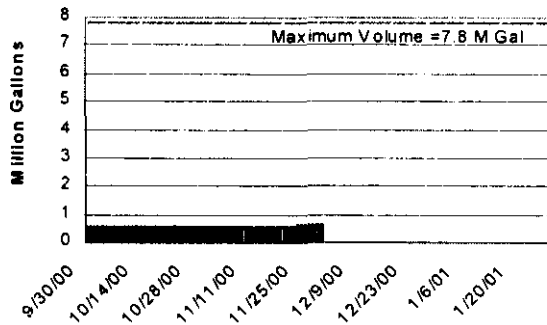
**Action Plans:** Working to identify funding and obtain approval of work scope



## LIQUID WASTE PROCESSING

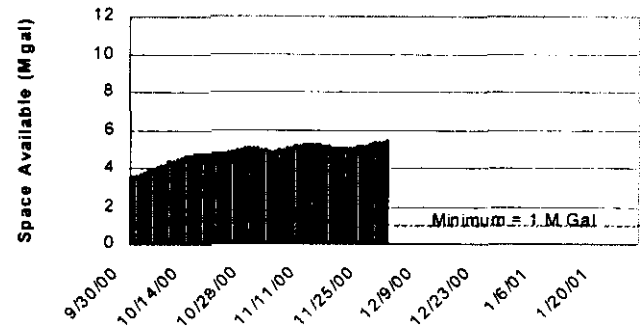
Green

Basin 42 Inventory



Space Available in Basins 43 & 44

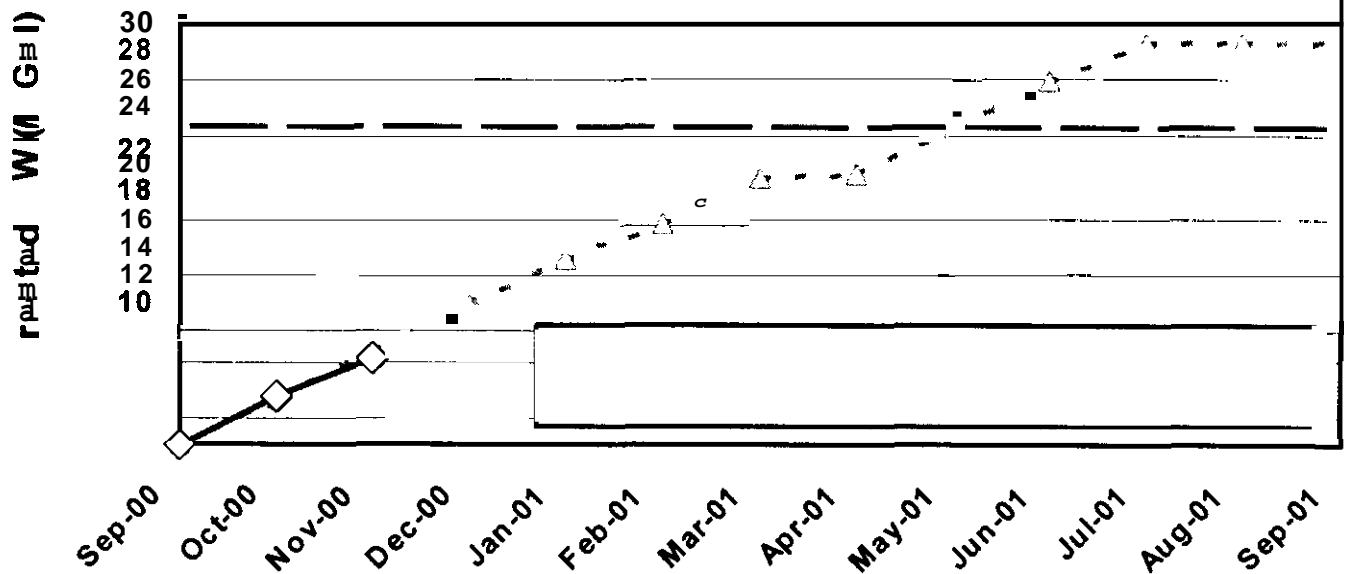
6.49 M Gal available as of 11/30/00



**Action Plans:** On track. Basin #42 maintained at less than 7.8 M gallons. At end of November, 5.5 M gallons of space available in LERF Basins #43 and #44 (required to be maintained at less than 7.8 M gallons with at least a 1 M gallon reserve).

## UP-1 GROUNDWATER TREATMENT

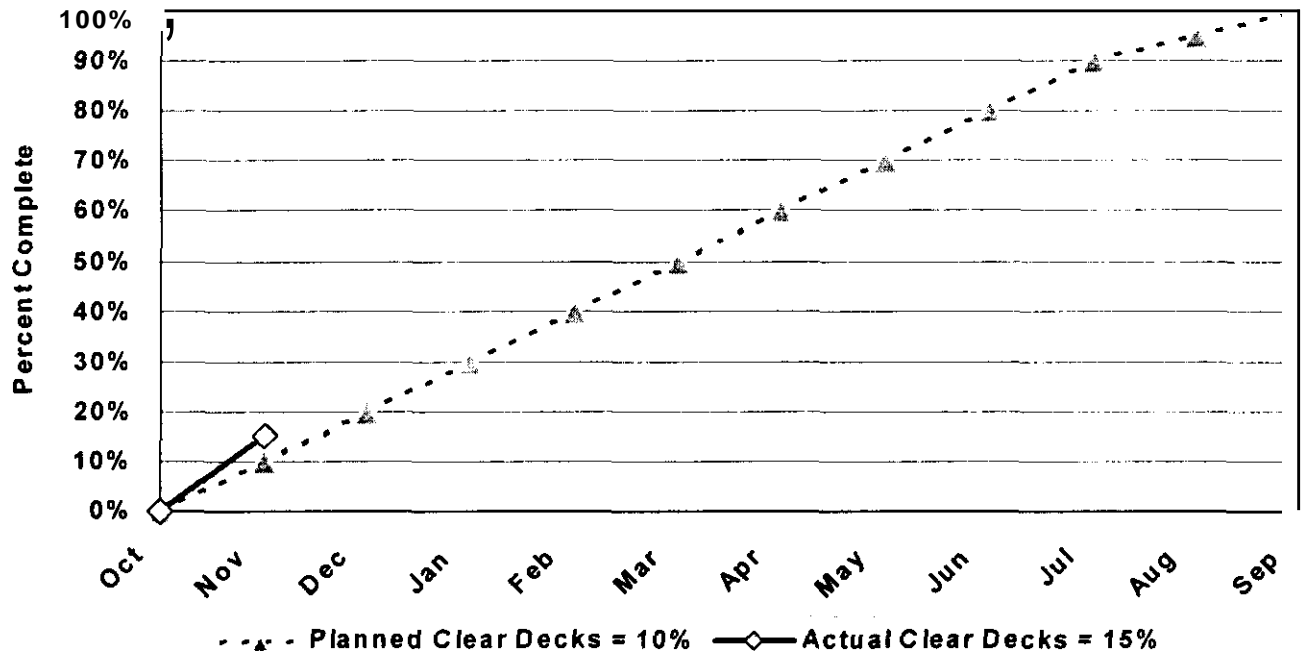
Green



**Action Plans:** On track. Through November processed 6.2 M gallons.

## T PLANT DECK CLEARING

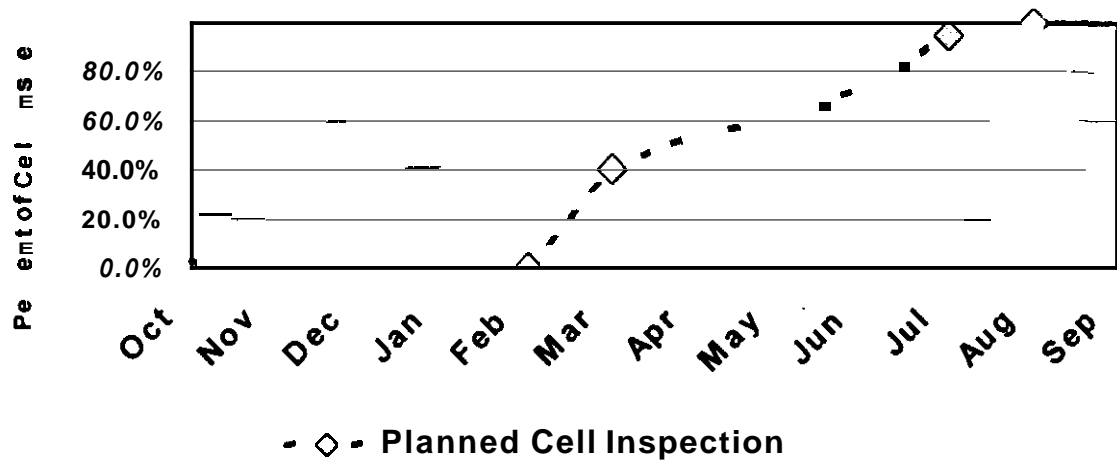
Green



Action Plans: On track

## T PLANT CELL INSPECTION

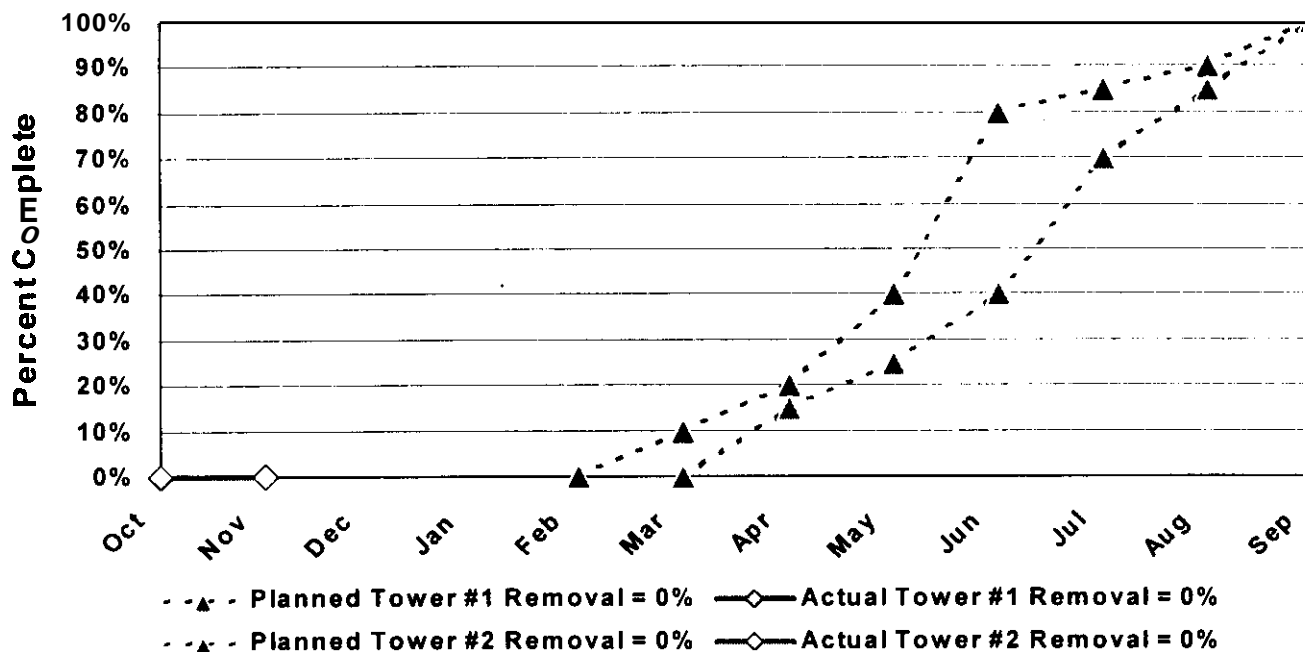
Green



Action Plans: On track. Cell inspection tied to deck clearing.

## T PLANT TOWER REMOVAL

Green



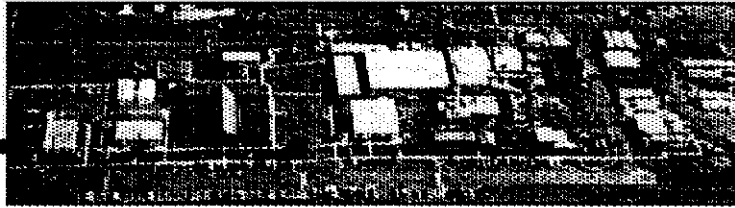
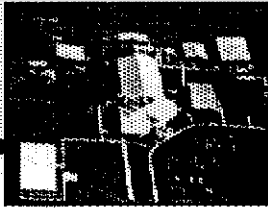
Action Plans: On track.

## KEY INTEGRATION ACTIVITIES

- Preparing T Plant to receive Spent Nuclear Fuel K Basin sludge.
- Issuance of the Records of Decision (ROD) for Low-Level Waste (LLW) and Mixed Low-Level Waste (MLLW) is expected to affect Hanford's role in disposing of waste from other sites. Working with RL, DOE-HQ, Ecology, and other Sites to develop and define Hanford's role as one of the identified LLW/MLLW disposal sites for the DOE Complex.
- Continue support of UP-1 Groundwater treatment.
- Continue support to River Corridor Project in cleanup and removal of waste from 324/327 buildings.

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***Section B: I – Waste Management***

- Support was provided to the CH2M HILL Hanford Group (CHG) optimization study to evaluate the feasibility of treating the Submerged Bed Scrubber liquid waste from the Waste Treatment Plant (WTP) in the Effluent Treatment Facility (ETF). There is concern that the total quantity of Tc<sup>99</sup> in the liquid waste may be several thousand curies, and would find its way to the mixed waste trench via solid waste from ETF. Iodine-129 is also a problem. Better information is needed on the volume and composition of the liquid waste to determine the impact on the performance assessment.
- A meeting was held with CHG to begin further development of the strategy for disposing of failed melters from the WTP. Comments on the strategy document issued in October were reviewed to identify areas of uncertainty. Additional work is planned on permitting, transportation, and the cost estimate. Waste Management is leading this activity.
- Continue to work with PNNL, EM 50 and Mixed Waste Focus Areas to obtain funding in support of the M-91 Facility Project.
- Continue to work with DOE-RL, -Oakland, and -Ohio to support resolution of TRU small quantity site disposition



# **Section B:2**

## ***Analytical Services***

### ***(222-S, WASP, WSCF)***

#### **PROJECT MANAGERS**

S.H. Wisness, RL  
(509) 373-9337

D.L. Renberger, FH  
(509) 372-0877



## **SUMMARY**

The Analytical Services (AS) Project [222-S, Hanford Analytical Services Program (HASP), Waste Sampling and Characterization Facility (WSCF)] consists of Analytical Services, PBS WM06, WBS 1.2.4.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of November 30, 2000. Other data is updated as noted.

## **ACCOMPLISHMENTS**

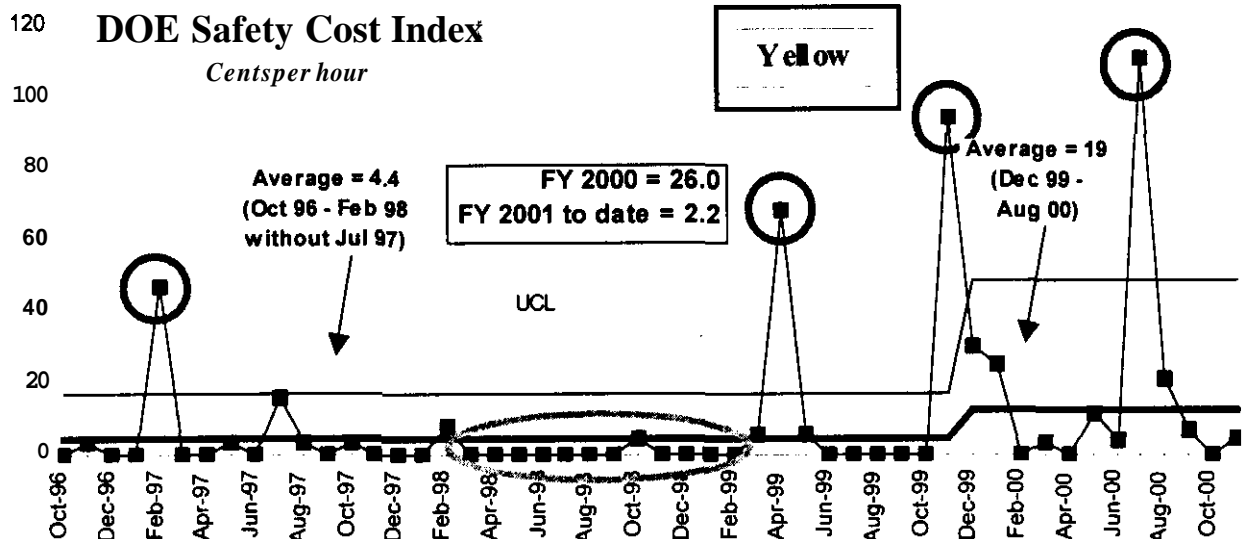
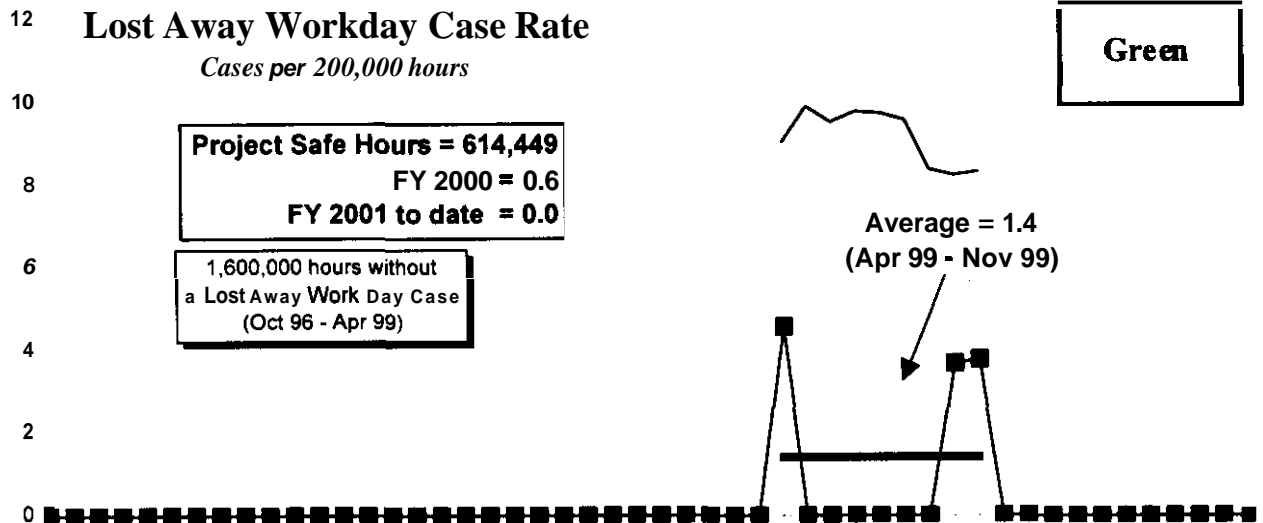
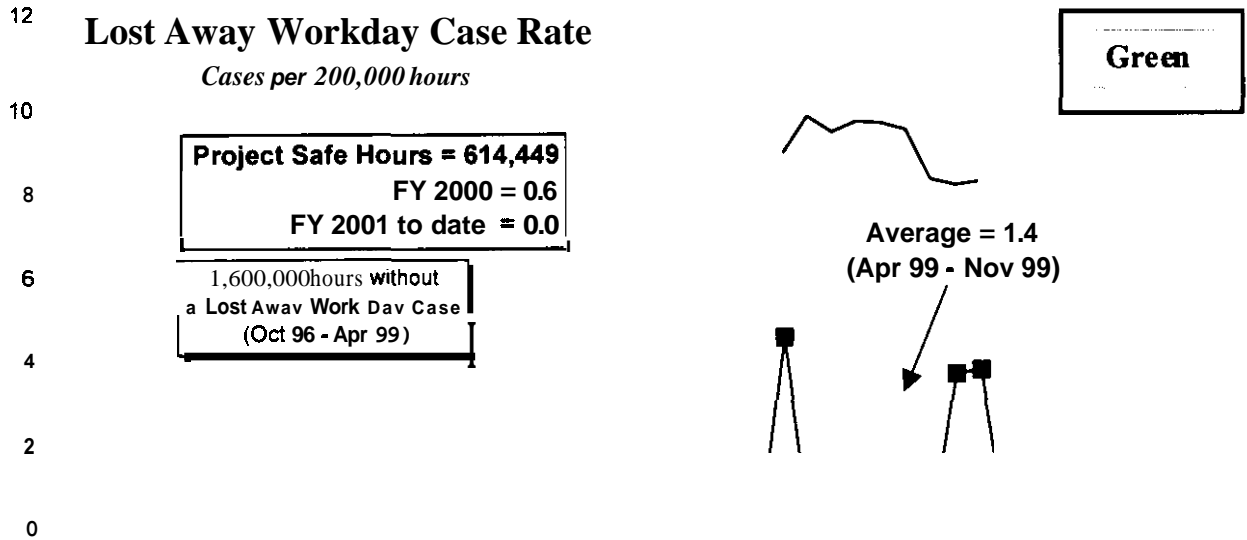
- Processed a total of 0.75 Analytical Equivalency Unit (AEUs) at the 222-S Laboratory in November in support of the River Protection Project (RPP) (TWRS) tank characterization program. Production through November 30 was 1.83 AEUs versus a planned 1.88 AEUs. Production through January 4, 2001 is 2.7 AEUs.
- Performed 2,982 analyses through December 7, 2000 at WSCF for a wide variety of customers. Production through November 2000 was 2,782 analyses.
- On Monday December 4, the Washington State Department of Health (WDOH) came to the WSCF analytical laboratory to perform a minor stack inspection and to audit laboratory compliance to the conditions in their latest Notice of Construction (NOC). WSCF representatives provided the inspectors with copies of radiation survey reports and the radiation survey report task description to review. The inspectors commented that these documents appeared complete. The inspectors were provided a field walk down of the 696-W-1 and 696-W-2 stacks and their associated systems [high-efficiency particulate air (HEPA) filter, sample stack cabinet and exhaust units]. The inspectors noted no findings or concerns. They also visited the non-point source facilities listed in the WSCF NOC.
- The Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP-AES) contract was awarded December 15, 2000. The ICP-AES will replace an existing 18 years old system at the 222-S Laboratory that has become less reliable and difficult to maintain.

## **SAFETY**

In November, there were no OSHA recordable cases, one Restricted Workday Case, and four First Aid Cases. Analytical Services continues to focus on ergonomic issues, and has brought in Hanford Environmental Health Foundation (HEHF) expertise to 222-S to assist in ergonomic evaluations and Development Staff to revise sample cask handling methods. It is anticipated that this action will improve the Case Rates.

An OSHA Restricted Duty injury case that occurred on July 28, 2000 at the 222-S Laboratory was reclassified to Lost Time Away from work. The employee underwent knee surgery on December 6, 2000 and did not return to work the following day. This reclassification broke the 11 million safe hour record of Fluor Hanford.

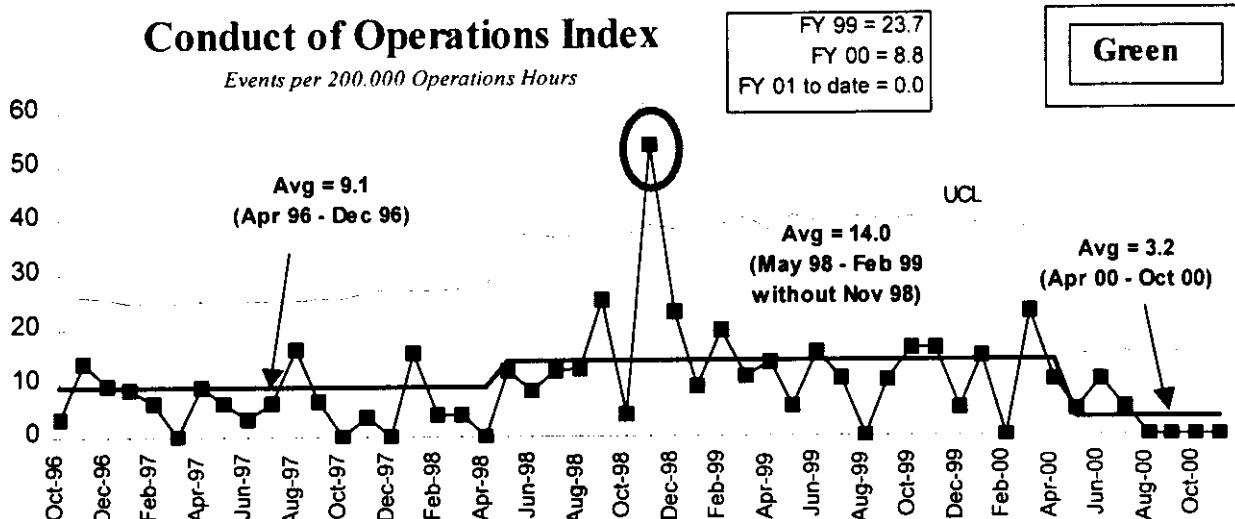
**PHMC Environmental Management Performance Report – January 2001**  
**Section B: 2 – Analytical Services (222-S, HASP, WSCF)**



## CONDUCT OF OPERATIONS / ISMS STATUS

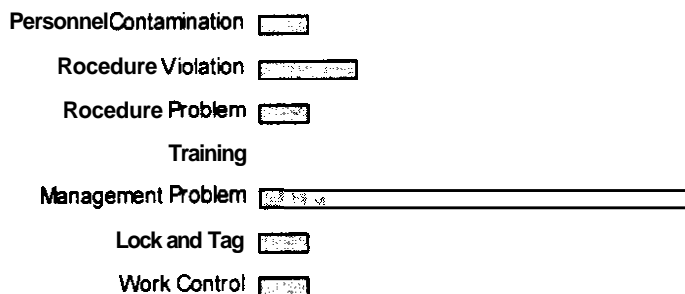
### Conduct of Operations Index

Events per 200,000 Operations Hours



### Number of Reports Past 12 Months

0 2 4 6 8 10 12 14 16 18 20



## ISMS STATUS

Analytical Services ISMS status is included in the Waste Management Project Section of this report.

## BREAKTHROUGHS

Nothing to report at this time.

## OPPORTUNITIES FOR IMPROVEMENT

Nothing to report at this time.

## UPCOMING ACTIVITIES

- **WIPP Waste Shipments** — Continue to support the production goal of headspace analysis in support of waste shipments to Waste Isolation Pilot Plant (WIPP). Continued discussions with Idaho National Engineering and Environmental Laboratory (INEEL) (located at Idaho Falls, ID) regarding possible support to the INEEL WIPP program.
- **ORP Waste Treatment Plant (WTP)** — Support DOE-RL and Office of River Protection (ORP) efforts to evaluate options for long-term high-activity laboratory support to the Site cleanup mission (i.e. 222-S, WTP laboratory, a new laboratory. etc.).
- **222-S RCRA Part B Application** — Continue to support development of Modification F (which includes 222-S Part B application) of the Hanford Facility (HF) Resource Conservation and Recovery Act of 1976 (RCRA) Permit review. Modification F will be issued after issuance of Modification E [which includes Waste Receiving and Processing (WRAP) and Central Waste Complex (CWC)].
- **PCB Management** — Continue to work with RL and ORP on polychlorinated biphenyl (PCB) management and regulatory issues.

## FY TO DATE COST PERFORMANCE (\$M):

	BCWP	ACWP	VARIANCE
Analytical Services	\$4.6	\$4.3	\$0.4*

The \$0.4 million (8 percent) favorable cost variance was due to costing delays, lagging contract costs, delays in billings of assessments and staff vacancies.

## FY TO DATE SCHEDULE PERFORMANCE (\$M):

	BCWP	BCWS	VARIANCE
Analytical Services	\$4.6	\$5.1	-\$0.4*

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

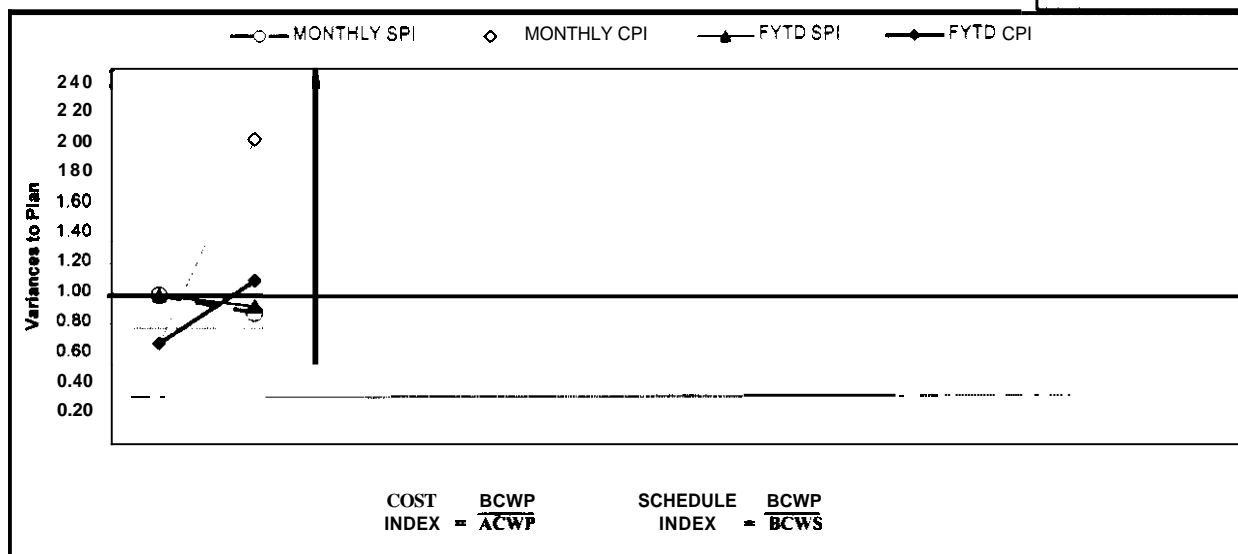
Green

		FYTD							
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM
WBS 1.2.4	Analytical								
PBS WM06	Services	\$ 5,052	\$ 4,634	\$ 4,260	\$ (418)	-8%	\$ 374	8%	\$ 32,139
<b>Total</b>		<b>\$ 5,052</b>	<b>\$ 4,634</b>	<b>\$ 4,260</b>	<b>\$ (418)</b>	<b>-8%</b>	<b>\$ 374</b>	<b>8%</b>	<b>\$ 32,139</b>

Note: RL-Directed costs (steam and laundry) are included.

## COST/SCHEDULE PERFORMANCE INDICES (MONTHLY AND FYTD)

Green



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.99	0.87										
MONTHLY CPI	0.67	2.03										
FYTD SPI	0.99	0.92										
FYTD CPI	0.67	1.09										
MONTHLY BCWS	\$2,000	\$3,052	\$2,375	\$2,743	\$2,293	\$2,525	\$2,392	\$3,192	\$2,322	\$2,283	\$3,000	\$3,339
MONTHLY BCWP	\$1,975	\$2,659										
MONTHLY ACWP	\$2,948	\$1,312										
FYTD BCWS	\$2,000	\$5,052	\$7,627	\$10,372	\$12,666	\$15,190	\$17,782	\$20,974	\$23,296	\$25,579	\$28,580	\$32,139
FYTD BCWP	\$1,975	\$4,634										
FYTD ACWP	\$2,948	\$4,260										

## **COST VARIANCE ANALYSIS: (+\$0.4M)**

### **WBS/PBS**

### **Title**

1.2.4/WM06

Analytical Services

**Description/Cause:** The \$0.4million (8 percent) favorable cost variance was due to costing delays, lagging contract costs, delays in billings of assessments and staff vacancies.

**Impact:** None.

**Corrective Action:** None required.

## **SCHEDULE VARIANCE ANALYSIS: (-\$0.4M)**

### **WBS/PBS**

### **Title**

1.2.4/WM06

Analytical Services

**Description /Cause:** The \$0.4million (8 percent) unfavorable schedule variance was due to the 222-S HEPA filters and the inductively coupled mass spectrometer (ICP-MS) installation delays.

**Impact:** None.

**Corrective Action:** Facility shutdown will be necessary for the 222-S HEPA filter installation. Due to higher plant priorities, the shutdown will be scheduled for the April-May timeframe. The prolonged procurement process for the ICP-MS will delay installation until the latter half of the fiscal year. The procurement process for the ICP-MS is ongoing.

## **ISSUES**

### **Technical Issues**

Nothing to report at this time,

### **DOE/Regulator/External Issues**

**Polychlorinated Biphenyls (PCBs) Management** — The DOE Office of River Protection authorized CH2M Hill Group (CHG) to receive two shipments of tank waste from the Fluor Hanford operated 222-S Laboratory. This waste may contain suspect PCB's originating from suspect PCB contaminated tank **241-SY-102**. CHG indicated that they will agree to receive the two shipments and will forward authorization to Fluor Hanford to allow these shipments to proceed. This resolution enables the laboratory to receive samples from the tank and begin analyses and to manage the wastes without major costs **or** interference to other on-site work.

## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS (\$000)

PROJECT CHANGE NUMBER	DATE ORIGIN	BCR TITLE	COST IMPACT \$000	S C H	T E C H	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
FH-2001-001	9/12/00	Base Ops Reduction for PHMC Projects	-\$610		X		09/13/00		At DOE-RL
FH-2001-002	9/25/00	FY2001 Fee Reduction to 90%	-\$190				09/13/00		At DOE-RL
ADVANCE WORK AUTHORIZATIONS									
		Nothing to report at this time.							

Green

## 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	0	0	0	0	0	0	0	0
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	1	0	1
<b>Total Project</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

### Tri-Party Agreement / EA Milestones

Nothing to report at this time.

### DNFSB Commitments

Nothing to report at this time.

## MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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**OVERDUE – 0**

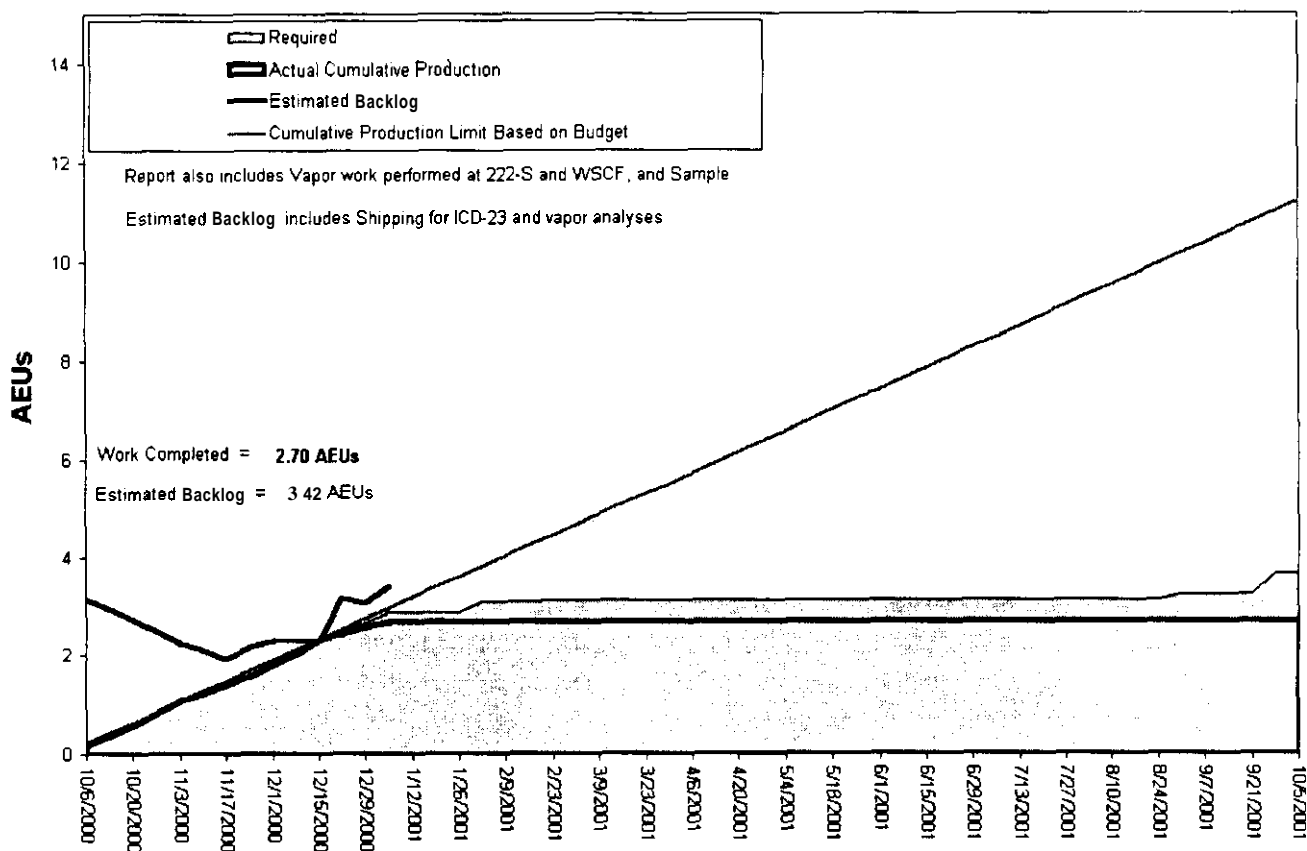
**FORECAST LATE – 0**

## PERFORMANCE OBJECTIVES

**Green**

### Budgeted Capacity vs. Actual Production - TW01

January 04 2001



Processed a total of 0.75 AEUs at the 222-S Laboratory in November in support of the RPP (TWRS) tank characterization program. Production through November 30 is 1.83 AEUs versus a planned 1.88 AEUs. Production through January 4, 2001 is 2.7 AEUs.

## KEY INTEGRATION ACTIVITIES

- Continue to support DOE-RL and ORP efforts to establish required analytical support for Waste Treatment Plant (WTP) design and operation.
- Continue to support Waste Management headspace gas analyses for transuranic (TRU) waste shipment to WIPP.





# **Section C:1**

## ***Nuclear Material Stabilization***

### **PROJECT MANAGERS**

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(509) 376-7435

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



## **SUMMARY**

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

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of November 30, 2000. All other information is as of December 31, 2000, unless otherwise stated.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that one of nine milestones (11 percent) was completed on or ahead of schedule, none were completed late, and one is forecast to be late (11 percent). Although eight additional milestones are scheduled for completion later this fiscal year, no milestones were scheduled for completion during this report period. Further details can be found in the milestone exception report following the cost and schedule variance analysis.

## **ACCOMPLISHMENTS**

### **Maintain Safe and Compliant PFP**

- Through December 31, 2000, there were 396 calendar days (nearly 1.3 million staff hours) since the last recorded lost workday injury that occurred on December 2, 1999.
- Completed installation of the first of six (6) automatic external defibrillators at the Plutonium Finishing Plant (PFP) to assist victims of Sudden Cardiac Arrest.
- Installation and testing of backflow preventers within the PFP complex continues. To date, seven (7) backflow preventers have been installed, tested, and are operating. This activity remains one month ahead of schedule of the June 2001 RL milestone completion date.

### **Oxides/Metals/Polycubes Stabilization**

- The ALARA analysis of polycube stabilization was completed in November and the cost/benefit analysis was issued December 26, 2000.

### **Maintain Safe & Secure SNM**

- The sixth consecutive year of International Atomic Energy Agency (IAEA) monthly ADHOC inspections was successfully completed without an observation or finding.
- Six University of Washington fuel plates were shipped off-site to Oak Ridge National Laboratory on November 16, 2000, contributing to the reduction of special nuclear materials inventory at PFP.

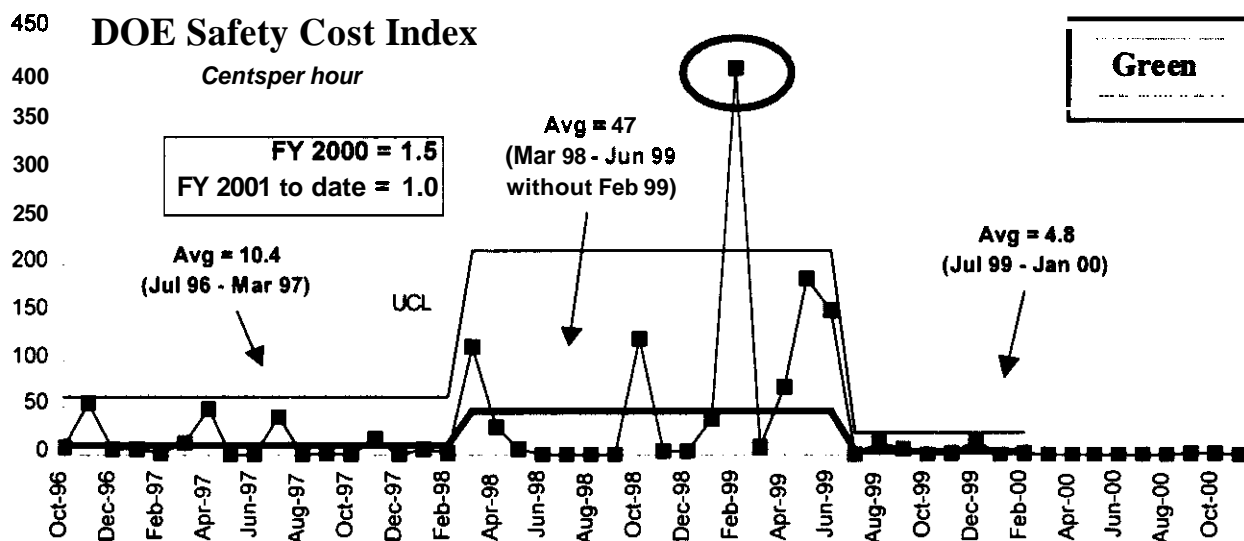
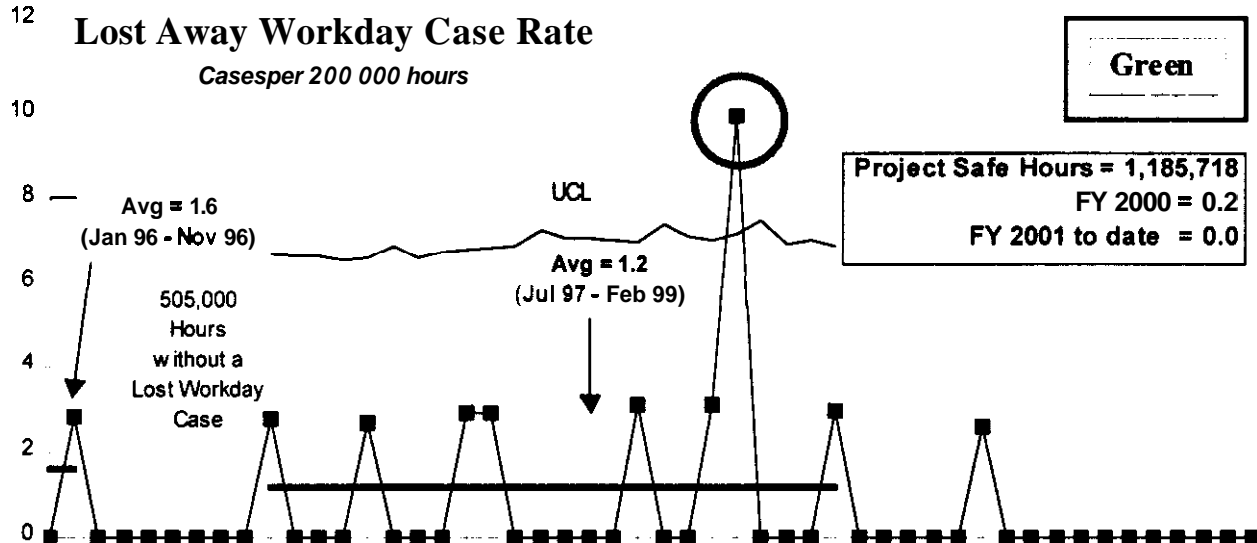
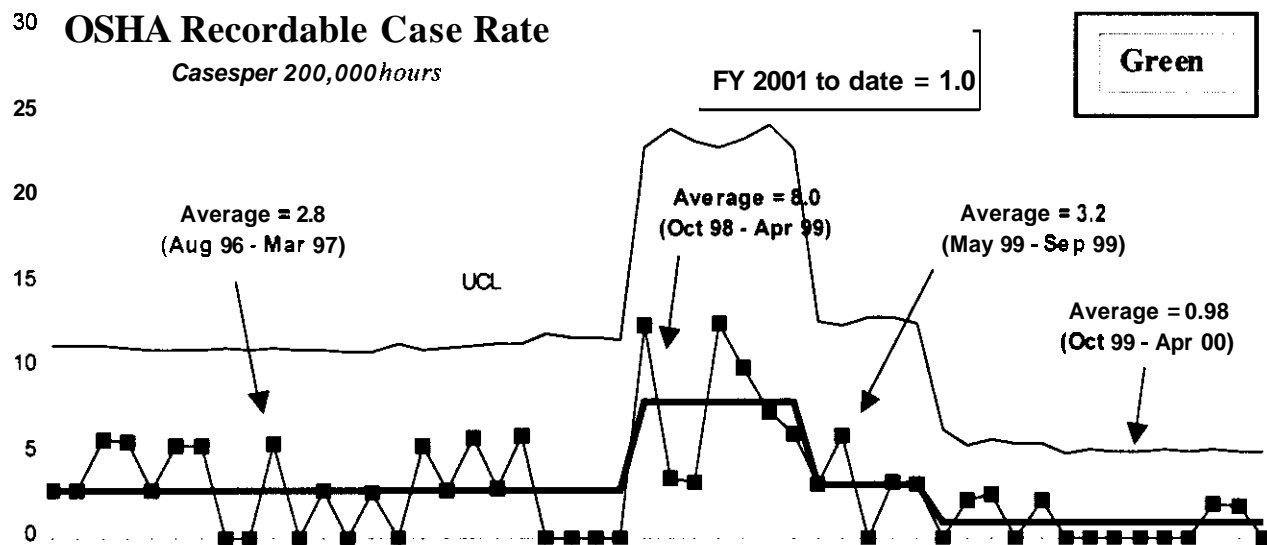
## **Solution Stabilization**

- Upgraded hardware was installed, and its operation initiated (two-boat hot plate system) in glovebox #3. A second two-boat hot plate system is scheduled to be installed in January 2001.

## **SAFETY**

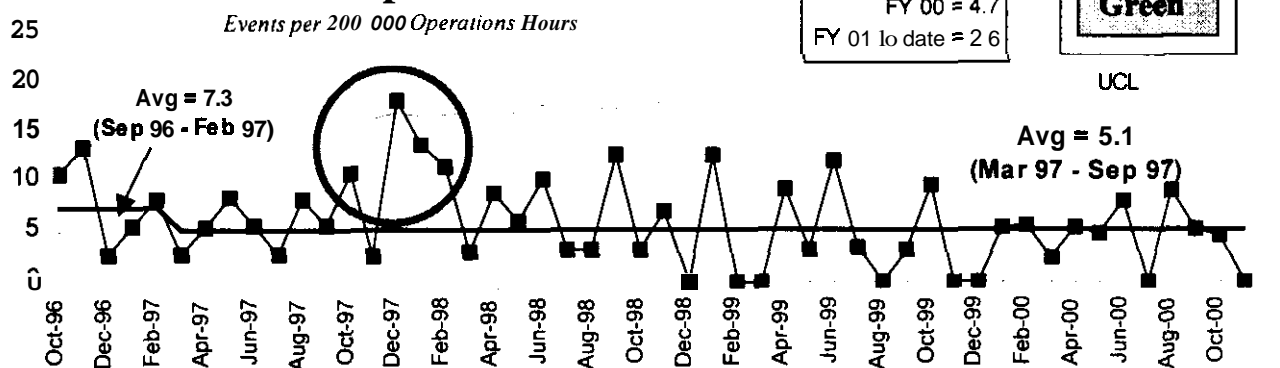
The Nuclear Material Stabilization Project (NMSP) is approaching **1.2** million safe work hours since the last new case with days away from work. The NMSP **OSHA** Recordable Case Rate is stable.

**PHMC Environmental Management Performance Report – January 2001**  
**Section C: 1 – Nuclear Materials Stabilization**

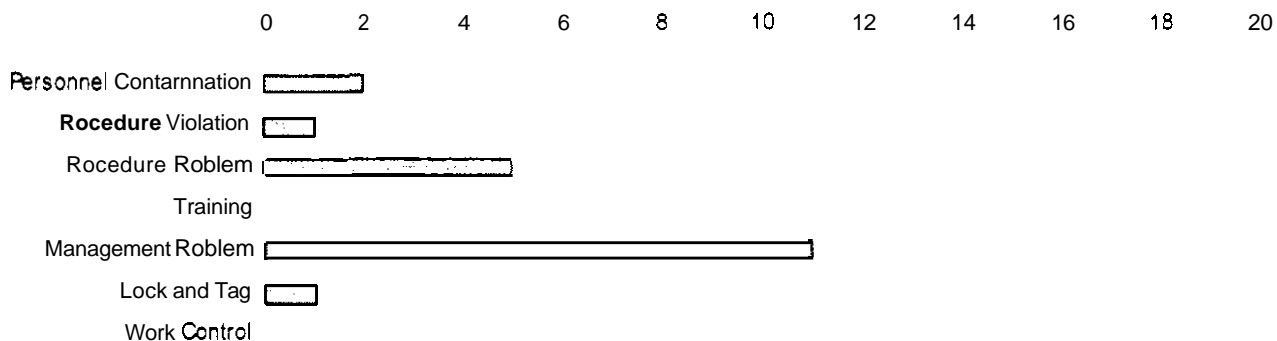


## CONDUCT OF OPERATIONS / ISMS STATUS

### Conduct of Operations Index



### Number of Reports Past 12 Months



## ISMS STATUS

There were continued safety improvements at PFP through Integrated Environmental, Safety and Health Management System (ISMS).

- PFP was commended by RL for participation in the ISM National Conference held December 5-6, 2000.

## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

- Nothing to report at this time.

## **Opportunities for Improvement**

**Green**

- **Exposure Reduction** — Funding was approved, and procurement is underway, to purchase the remote controlled video camera that will reduce employee exposure in the 2736-2 vaults by performing remote video inspections and inventories.
- **Process Efficiency** — Continuing to identify alloys that can be stabilized early using potentially available muffle furnace capacity. The priority for Furnaces 1, 2 and 3 is thermal stabilization of solutions precipitate. For Furnaces 4 and 5, the priority is for the thermal stabilization of metals if they ignite and oxidize. If that doesn't happen, and if there are no solutions precipitate furnace charges available, then alloys are the next candidate for furnace charges. Having these backup material options ensures maximum use of available furnace capacity.
- **Process Improvement** — A containment tent was fabricated and installed to support residue sealout operations from glovebox HC-46F in room 170 at 234-5Z. This allows immediate sealout and provides the opportunity for concurrent operations with an expected significant increase in throughput. (No further status to be provided.)
- **Loss On Ignition (LOI) Equipment Upgrade** — Calibration and testing of the Supercritical Fluids Extraction (SFE) equipment for moisture measurement in stabilized oxides was completed. Operation of this new equipment indicated that eight previously stabilized items that had exceeded LOI limits were actually well within acceptable limits for storage. (No further status to be provided.)

## **UPCOMING ACTIVITIES**

- For Project W-460, Westinghouse Savannah River Company's delivery of the 2736-ZB Bagless Transfer System (BTS) and Outer Can Welder (OCW) is expected during the second quarter of FY 2001.
- Complete modifications to one vault cubicle by April 2, 2001. (Milestone TRP-99-412)
- Complete repackaging and shipping of Rocky Flats ash to the Central Waste Complex (CWC) by April 30, 2001. (Milestone TRP-01-515).
- Complete stabilization of plutonium (Pu) alloys by June 30, 2001 (Milestone TRP-01-501).
- Complete repackaging of Pu metal inventory in 3013 inner cans by March 31, 2001, and outer cans by August 1, 2001.

## FY TO DATE COST PERFORMANCE (\$M):

	BCWP	ACWP	VARIANCE
<b>Nuclear Materials Stabilization</b>	\$13.8	\$14.0	-\$ .1M*

	BCWP	BCWS	VARIANCE
<b>Nuclear Materials Stabilization</b>	\$13.8	\$17.2	-\$3.3M*

The \$3.3 million (19 percent) unfavorable schedule variance was due primarily to technical and staffing issues in the Residues Packaging and Solutions Stabilization projects. Other contributing factors included the time required for requalification of the Segmented Gamma Assay System (now completed), and delayed delivery of Pipe Overpack Containers (POCs) scheduled but not delivered. (See detailed variance narratives)

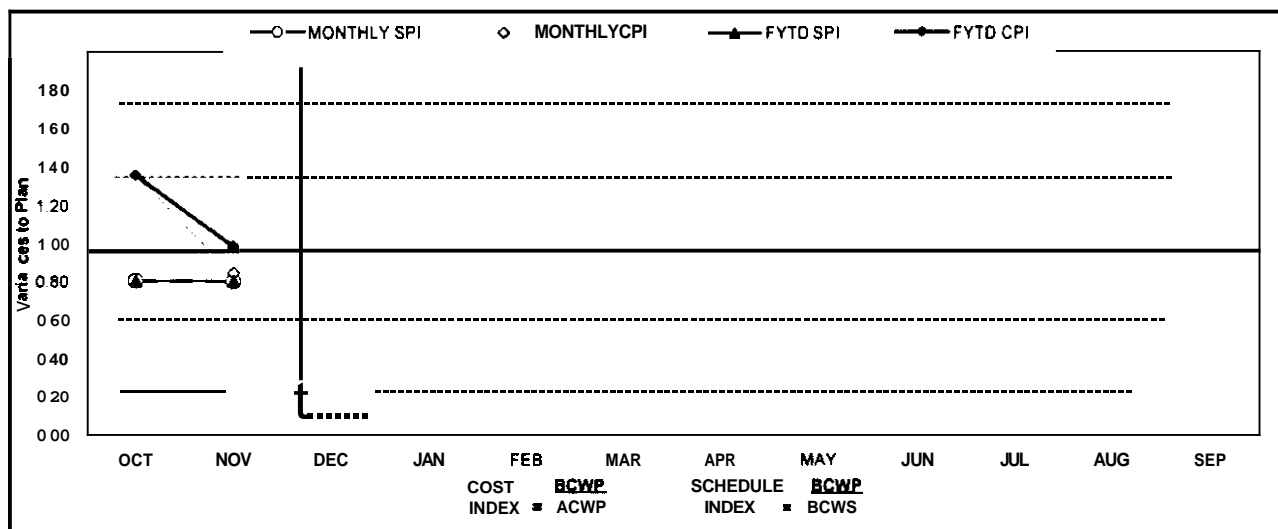
## FY 2001 COST/SCHEDULE PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS – (\$000)

<b>Yellow</b>
---------------

		FYTD							
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM
WBS 1.4.5	PFP	\$ 17,187	\$ 13,844	\$ 13,973	\$ (3,342)	-19%	\$ (129)	-1%	\$ 106,494
PBS TP05	Deactivation								
<b>Total</b>		<b>\$ 17,187</b>	<b>\$ 13,844</b>	<b>\$ 13,973</b>	<b>\$ (3,342)</b>	<b>-19%</b>	<b>\$ (129)</b>	<b>-1%</b>	<b>\$ 106,494</b>

Authorized baseline per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM). RL-Directed Costs (steam) are included in the PEM BCWS.

**PHMC Environmental Management Performance Report – January 2001**  
**Section C: I – Nuclear Materials Stabilization**



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.81	0.80										
MONTHLY CPI	1.36	0.85										
FYTD SPI	0.81	0.81										
FYTD CPI	1.36	0.99										
MONTHLY BCWS	\$6,629	\$10,558	\$9,052	\$9,252	\$7,587	\$8,544	\$8,443	\$10,285	\$7,371	\$7,177	\$9,728	\$11,870
MONTHLY BCWP	\$5,355	\$8,489										
MONTHLY ACWP	\$3,945	\$10,028										
FYTD BCWS	\$6,629	\$17,187	\$26,239	\$35,491	\$43,078	\$51,622	\$60,064	\$70,350	\$77,720	\$84,897	\$94,625	\$106,494
FYTD BCWP	\$5,355	\$13,844										
FYTD ACWP	\$3,945	\$13,973										

**COST VARIANCE ANALYSIS: (-\$0.1M)**

**WBS/PBS**

**Title**

**1.4.5/TP05**

**PFM Deactivation**

**Description and Cause:** Within threshold.

**Impact:** No impact projected.

**Corrective Action:** None required at this time.

**SCHEDULE VARIANCE ANALYSIS: (-\$3.3M)**

**WBS/PBS**

**Title**

**1.4.5.1.11/TP05**

**Maintain Safe & Compliant PFM (-\$287K)**

**Description and Cause:** The unfavorable schedule variance was due to a shortage of staff that delayed the start of planned electrical, lighting, and Continuous Air Monitor (CAM) upgrades.

**Impact:** No impact at the present time. Despite the delayed start, these projects are expected to be completed as scheduled.

**Corrective Action:** Efforts are underway to expedite the staff increase necessary to support the planned special project workscope.



**1.4.5.1.13/TP05      Stabilization of Nuclear Material (-\$1,578K)**

**Description and Cause:** The unfavorable schedule variance was due primarily to technical and staffing issues in the Residues Packaging and Solutions Stabilization projects. Other contributing factors include the time required for requalification of the Segmented Gamma Assay System (now completed). and no delivery of Pipe Overpack Containers (POCs) as scheduled. Progress in the Solutions Stabilization project has been slowed by the decreased throughput now being experienced with the current feed stream. Specifically, more boats of precipitate are being generated per batch of solution than originally planned.

**Impact:** While Residues Packaging is significantly behind schedule for the original December 2000 target date, the April 30, 2001 Tri-Party Agreement Milestone (M-083-07) commitment will be met. The DNFSB milestone (TRP-01-500) to complete solutions stabilization by December 31, 2001, is forecast to be 3 months behind schedule.

**Corrective Action:** Staffing to support second shift Residues Packaging Project operations is on schedule to be in place in January 2001. Additional lag storage, revision to the Operational Safety Requirement allowing increased inventory, and installation of upgraded hardware (two boat hot plate systems) are expected to significantly increase the Solutions Stabilization Project's processing throughput.

**1.4.5.1.14/TP05      Disposition of Nuclear Material (-\$1,473K)**

**Description and Cause:** The unfavorable schedule variance was primarily due to Project W-460 equipment and material procurements in support of 2736-ZB Bagless Transfer System construction that have not been delivered. Shipments of packaged Rocky Flats ash to the Central Waste Complex are also behind schedule.

**Impact:** No impact is currently forecast for Project W-460 or completion of residue packaging of Rocky Flats ash.

**Corrective Action:** Recovery of this schedule variance is expected as equipment and materials are delivered.

## **ISSUES**

### **Technical Issues**

**Issue:** The quantity of boats from the precipitation process is higher than expected or forecasted in the baseline estimates and schedules.

**Impacts:** Extends project completion date.

**Corrective Action:** Processing estimates and production schedules were revised based on results of the characterization-processing task. Recovery plans, which include installation of two-boat hot plates, additional lag storage, and increased glovebox inventory, have been developed and are being implemented. Baseline Change Request FSP-2001-014 is being processed to extend the solutions stabilization completion date to March 31, 2002.

Filtrate from the precipitation process is requiring recycling to meet the discharge limit for the drum loading station. Techniques for improving the processing are being worked jointly with members of the Plutonium Process Support Laboratories and Pacific Northwest National Laboratory staff.

**PHMC Environmental Management Performance Report – January 2001**  
**Section C: 1 – Nuclear Materials Stabilization**

**Issue:** The rate of throughput for polycube processing was determined to be less than planned during the latest Integrated Project Management Plan (IPMP) update.

**Impacts:** The processing method change will provide a recovery of the schedule delay. However, the completion of polycube stabilization may still be impacted up to two months because of the increased amount of precipitate to be stabilized, limiting furnace availability.

**Corrective Action:** A revised processing method was established and the required Safety Analysis (SA) was drafted.

**Issue:** Portions of the oxides to be processed contain fairly high levels of chloride.

**Impacts:** Completion of oxide stabilization could be delayed.

**Corrective Action:** A meeting has been held with PNNL to select the characterization and material pretreatment methods to remove chlorides prior to processing. The need date for this technology is October 2001.

## DOE/Regulator/External Issues

Nothing to report at this time.

## BASELINE CHANCE REQUESTS CURRENTLY IN PROCESS (\$000)

PROJECT CHANGE NUMBER	DATE ORIGIN.	BASELINE CHANGE REQUEST TITLE	COST IMPACT \$000	S C H	T E C H	DATE TO CCB	CB APR'VD	RL APR'VD	CURRENT STATUS
FH-2001-001	12-Sep-00	Bare Operations Reduction	<\$6,790>	X	X	25-Oct-00	25-On-00		At RL
FH-2001-002	12-Sep-00	FY01 Fee Reduction to 90%	<\$600>	X	X	25-Oct-00	25-Oct-00		At RL
FH-2000-003	12-Sep-00	Addition of High Priority Workscope	\$9,707	X	X	25-Oct-00	25-Oct-00		At RL
FSP-2000-079	12-Sep-00	FY 2001 MYWP & Baseline Revisions	\$0	X	X	29-Aug-00	31-Aug-00	27-Dec-00	Approved
FSP-2001-009	12-Sep-00	Remote Material Surveillance	\$548	X	X	11-Dec-00	19-Dec-00	N/A	Approved
FSP-2001-013	28-Nova	Tank 241-Z-361 Cont'd operations	\$150	X	X	30-Nov-00	6-Dec-00	N/A	Approved
FSP-2001-014	29-Nov-00	Extend Solutions Campaign	<\$407>	X	X	11-Dec-00	19-Dec-00		At RL
			<b>IK AUT</b>	<b>ORIZATION</b>					
AWA-01-002		PFPParking Lot Upgrade	\$150						On hold
AWA-01-003		Mg(OH) <sub>2</sub> Filtrate Disposal	\$75						
AWA-01-004		Mg(OH) <sub>2</sub> FSAR Addendum	\$70	X	X	9-Nov-00	13-Nov-00	N/A	Complete

## MILESTONE ACHIEVEMENT

**Green**

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	0	0	0	0	0	2	0	2
DOE-HQ	0	0	0	0	0	1	1	2
RL	1	0	0	0	0	4	0	5
<b>Total Project</b>	1	0	0	0	0	7	1	9

Only TPAIEA 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 TPAIEA milestone achievement and a Milestone Exception Report follows. The last milestone table summarizes the first six months of FY 2002 TPA/EA milestones.

### FY 2001 Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-083-07 (TRP-01-515)	“Complete Repackaging & Shipping of Rocky Flats Ash to the CWC”	Due April 30,2001 – Currently behind schedule but April milestone completion date will be met.
M-083-08 (TRP-01-516)	“Complete Requirements to Ship Rocky Flats Ash to WIPP”	Due June 1,2001 - On schedule.

### DNFSB Commitments

M-IP-114 (TRP-01-501) R94-01)	‘Ship Alloys to SRS or Complete Stabilization of Alloys”	Due June 30,2001 - On schedule.
M-IP-110 (TRP-02-500)	‘Complete Packaging of Metal Inventory”	Due March 31,2001 - Metal and corrosion products items are scheduled to be brushed and packaged in inner Bagless Transfer System containers by March 31,2001 and April 30,2001 respectively. All material will be packaged in outer 3013 containers by August 1,2001.

**Yellow**

## **MILESTONE EXCEPTION REPORT**

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
-------------------	--------------	------------------------	----------------------	----------------------

**OVERDUE – 0**

**FORECAST LATE – 1**

**TRP-02-500 HQ** Complete Packaging of Metal Inventory 03/31/2001 08/01/2001  
**1.4.5**

**Cause:** The Outer Can Welder, required for completion of this milestone. will not be operational in time to meet this milestone commitment.

**Impact:** This DNFSB Recommendation 2000-1 milestone will be delayed until August 31,2001.

**Corrective Action:** Nothing to report at this time.

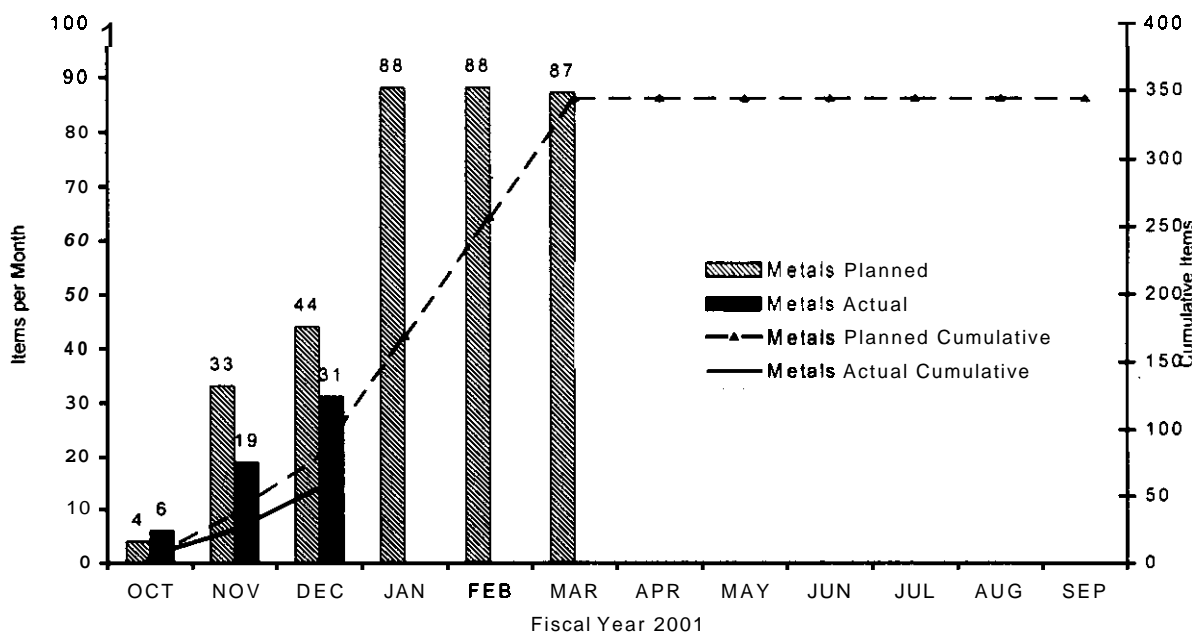
Number	Milestone Title	Status

<b>R94-01 (TRP-01-500)</b>	<b>“Complete Stabilization &amp; Packaging Plutonium Solutions”</b>	<b>Due December 31,2001</b> – Currently forecast to be 3 months behind schedule.
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## PERFORMANCE OBJECTIVES Oxides/Metals/Polycubes Stabilization

Green

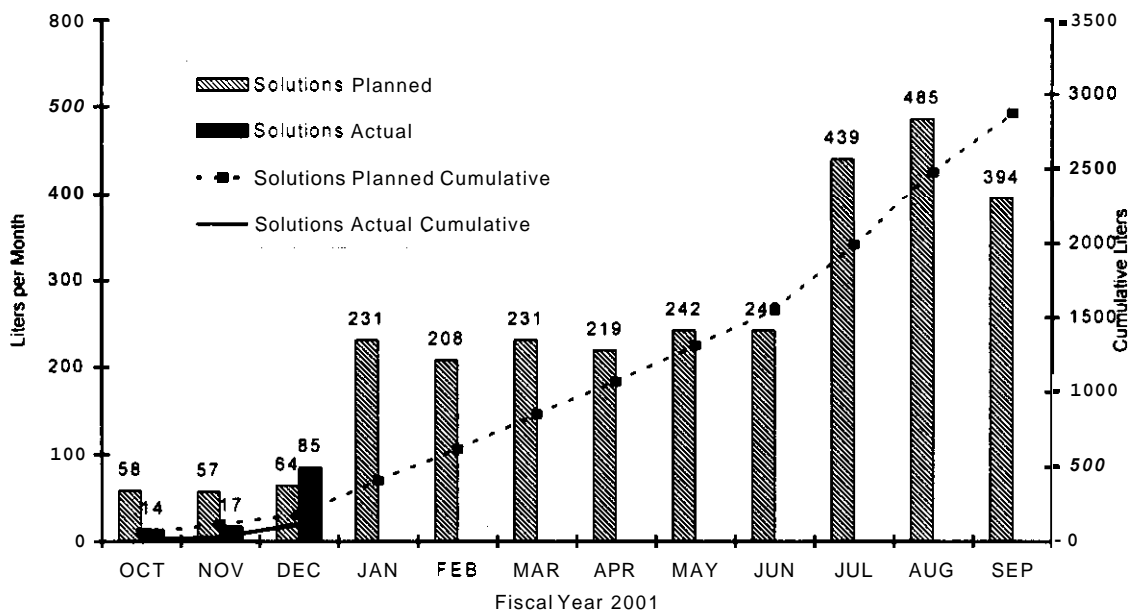
### PFP METALS PROCESSING



## Solution Stabilization

Yellow

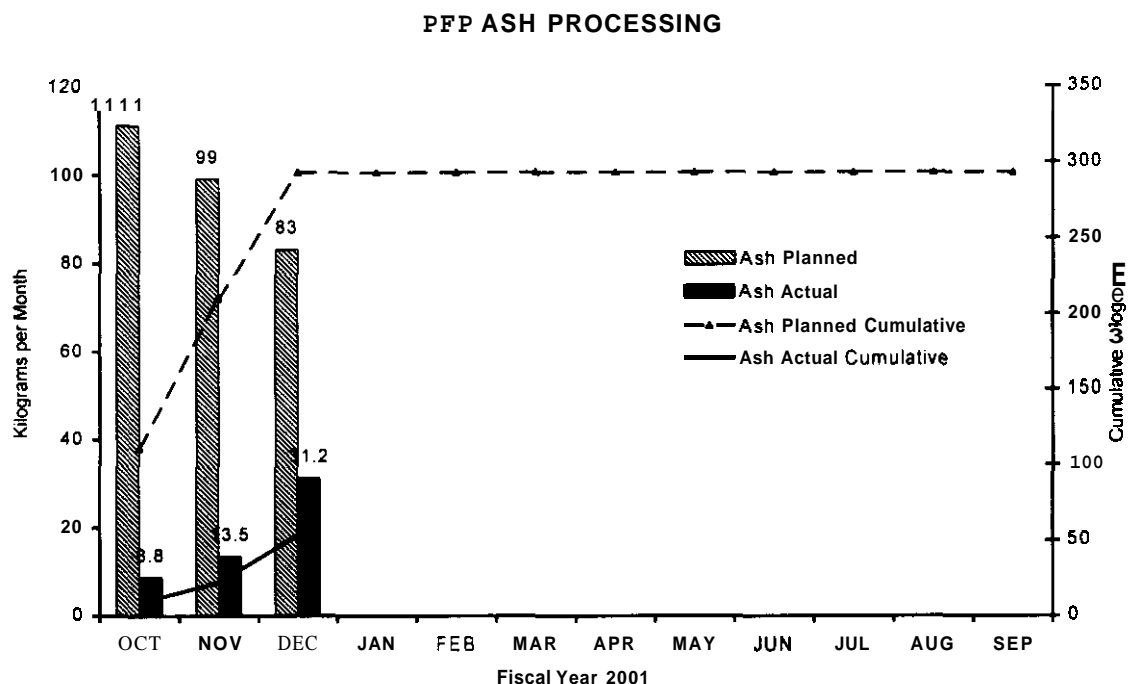
### PFP SOLUTIONS PROCESSING



The quantity of the boats from the precipitation process is significantly higher than forecasted in the baseline estimates and schedules.

## Residues Stabilization

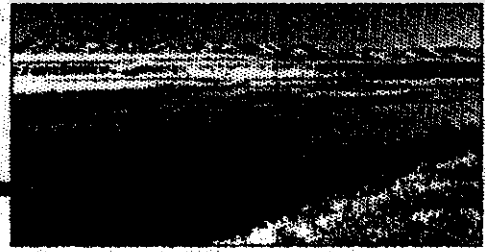
**Yellow**



Significantly behind schedule for anticipated target date, however the April Tri-Party Agreement Milestone (M-083-07) will be met.

## KEY INTEGRATION ACTIVITIES

- Techniques for improving the precipitate processing are being worked jointly by staff members of the Plutonium Process Support Laboratories and Pacific Northwest National Laboratory (PNNL). A meeting has been held with PNNL to select the characterization and material pretreatment methods to remove chlorides prior to processing.
- Coordinating with Lawrence Livermore National Laboratory (LLNL) to ship oxide material (81 kg.) to that facility next spring at no cost to the NMS Project.
- Westinghouse Savannah River Company shipment of the 2736-ZB Bagless Transfer System (BTS) and Outer Can Welder (OCW) are scheduled for the weeks of February 1, 2001, and March 1, 2001, respectively.



## The River

Restoring the river corridor is one of the outcomes Hanford must focus on to move forward with cleanup. The PHMC supports this outcome with activities such as moving the spent nuclear fuel, cleaning up the waste sites, and taking down surplus facilities. Projects supporting this effort are Facility Stabilization (River Corridor), Spent Nuclear Fuel, and Science & Technology (EM-50) activities.



## **Section C:2**

### ***River Corridor***

#### **PROJECT MANAGERS**

P.M. Knollmeyer, RL  
(509)376-7435

N. Boyter, FH  
(509)373-3725



## **SUMMARY**

The River Corridor Project (RCP) consists of the following projects: 300 Area Liquid Effluent Facility (LEF) WBS 1.2.3.2, Project Baseline Summary (PBS) WM05; B-Plant, WBS 1.4.1. PBS TP01; 300 Area/Special Nuclear Materials, WBS 1.4.4, PBS TP04; Transition Project Management, WBS 1.4.6, PBS TP12; Accelerated Deactivation, WBS 1.4.8. PBS TP10; 324/327 Facility Transition, WBS 1.4.10. PBS TP08; and Hanford Surplus Facility Program (300 Area Revitalization), WBS 1.4.11, PBS TP14.

PBS WM05 is divided between WBS 1.2.3.1, Liquid Effluents (200 LEF) and WBS 1.2.3.2. 310 TEDF/340 Facility (300 LEF). The 310 TEDF/340 Facility work scope is now included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope has remained in Waste Management Project. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the Waste Management Project, which has the majority of the work scope and funding incorporated in their baseline.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of November 30, 2000. All other information is as of December 27, 2000.

During this reporting period, the 324 Building Deactivation Project staff loaded out two steel waste disposal boxes (SWDBs); one was shipped to compliant storage on December 1. Four of the fourteen SWDBs required to complete B Cell cleanout have now been shipped. The planned outage for the 30-ton cask-handling crane was initiated on December 1, 2000, ahead of schedule. An independent crane consultant from PH Moms Material Handling has been on site assisting with repairs/alignment of the 30-ton crane Phase II repairs. Additionally, the 3-ton crane was returned to service following post-maintenance testing.

While in min-safe mode, the 327 Building Deactivation Project staff replaced the criticality alarm horn #12 and re-tested the system, as planned. In addition, an annual work schedule has been developed that includes contingency facility cleanout work scope as additional efficiencies are realized with the min-safe staff. To assist in final readiness for fuel movement, a 327 Project instrument technician was loaned to the K Basin Project.

The 300 Area Treated Effluent Disposal Facility (TEDF) treated 6.1 million gallons of wastewater for the month of November. Additionally, the 300 Area TEDF Waste Acceptance Criteria has been issued, and the revised Conduct of Operations Applicability Matrices for the 310 and 340 Facilities were transmitted to RL for approval. The 300 TEDF continues to make use of Plutonium Facility Plant (PFP)-loaned resources for waste disposition from the process sewer cleanout. In support of the Spent Nuclear Fuel Project (SNFP), a Multi Canister Overpack trailer was moved to 340-B East for winter storage.

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Accelerated Deactivation Project's National Facilities Deactivation Initiative received the Vice-Presidential HAMMER Award for excellence in DOE complex deactivation planning efforts. In addition, the 3716 Building backflow preventer installation was completed, the building was declared in compliance by the site water purveyor. The sampling of 2714-U waste drums in 2706-T was initiated.

A Project Management Plan for the revised scope of the Uranium Disposition Project has been prepared and transmitted to RL for review and approval.

The Facility Evaluation Board (FEB) conducted a field activities evaluation of the River Corridor Project during the period of December 4 - 15, 2000. A report is expected mid-January 2001.

## **ACCOMPLISHMENTS**

### **324 Building Deactivation Project —**

- Two steel waste disposal boxes (SWDBs) were loaded out and one was shipped to compliant storage
  - Four of the fourteen SWDBs required to complete B Cell cleanout have now been shipped
- Rectangular grout container (RGC)-102 was filled with five engineered containers and three high level vault filters, and RGC-104 was transferred into B Cell
- Planned outage for the 30-ton cask handling crane was initiated on December 1, 2000, ahead of schedule
- An independent crane consultant from PH Morris Material Handling has been on site assisting with repairs/alignment of the 30-ton crane Phase II repairs
- A B Cell camera was replaced to improve visibility in B Cell
- The 3-ton crane was returned to service following post-maintenance testing
- Efforts continued on the implementation of the Safety Analysis Report (SAR) and companion Operational Safety Requirements (OSR) after a 45-day extension was granted by RL to allow operations as currently being conducted
- All minimum safe activities occurred as planned.

### **327 Building Clean up —**

- While in min-safe mode, the criticality alarm horn #12 was replaced and the system re-tested as planned
- An annual work schedule has been developed that includes contingency facility cleanout work scope as efficiencies are realized with the min-safe staff
- A 327 Project instrument technician was loaned to the K Basin Project to assist in final readiness for fuel movement.

### **300 Area Treated Effluent Disposal Facility (TEDF) —**

- The TEDF treated 6.1 million gallons of wastewater for the month of November
- The 300 Area TEDF Waste Acceptance Criteria has been issued
- The revised Conduct of Operations Applicability Matrices for the 310 and 340 Facilities were transmitted to RL for approval

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- An old low-level waste box was shipped *to* the low-level burial grounds
- Three drums of radioactive sludge from cleanout of the process sewer manhole 16 were repackaged into a single radioactive waste drum
- 300 TEDF continues to make use of PFP -loaned resources for waste disposition from the process sewer cleanout
- In support of the Spent Nuclear Fuel Project, a Multi Canister Overpack trailer was moved to 340-B East for winter storage.

**Accelerated Deactivation Project —**

- The National Facilities Deactivation Initiative (NFDI) received the Vice-presidential HAMMER Award for excellence in DOE complex deactivation planning efforts
- As planned, the 3706 Building waste has been repackaged and is ready to be shipped
- The scaffolding for final cleanup of 242B/BL was completed
- The first quarterly surveillance of 209-E Critical Assembly Room and Mix Room were completed after transfer from CH2M HILL Hanford Group (CHG)
- The 3716 Building backflow preventer installation was completed, and the building was declared in compliance by the site water purveyor
- Sampling of 2714-U waste drums in 2706-T was initiated.

**Uranium Disposition —**

- A Project Management Plan (PMP) for the revised scope of the project has been prepared and was transmitted to RL for review and approval.

**Facility Evaluation Board Review —**

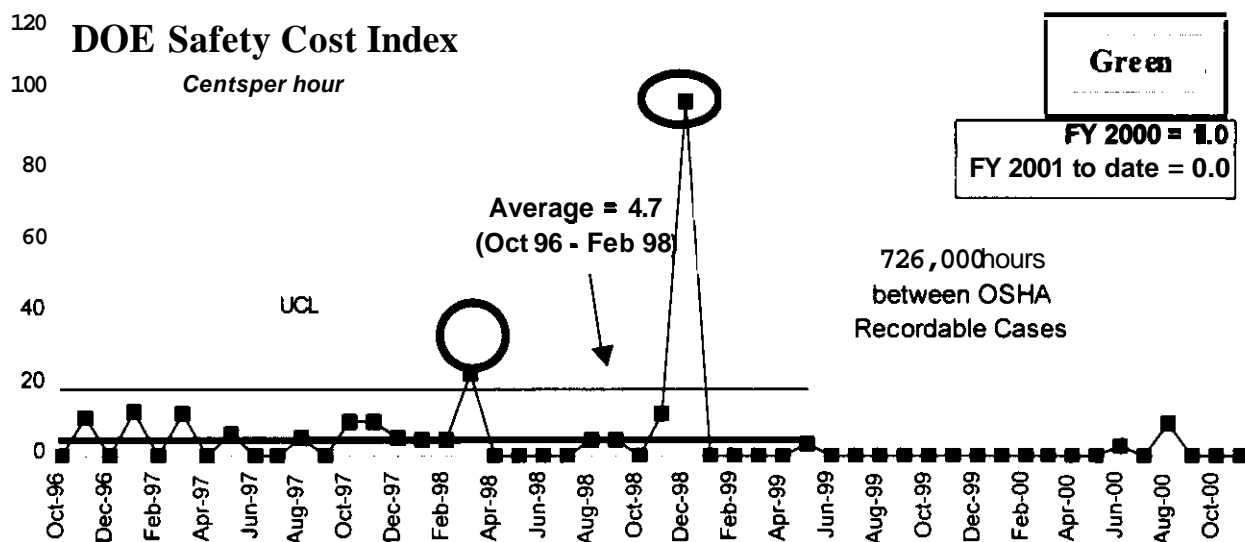
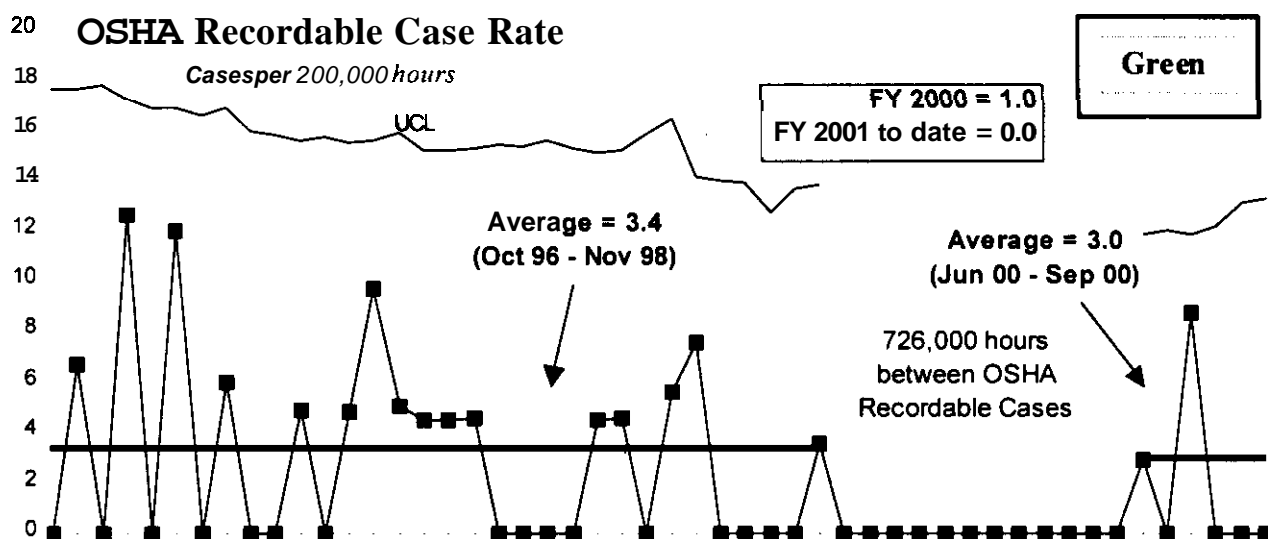
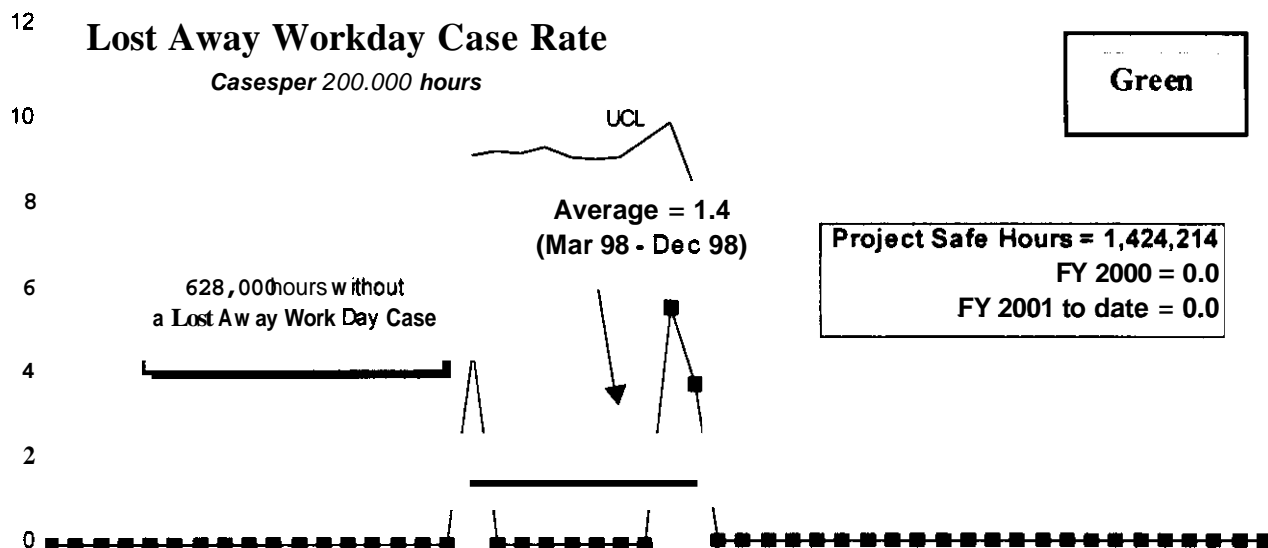
- The Facility Evaluation Board conducted a field activities evaluation of the River Corridor Project during the period of December 4 - 15, 2000. A report is expected mid-January 2001.

## **SAFETY**

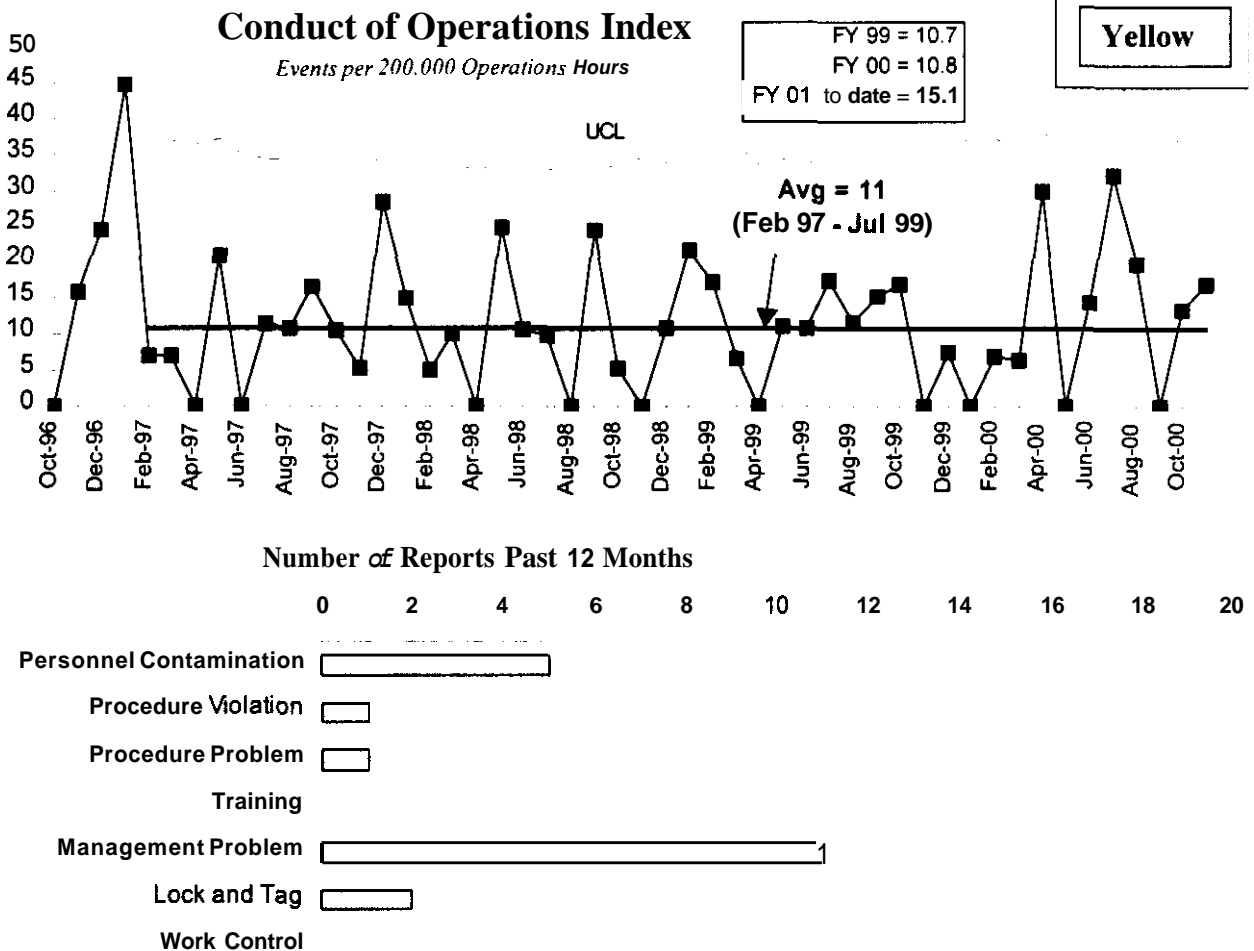
The project has exceeded 1,474,214 hours without a Lost Away **Work** Day Case (23 months. since January, 1999), as of December 27, 2000.

The project had 726,000 hours between OSHA Recordable Cases, from June 1999 through May **2000**. There have been no new OSHA Recordable Cases reported in the three months since the significant increase in the summer of 2000. There was only one case for the month, a first aid case. The project has an overall green rating.

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## CONDUCT OF OPERATIONS / ISMS STATUS



The River Corridor Project (RCP) is continuing to evaluate the appropriate action(s) to address the number of Management Problems reported.

## ISMS STATUS

**Green**

- RCP staff members served as panel members, presenters and moderators at the National Integrated Environmental, Safety and Health Management System (ISMS) Workshop in December. Topics covered included “Benefits of the Automated Job Hazard Analysis,” “Barriers to Effective Communications,” and “Safety Initiatives and Sustaining ISMS.”
- An ISMS appraisal was performed as part of the Facility Evaluation Board (FEB’s) evaluation of the RCP during the first two weeks in December 2000.
- Recognition awards were given to each RCP employee for successful ISMS verification and also for achieving one million safe work hours.

## **BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT**

### **Breakthroughs**

**Green**

- **300 Area Accelerated Closure Plan (ACP)** — An opportunity exists to accelerate closure of a significant portion of the 300 Area, nearly four decades ahead of the current deactivation plan, and for an estimated savings of over \$1.0 billion. The ACP provided the basis for the new “Done-in-a-Decade” closure project. A Baseline Change Request (BCR) has been initiated to begin skyline reduction activities (removal of two water towers, 3902A and 3902B) during FY 2001, with incremental funding provided by RL. A third facility, 303-K, already planned in the baseline will also contribute to the skyline reduction initiative.
- **Technical Reviews of 327 Hot Cell Removal** — Technology Management, in conjunction with RCP, has submitted a draft proposal for conducting a review of the feasibility of intact removal of hot cells from the 327 Facility. Rather than perform hot cell decontamination, stabilization, and eventual size reduction, and utilization of standard waste packaging, the technical review would begin to evaluate the feasibility of stabilizing, packaging and disposing of the hot cell as whole units. 327 Facility management accepted the topic and scope of this proposal; the review is presently scheduled to begin in January.
- **Remote Size Reduction System** — FH has been notified that a remote glove box size reduction system designed and fabricated for use at Rocky Flats will not be utilized. Discussions are currently underway with Rocky Flats and the vendor to assess the viability to transfer this system to Hanford.

### **Opportunities for Improvement**

- **324 Project Planning / Execution** — On November 7, 2000, FH provided formal notification to RL that Tri-Party Agreement milestone M-89-02 (“Complete Removal of 324 Building Radiochemical Engineering Cells (REC) B Cell Mixed Waste and Equipment”) would be missed. FH, in concert with RL and the Washington State Department of Ecology (Ecology), has prepared a revised schedule that factors in the lost schedule, and also predicts future schedule impacts. The schedule was impacted primarily due to technical/mechanical issues (high dose SWDBs, 30-ton and 3-ton crane repairs, SAR revision) and needed operational improvements, as well as a reduction in the amount of overtime previously planned in the baseline schedule. Resolution of the higher bottom dose on the SWDBs, although assumed to be resolved, as the schedule requires, also has the potential to further impact the schedule. FH has finalized the schedule, and is now working to due dates of March 30, 2001, for mixed waste removal, and July 31, 2001, for low-level waste removal.
- **Billet Safety Analysis Report for Packaging (SARP)** — The Unirradiated Uranium Billet Safety Analysis Report for Packaging (SARP) is required to minimize the cost of shipping and to support shipment of uranium billets off-site. The current uranium billet SARP, Revision K, with a Certificate of Compliance (COC),

**Yellow**

**Green**

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allows shipment of only three billet boxes per trailer instead of five boxes per trailer as were analyzed for the revision. Shipping five boxes instead of **three** will save approximately \$200K of the billet transportation cost. DOE-HQ is aware of the impact and a revised SARP has been prepared to allow for the five billet boxes **per** trailer. The revised SARP and COC are targeted to be issued by January 15, 2001.

## **UPCOMING ACTIVITIES**

**Tri-Party Agreement Milestone M-89-02** — A date for completing the scope of “Complete Removal of 324 Building Radiochemical Engineering **Cell** (REC) B **Cell** Mixed Waste (MW) and Equipment,” is set for July 31, 2001. The scheduled date for removal of mixed waste from B Cell is now March 30, 2001. Removal of the low-level and TRU waste is due to be complete by July 31, 2001.

**Facility Evaluation Board Review** — FEB review is expected to be completed during first quarter of FY 2001.

**324/327 Authorization Basis** — Implement technical update of 324 Authorization Basis (Safety Analysis Report) by January 2001, and implement technical update of 327 Authorization Basis (Basis of Interim Operation) by May 2001.

**Uranium Disposition** — Complete shipment of –235 metric tons of excess uranium billets and –five metric tons of uranium dioxide to the DOE Portsmouth facility in Ohio by March 31, 2001, and disposition of –140 metric tons of surface-contaminated uranium fuel by June 30, 2001.

**224-T** — Begin 224-T initial entry and characterization by early March 2001.

## **FY To DATE C o n PERFORMANCE (\$M):**

	<b>BCWP</b>	<b>ACWP</b>	<b>VARIANCE</b>
<b>River Corridor Project</b>	<b>\$5.9</b>	<b>\$5.1</b>	<b>\$0.8</b>

	<b>BCWP</b>	<b>BCWS</b>	<b>VARIANCE</b>
<b>River Corridor Project</b>	<b>\$5.9</b>	<b>\$7.4</b>	<b>-\$1.5</b>

The \$1.5 million (20 percent) unfavorable schedule variance was primarily due to Steel Waste Disposal Boxes (SWDB) hot spots issue and resolution of emerging issues in 324 Facility transition. Further information at the PBS level can be found in the following Schedule Variance Analysis details.

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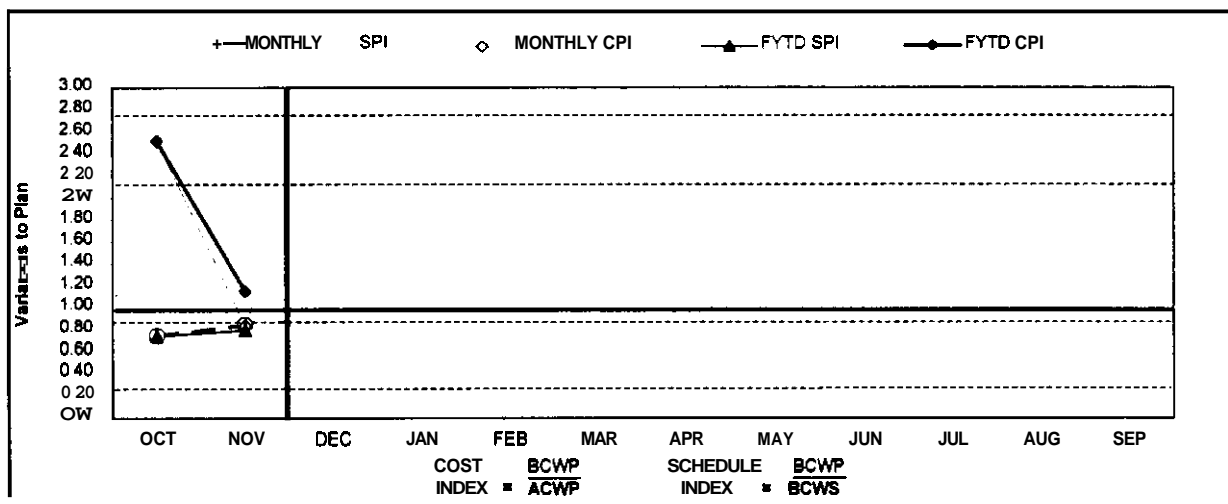
**FY 2001 COST/SCHEDULE PERFORMANCE – ALL FUND TYPES**  
**CUMULATIVE TO DATE STATUS – (\$000)**

		FYTD									
	By PBS	BCWS	BCWP	ACWP	SV	%	CV	%	PEM		
PBS TPOI WBS 1.4.1	B-Plant	\$ -	0	\$ 0	\$ -	0%	\$ (0)	0%	\$ -		
PBS TPOJ WBS 1.4.4	300 Area/ Special Nuclear Materials	\$ 386	\$ 386	\$ 298	\$ -	0%	\$ 88	23%	\$ 2.751		
PBS TP12 WBS 1.4.6	Transition Program Management	\$ 1.028	\$ 1.025	\$ 181	\$ (3)	0%	\$ 844	82%	\$ 6.791		
PBS TP10 WBS 1.4.8	Accelerated Deactivation	\$ 771	\$ 421	\$ 497	\$ (350)	-45%	\$ (76)	-18%	\$ 2.920		
PBS TP08 WBS 1.4.10	3241327 Facility Transition	\$ 5,123	\$ 3.974	\$ 4.093	\$ (1.149)	-22%	\$ (119)	-3%	6 34.912		
PBS TP14 WBS 1.4.11	Hanford Surplus Facility Program (300Area	\$ 6 4 6	6 4	\$ 51	\$ -	0%	\$ 13	20%	\$ 416		
Total		\$ 7,372	\$ 5,871	\$ 5,120	\$ (1,502)	-20%	\$ 750	13%	\$ 47,790		

Notes: RL-Directed costs (steam and laundry) are included in the PEM BCWS, 310 TEDF/340 Facility performance data is reported under PBS WMOS (Waste Management).

**COST/SCHEDULE PERFORMANCE INDICES**  
**(MONTHLY AND FYTD)**

**Yellow**



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.74	0.84										
MONTHLY CPI	2.51	0.83										
FYTD SPI	0.74	0.80										
FYTD CPI	2.51	1.15										
MONTHLY BCWS	\$3,234	\$4,138	\$3,514	\$4,165	\$3,705	\$4,164	\$4,270	\$5,068	\$3,581	\$3,440	\$4,264	\$4,248
MONTHLY BCWP	\$2,396	\$3,475										
MONTHLY ACWP	\$953	\$4,167										
FYTD BCWS	\$3,234	\$7,372	\$10,886	\$15,049	\$18,755	\$22,919	\$27,189	\$32,257	\$35,838	\$39,278	\$43,543	\$47,790
FYTD BCWP	\$2,396	\$5,871										
FYTD ACWP	\$953	\$5,120										



## **COST VARIANCE ANALYSIS: (+\$0.8M)**

### **WBS/PBS**

### **Title**

#### **1.4.4/TP04**

#### **300 Area SNM**

**Description and Cause:** The favorable cost variance was a result of labor underruns due to other unplanned priority work.

**Impact:** No Impact.

**Corrective Action:** None.

#### **1.4.8/TP10**

#### **Accelerated Deactivation**

**Description and Cause:** The unfavorable cost variance was primarily a result of labor overruns in the 2714U Waste Drum Characterization activity, due to a more complex than planned drum opening, sampling, and repackaging.

**Impact:** Being evaluated.

**Corrective Action:** Discussions are ongoing between RCP and Waste Management to determine cause for overrun and establish resolution.

#### **1.4.6/TP12**

#### **Transition Project Management**

**Description and Cause:** The favorable cost variance was primarily due to lower than planned labor, contract and fee assessment. In addition, reverse accruals pertaining to Nuclear Material Stabilization (NMS) were erroneously coded to this account, understating the actual costs.

**Impact:** No Impact.

**Corrective Action:** Cost transfers have been submitted to move the reverse accruals to the appropriate Cost Account Charge Numbers within NMS.

#### **1.4.11/TP14**

#### **Hanford Surplus Facility Program**

**Description and Cause:** The favorable cost variance was due to costs for contract support not being incurred as planned.

**Impact:** No Impact.

**Corrective Action:** The full contract costs are expected later in FY 2001.

All other PBS variances are within established thresholds.

## **SCHEDULE VARIANCE ANALYSIS: (-\$1.5M)**

#### **1.4.10/TP08**

#### **324/327 Facility Transition**

**Description and Cause:** The unfavorable schedule variance was primarily due to the Steel Waste Disposal Boxes (SWDB) “hot spots” issue (delaying their shipment) and the effect of plant work being put on hold while plant personnel were retrained and procedures strengthened.

**Impact:** TPA milestone M-89-02 will be delayed.

**Corrective Action:** Initial briefings with Ecology and RL have been completed. Revised schedule has been developed that moves completion of TPA milestone scope to March 2001.

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**1.4.8/TP10 Accelerated Deactivation**

**Description and Cause:** The unfavorable schedule variance was due to delays with Surveillance and Maintenance quarterly activities and Authorization Basis activities.

**Impact:** No Impact.

**Corrective Action:** The variance will self correct when these activities are completed in December.

All other PBS variances are within established thresholds

## **ISSUES**

### **Technical Issues**

**Issue:** 324 Building — Hot spots on the bottom of Steel Waste Disposal Boxes (SWDBs) loaded with Rectangular Grout Containers are more radioactive than the current Central Waste Complex (CWC) acceptance criteria of one rem per hour.

**Impacts:** Shipment schedule/in-cell work schedule has been delayed.

**Corrective Action:** Pursuing several actions:

— CWC is revising their existing authorization basis to accommodate this and other like shipments.

— 324 Building is evaluating SWDB loading to optimize sequence of individual items to minimize dose rates.

### **DOE/Regulator/External Issues**

**Issue:** On November 7, 2000, FH provided formal notification to RL that Tri-Party Agreement milestone M-89-02, “Complete Removal of 324 Building Radiochemical Engineering Cell (REC) B Cell Mixed Waste (MW) and Equipment,” would be missed.

**Impacts:** The schedule was impacted primarily due to technical/mechanical issues (high-dose SWDBs, 30-ton crane and 3-ton crane repairs, and Safety Analysis Report revision) and needed operational improvements, as well as a reduction in the amount of overtime previously planned in the baseline schedule. Resolution of the higher bottom dose on the SWDBs, although assumed to be resolved, as the schedule requires, also has the potential to significantly impact the schedule.

**Corrective Action:** FH, in concert with RL and Ecology, has prepared a revised schedule that factors in the lost schedule, and other schedule related issues.

**Issue:** Approval by DOE-HQ of the Unirradiated Uranium (UU) billet Safety Analysis Report for Packaging (SARP), Revision K, is requested to support shipment of uranium billets off-site.

**Impacts:** DOE-HQ approved Revision K of the uranium billet SARP with a Certificate of Compliance (COC) that allows shipment of only three billet boxes per trailer instead of the 5 boxes per trailer that was analyzed in the revision. Using this COC will increase the billet transportation cost by approximately \$200,000.

**Corrective Action:** DOE-HQ has been informed of the impact, and a COC allowing five billet boxes per trailer is expected by January 15, 2001. Per instructions from DOE-HQ,

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Revision 0 of the original SARP that includes Revision K has been issued. and the COC for the five billet boxes per trailer is on schedule.

**Issue:** An opportunity exists for transfer of Pacific Northwest National Laboratory (PNNL) facilities into PBS TP-14, pending resolution of the current DOE-HQ guidance to EM (pipeline suspension). PNNL has funds for FY 2001/2002 Surveillance and Maintenance (S&M) identified for transfer to FH, but these funds may no longer be available when the suspension ends.

**Impacts:** Efficiencies realized through combining these facilities into PBS TP-14 may be jeopardized.

**Corrective Action:** Agreement on a Memorandum of Agreement (MOA) to begin the transfer process has been reached. PNNL, FH and DOE are readying the MOA for approval. The MOA is targeted for approval by the end of December. DOE-HQ's concerns have been resolved.

**BASELINE CHANCE REQUESTS CURRENTLY IN PROCESS**  
**(\$000)**

PROJECT CHANGE NUMBER	DATE ORIGIN	BCR TITLE	Y01 COST IMPACT	S C H	E C H	DATE To FH CCB	FHCCB APRVD	RL APRVD	CURRENT STATUS
FSP-2000-002	11/2/99	Mark-42 Project Completion	\$304		X	04/05/00			Add'l funding req'd
FSP-2000-072	7/27/00	MYWP Submittal (Phase I)	(\$37,767)	X	X	08/25/00	08/31/00	12/27/00	
FSP-2000-084	8/31/00	Transfer 209E facility	\$526		X	09/14/00	09/14/00	10/17/00	
FH-2000-001	9/12/00	Base Ops Reduction for PHMC Projects	(\$2,575)		X				Pending RL Approval
FH-2000-002	9/25/00	FY2001 Fee Reduction to 90%	(\$413)						Pending RL Approval
FH-2000-003	9/25/00	FY2001 Addition of High Priority Workscope	\$14,951		X				Pending RL Approval
FSP-2001-001	10/9/00	Baseline Adjustment to TP08	(\$496)		X				Draft Prepared
FSP-2001-007	10/31/00	Uranium Disposition Project	\$371		X	11/7/00	11/17/00	12/28/00	
FSP-2001-008	11/7/00	FY2001 Savings Opportunities	(\$607)		X	11/15/00	11/17/00	N/A	
FSP-2001-011	11/14/00	Design Change - 324 LWHS	\$0		X				Draft Prepared
FSP-2001-012	11/21/00	Admin. Change to RL-TP08 Milestone Data	\$0						Draft Prepared
FSP-2001-015	11/30/00	Add FY2001 Workscope to RCP Baseline	\$2,646		X				In Development
FSP-2001-023	12/20/00	324 Building SAR Revision	\$0	X	X				Draft Prepared

ADVANCE WORK AUTHORIZATIONS									
AWA	10/2/00	FY01 Uranium Disposition Activities	\$371		X	10/3/00	10/18/00	10/18/00	BCR #FSP-2001-007
AWA	11/2/00	324 SAR	\$56		X	11/3/00	11/3/00	11/3/00	BCR #FSP-2001-023
AWA	12/15/00	300 Area Accelerated Cleanup	\$50	X	X	12/18/00			BCR #FSP-2001-015

## MILESTONE ACHIEVEMENT

Yellow

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	0	0	0	1	0	0	0	1
DNFSB	0	0	0	0	0	0	0	0
DOE-HQ	0	0	0	0	0	0	0	0
RI	0	0	0	0	0	0	0	0
<b>Total Project</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

Only TPA/EA milestones and all FY 2001 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 FY 2001 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.

FY 2001 Tri-Party Agreement / EA Milestones		
M-89-02	<b>“Complete Removal of 324 Building Radiochemical Engineering Cells (REC) B Cell Mixed Waste (MW) and Equipment,”</b>	<b>Due 11/30/00 — Progress</b> continues to be made in accomplishing the milestone work scope, however due to technical and operational issues the milestone was not met. <b>A</b> revised schedule was developed with the support of RL and Ecology. The scheduled date for the removal of mixed waste from B Cell is now March 30, 2001. The date for removal of low-level waste remains at July 31, 2001, as agreed to with the regulators. <div style="border: 1px solid black; padding: 2px; display: inline-block;">Yellow</div>
<b>DNFSB Commitments</b>		

## MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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### OVERDUE – 1

TRP-99-901 1.4.10	EA	Complete Removal of 324 Radio-chemical Engineering Cells (REC) B Cell Mixed Waste (MW) & Equip.	11/30/00	03/30/01
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**Cause:** Technical and operational issues have delayed completion of this work scope.

**Impact:** Completion of TPA milestone M-89-02 was not met.

**Corrective Action:** A recovery schedule has been developed with the support of RL and Ecology.

### FY 2000 OVERDUE – 1

MX-92-06-T01	“Complete Disposition for all Site Unirradiated Uranium”	Due 12/31/01 — On Schedule.

## PERFORMANCE OBJECTIVES

Outcome	Performance Indicator	Status
Restore the River Corridor for Multiple Uses	<b>FHI-M8 – 300 Area Cleanup</b>	
	<b>Measure 1: Accelerate 300 Area Cleanup</b>	
	<b>Expectation 1:</b> Deactivate 324/327 Buildings	
	Base: Complete 26.5% remaining 324/327-baseline work.	<b>Status:</b> 2.9% of the remaining low-level scope has been completed through 12/00.
	Base: Complete B Cell cleanout and shipment of B Cell waste to 200 Area Burial Grounds.	<b>Status:</b> 4 of the planned 14 steel waste disposal box (SWDB) shipments of B Cell waste have been made. The crane has been returned to service allowing for shipment of the 5 <sup>th</sup> SWDB.
	<b>Stretch:</b> Complete additional 2.5% remaining 324/327-baseline work.	<b>Status:</b> No additional work scope has been performed to date.
	<b>Expectation 2:</b> Disposition surplus facilities	
	<b>Base:</b> Disposition 3902A, 3802B & 303-K by 9/30/01.	<b>Status:</b> Planning has been initiated for demolition of the 3 structures.
	<b>Stretch:</b> Disposition 377 Bldg. by 6/30/02.	<b>Status:</b> No work scope has been performed to date
	<b>Expectation 3:</b> Disposition uranium billets, uranium dioxide, scrap materials in 200/300 Areas, and 303-K thorium-232 by 9/30/01.	<b>Status:</b> Preparation continues to initiate shipment of the uranium billets and uranium dioxide to the DOE Portsmouth site in the second quarter of FY 01.
	<b>Measure 2: Support RCP Contract Transition</b>	
	<b>Expectation 1:</b>	
	<b>Stretch:</b> Support RCP contract transition by 7/1/02.	<b>Status:</b> A plan for development of a plan will be prepared by 2/15/01.

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<p><b>Transition Central Plateau to support long- term waste management</b></p>	<p><b>FHI-M3 – 200 Area Facility Disposition</b>  <b>Measure 1: Disposition Surplus Buildings and Rolling Stock</b>  <b>Expectation 1:</b>  <b>Base:</b> Decontaminate &amp; Decommission (D&amp;D) 233-S &amp; 233-SA Facilities by 9/30/04  <b>Stretch:</b> D&amp;D 233-S &amp; 233-SA by 6/30/04  <b>Expectation 2:</b> Complete installation of new roofs on PUREX &amp; B Plant by 9/30/02.  <b>Expectation 3:</b>  <b>Base:</b> Disposition contaminated railcars by 6/30/06.  <b>Stretch:</b> Disposition contaminated railcars by 8/31/05  <b>Super stretch:</b> Disposition contaminated railcars and heavy equipment by 9/30/03.</p>	<p><b>tatus:</b> Work will not be initiated until 7/01/02</p> <p><b>tatus:</b> Work will not be initiated until 7/01/02</p> <p><b>tatus:</b> Work will not be initiated until 2/01/02</p> <p><b>tatus:</b> Efforts continue to disposition one rail car in Y 01. Detail planning for the total PI work scope has been initiated.</p> <p><b>tatus:</b> Nothing to report.</p> <p><b>tatus:</b> Nothing to report.</p>
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## KEY INTEGRATION ACTIVITIES

- **NFDI Support to DOE Complex —** The National Facilities Deactivation Initiative (NFDI) has been awarded a Vice-presidential Hammer award in recognition of cost saving and innovative approaches to deactivation and decommissioning activities throughout the DOE complex. DOE-HQ has provided RL \$350,000 for NFDI activities during the first half of FY 2001.
- **324 Building/SNF Project Savings —** In FY 2000, the 324 Building B Cell project, along with the Spent Nuclear Fuel Project (SNFP), developed an alternative plan for the fuel removal activity. Agreement to use a longer inner canister for the fuel permits greater end shielding and allows manual welding and testing in the Cask Handling Area (CHA), rather than the more expensive remote effort in B Cell. The Programmatic Agreement that outlines the responsibilities and general items for this fuel transfer was approved by both RCP and SNFP. The 200 Area Interim Storage Area Acceptance Criteria (HNF-4894) has been approved by RCP and SNFP.

- **EM-50 Support** — With support from EM-50, AEA Technology completed two draft reports regarding future RCP deactivation tasks: (1) *Option Study for Inspection, Sampling and Remediation for Tank T-105 in the High-Level Waste (HLW) Vault in Building at Hanford*; and (2) *Options Study for B Cell HVAC Duct Remediation*. Both of these reports summarize the work accomplished by AEA in FY 2000. EM-50 plans to provide \$450,000 of FY 2001 as partial funding to continue work on these two tasks, as well as on a new proposal involving acquisition and deployment of a more robust manipulator arm for 324 hot cell deactivation. Negotiations for additional leveraged funds are ongoing.
- **New Hanford-Rocky Flats-Savannah River Joint Deactivation Proposal** — Through involvement with NFDI, Hanford, Rocky Flats, and Savannah River submitted a joint proposal focused on demonstration and deployment of large equipment size reduction systems. DOE-HQ/EM-50 plans to announce the selection of the winning proposals by the end of December 2000.
- **Participation in West Valley Demonstration Project** — In September 2000, RCP issued a letter of support to RL to participate as a "non-host deployment site" in a proposal led by PNNL and West Valley (NY). The West Valley Demonstration Project is deactivating hot cell facilities with similar decontamination and decommissioning challenges to RCP facilities. The project would fund FH to participate on an Integrated Contractor Team (ICT). The ICT will influence the identification and selection of technologies for demonstration. Based on successful demonstration at West Valley, FH would be considering the best technologies for use at RCP. Nine proposals from throughout the DOE-Complex were submitted in response to EM-50's Large Scale Demonstration and Deployment Program (LSDDP) call for proposals. As noted above, EM-50 plans to select the winning proposals by the end of December.
- **Coordination With the 324 B Cell Cybernetix Procurement Project Team** — PNNL staff have begun interfacing on a regular basis with the 324 Building staff regarding dealings with Cybemetix. Both companies have current contracts with Cybemetix. A PNNL staff member is now attending the B Cell conference calls with Cybemetix, and lessons-learned meetings are being held with PNNL and RCP. Both robotic systems are scheduled for shipment from France to Hanford in the spring of 2001.





# **Section D**

## ***Spent Nuclear Fuel***

### **PROJECT MANAGERS**

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J.H. Wicks Jr., FH  
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## **SUMMARY**

The Spent Nuclear Fuel (SNF) mission consists of the Spent Nuclear Fuel Project (SNFP) WBS 1.3.1.1 (Project Baseline Summary [PBS] WMO1) and the subsequent Canister Storage Building (CSB) Operations Project WBS 1.3.2.1 (PBS WM02), which does not start until FY 2004.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of November 30, 2000. All other information is as of December 21, 2000.

Fiscal year-to-date milestone performance (EA, HQ, and RL) shows that three out of five milestones were completed late and one out of five milestones is forecasted late.

The Milestone Achievement details, found following the cost and schedule variance analysis, provides further information on all milestone types.

## **ACCOMPLISHMENTS**

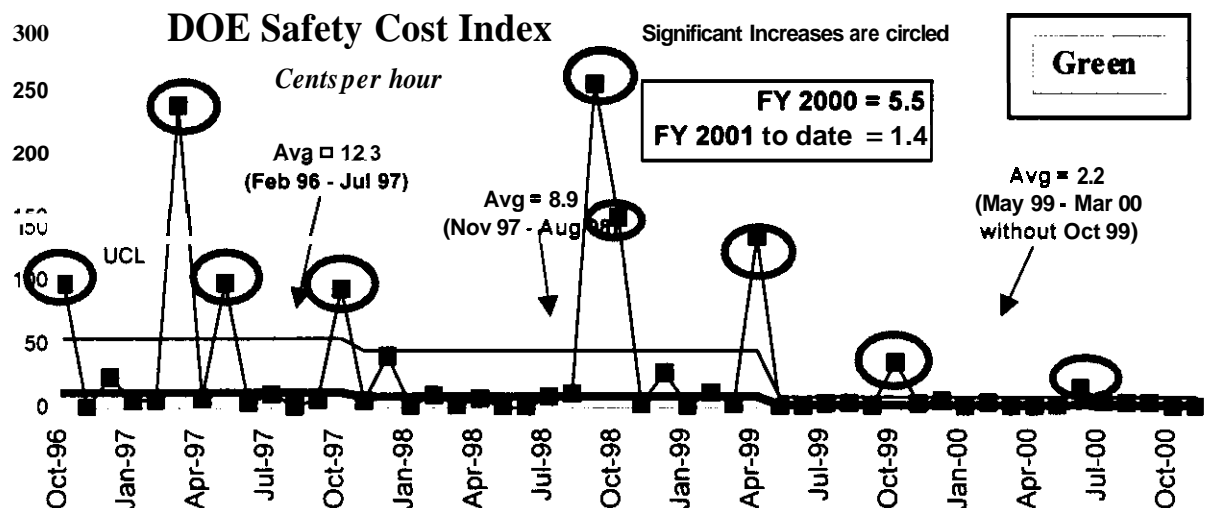
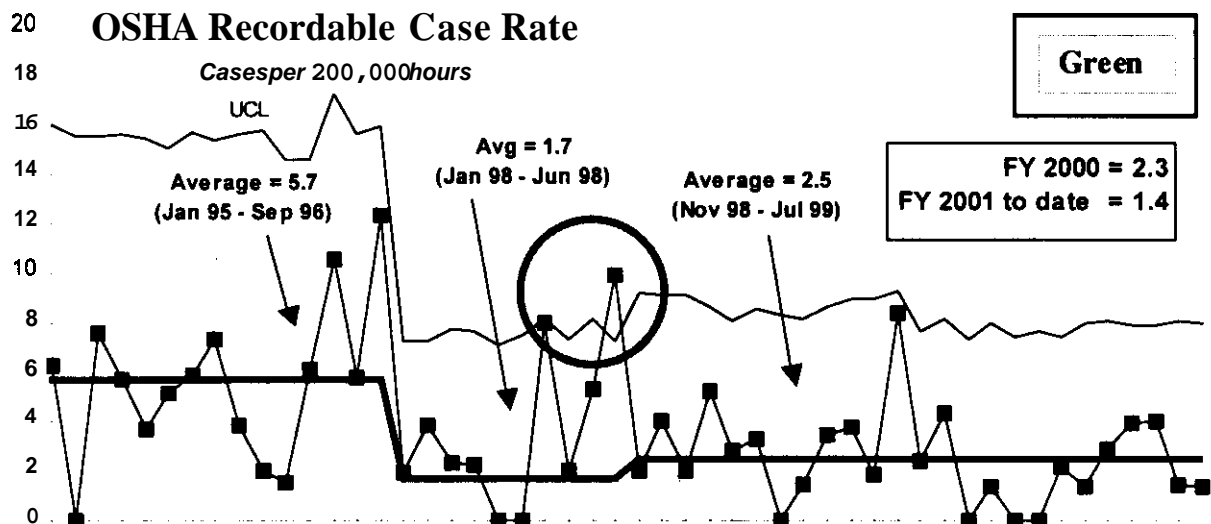
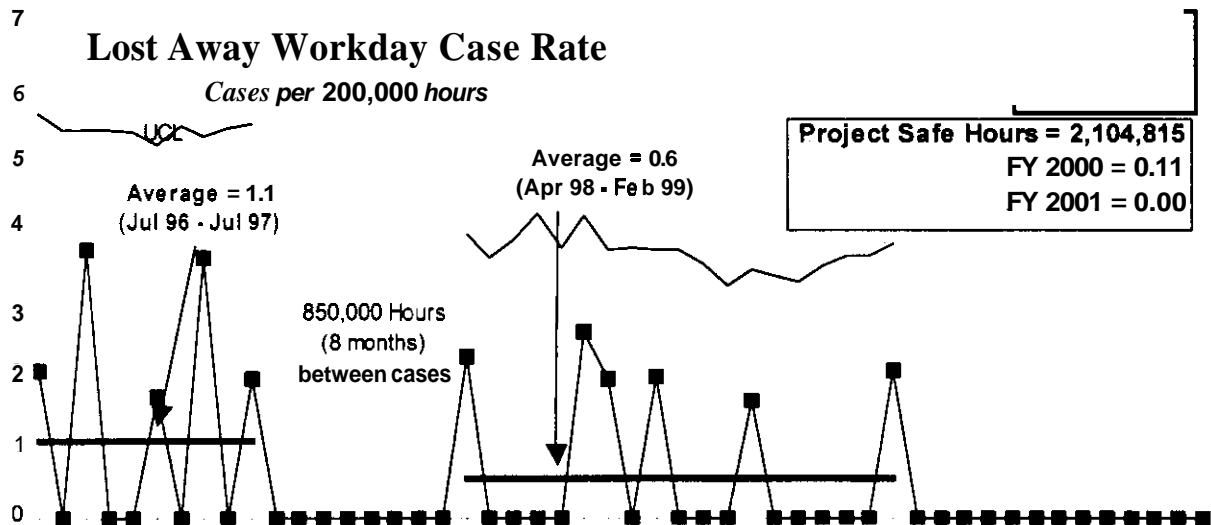
- Successfully completed DOE Operational Readiness Review (ORR) for the Cold Vacuum Drying (CVD) Facility on December 3, 2000. Completed loading of the first production multi-canister overpack (MCO). The MCO contains six fuel baskets with a total of 288 fuel elements. The loading of the MCO performed underwater in the K West Basin in anticipation of removal and transport to the CVD Facility. Completed Phased Startup Initiative (PSI) Phase 3 testing and commenced PSI Phase 4/Process Validation.
- The first shipment of irradiated uranium fuel assemblies was successfully moved from the K West (KW) Basin to the CVD Facility on December 7, 2000. Following a successful drying cycle at the CVD Facility, the MCO was transported to the CSB on December 18, 2000, where it entered long-term safe storage in a carbon steel tube in a below-ground vault. This initiated a Tri-Party Agreement commitment to remove approximately 2,300 tons of spent nuclear fuel from the River Corridor, and subsequently place it in safe long-term storage on the Central Plateau.

## **SAFETY**

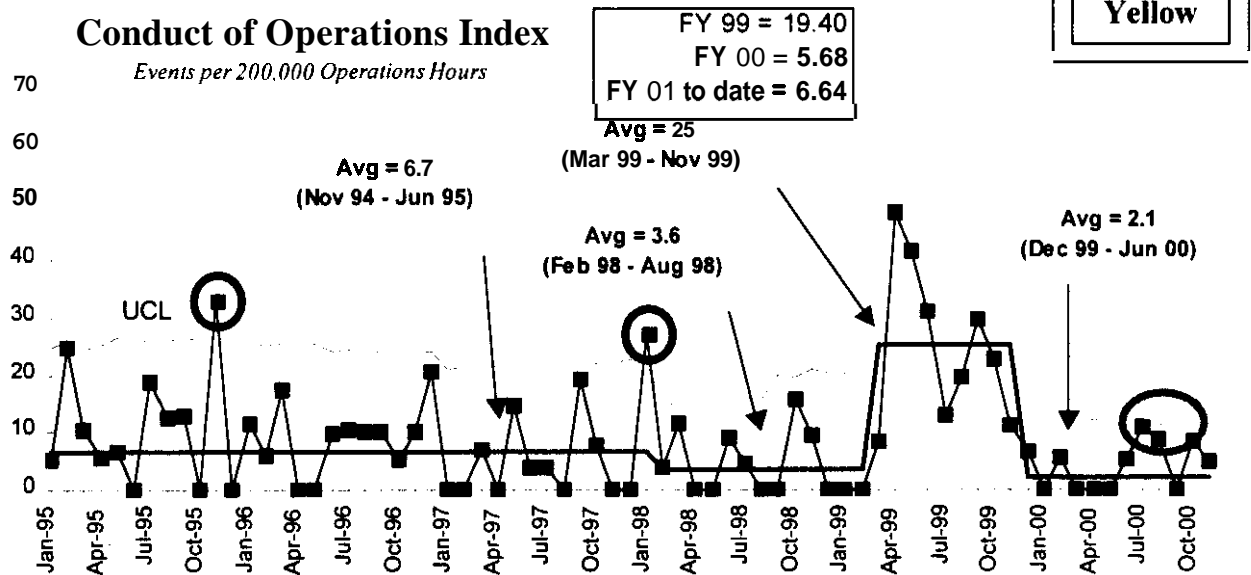
The project achieved over 2,000,000 safe work hours on November 15, 2000. No Lost Away Workday Cases have been reported in the last thirteen months.

The SNFP Occupational Safety and Health Administration (OSHA) Recordable Case Rate had shown signs of improvement, but has returned to the baseline of **2.5** cases per 200,000 hours. There has been a significant improvement in Lost/Restricted workday case rate.

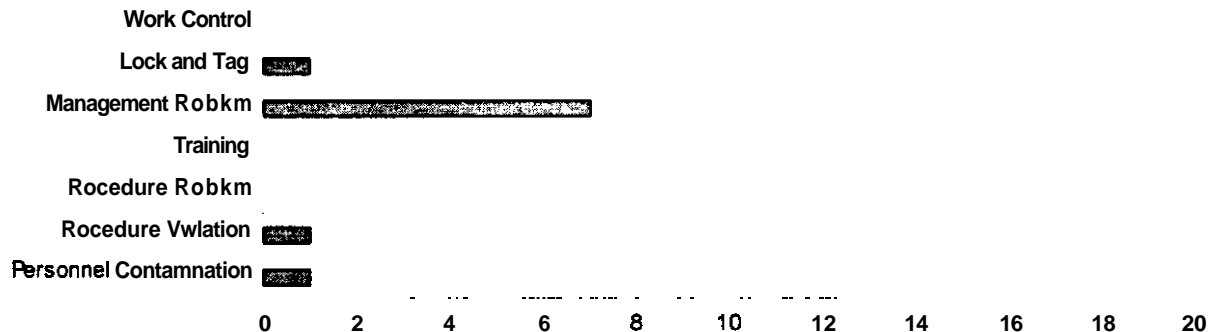
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## CONDUCT OF OPERATIONS / ISMS STATUS



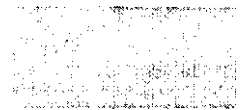
### Number of Reports Past 12 Months



The increase in the number of events for FY 2000 is indicative of the SNF Project transition from construction and testing to operations. During the period, the project completed two new nuclear facilities and refurbished one existing facility. All three of these nuclear facilities were thoroughly tested and went through several Operational Readiness Reviews prior to the commencement of operations. **As** a result of the knowledge gained during the transition to operations, many actions have been taken and are in progress to improve and monitor the conduct of operations at all four SNF Project facilities as the project safely moves into a more focused and efficient operation.

## ISMS STATUS

- The ISMS workshop held December 5-6, 2000 was supported by the SNF Project through presentations by senior management and attendance by Project personnel.



## **BREAKTHROUGHS/ OPPORTUNITIES FOR IMPROVEMENT**

### **Breakthroughs**

- Alternate Fuel Transfer Strategy (AFTS) – The AFTS will move fuel from the K East (KE) Basin to the K West (KW) Basin for processing in lieu of processing fuel in the KE Basin as currently baselined. This strategy will greatly reduce worker radiation exposure, safety risks, and increase the confidence level that the life cycle cost and schedule objectives can be achieved.
  - A Baseline Change Request was submitted to RL on November 29, 2000, for the AFTS.

### **Opportunities for Improvement**

- Multi-Canister Overpack (MCO) Production Rate Improvements – The Spent Nuclear Fuel Project is currently analyzing the reduction of fuel processing, loading, and drying times in an effort to meet and improve the baseline schedule for MCO processing.

## **UPCOMING ACTIVITIES**

- Complete Tri-Party Agreement Milestone M-34-06-T01, “Initiate K West Basin Spent Nuclear Fuel Canister Cleaning Operations,” originally due December 31, 2000. Change request to extend target completion date submitted, but subsequently denied by the Environmental Protection Agency (EPA); new forecast date for completion of the milestone is August 31, 2001.
- Complete definitive design for K East Integrated Water Treatment System (IWTS)/Sludge loadout system by April 2001.
- Continue receipt of MCO shipments through FY 2001.
- Submit Annual Debris Report to Washington State Department of Ecology/EPA in May 2001.
- Initiate K West (KW) Basin spent nuclear fuel canister cleaning operations August 2001.

## **FY TO DATE COST PERFORMANCE (\$M):**

	<b>BCWP</b>	<b>ACWP</b>	<b>VARIANCE</b>
<b>Spent Nuclear Fuel</b>	\$20.5	\$28.3	- \$7.8

The unfavorable cost variance of \$7.8 million (38 percent) was due to additional facility start up and engineering required to resolve first-of-a-kind equipment issues at K Basins and the Cold

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Vacuum Drying Facility and subsequent extension of the Operational Readiness Review process. A staff demobilization plan will be implemented to bring costs in line with the baseline.

**FY TO DATE SCHEDULE PERFORMANCE (\$M):**

	BCWP	BCWS	VARIANCE
Spent Nuclear Fuel	\$20.5	\$20.6	- \$0.1

Schedule variance was within approved threshold

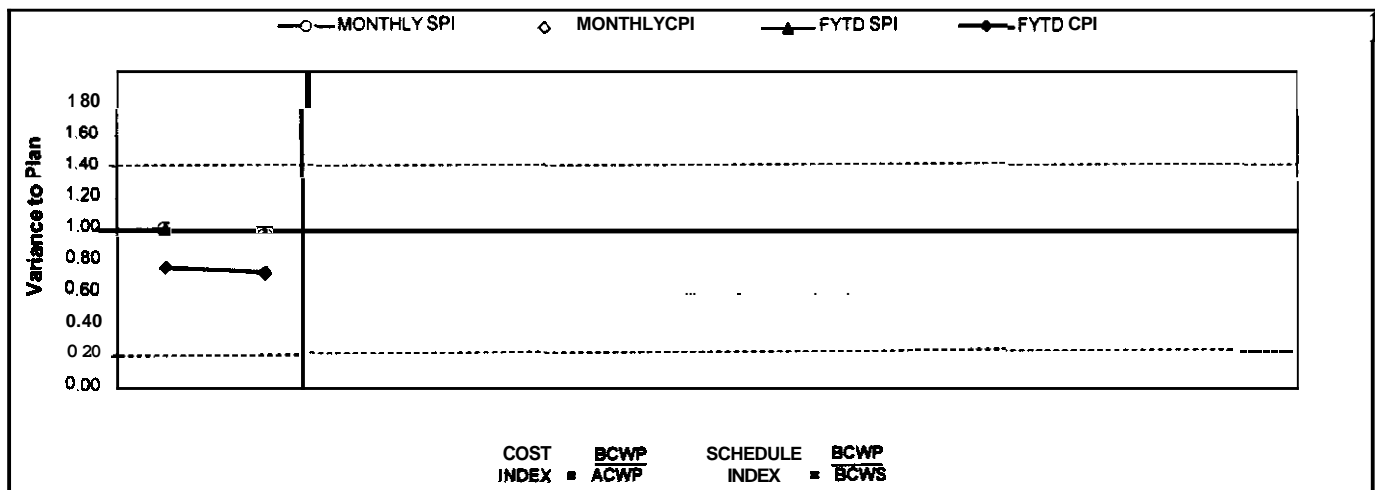
**FY 2001 COST/SCHEDULE PERFORMANCE – ALL FUND TYPES**  
**CUMULATIVE TO DATE STATUS – (\$000)**

		FYTD							
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM
PBS WMOI	Spent Nuclear	\$ 20,648	\$ 20,498	\$ 28,320	\$ (150)	-1%	\$ (7,821)	-38%	\$ 189,761
WBS 1 3	Fuel Project								
<b>Total</b>		<b>\$ 20,648</b>	<b>\$ 20,498</b>	<b>\$ 28,320</b>	<b>\$ (150)</b>	<b>-1%</b>	<b>\$ (7,821)</b>	<b>-38%</b>	<b>\$ 189,761</b>

Note RL-Directed costs (steam and laundry) are included in the PEM BCWS

**COST/SCHEDULE PERFORMANCE INDICES**  
**(MONTHLY AND FYTD)**

Yellow



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	1.00	0.99										
MONTHLY CPI	0.75	0.71										
FYTD SPI	1.00	0.99										
FYTD CPI	0.75	0.72										
MONTHLY BCWS	\$7,302	\$13,346	\$10,344	\$17,887	\$12,666	\$13,324	\$14,367	\$18,685	\$14,416	\$14,897	\$19,319	\$33,208
MONTHLY BCWP	\$7,317	\$13,181										
MONTHLY ACWP	\$9,757	\$18,563										
FYTD BCWS	\$7,302	\$20,648	\$30,992	\$48,879	\$61,545	\$74,868	\$89,236	\$107,921	\$122,337	\$137,234	\$156,333	\$189,761
FYTD BCWP	\$7,317	\$20,498										
FYTD ACWP	\$9,757	\$28,320										

## **COST VARIANCE ANALYSIS: (-\$7.8M)**

### **WBS/PBS**

### **Title**

1.3.1/WM01

**Spent Nuclear Fuel Project**

**Description/Cause:** The unfavorable cost variance was due to additional startup and engineering required to resolve first-of-a-kind equipment issues at the K Basins and CVD facility, and subsequent extension of the Operational Readiness Review process.

**Impact:** Variance impact requires corrective action below.

**Corrective Action:** A staff demobilization plan has been developed to bring costs in line with the baseline. The demobilization plan will be initiated following the start of fuel movement.

## **SCHEDULE VARIANCE ANALYSIS: (-\$0.1M)**

### **WBS/PBS**

### **Title**

1.3.1/ WMOI

**Spent Nuclear Fuel Project**

**Description /Cause:** None.

**Impact:** None.

**Corrective Action:** None.

## **ISSUES**

### **Technical Issues**

There is nothing to report at this time.

### **DOE/Regulator/External Issues**

- **CSB Operations** — The Washington State Department of Health (WDOH) agreed to interim operating conditions that will allow the CSB to receive spent nuclear fuel prior to replacement of two backdraft dampers on the main ventilation exhaust system that do not meet the American Society of Mechanical Engineers (ASME) N509 code. WDOH also agreed to a number of deviations with stipulated conditions from the N509 code for operation of the CSB.
- **KW Basin Canister Cleaning System** — The EPA disapproved the request to extend the Tri-Party Agreement target date for the KW Basin canister cleaning system. The target date of December 31, 2000, will be missed, but the canister cleaning system *will* be operational by August 31, 2001, without impact to operations or other Tri-Party Agreement milestones.
- **Milestone Status** — The Tri-Party Agreement milestone M-34-16, "Initiate Removal of K West Basin Spent Nuclear Fuel" was not met. The due date was November 30, 2000; the first fuel was removed from the KW Basin on December 7, 2000. The EPA intends to use its enforcement discretion on this issue.

## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS (\$000)

PROJECT CHANGE NUMBER	ATE ORIGIN.	BCR TITLE	COST IMPACT\$000						
PH-2001-	09/25/2000	FY2001 Fee Reduction to 90%	\$1.03	N	Y				In preparation
SNF-2001-002	1012612000	MCO Production Rate Changes Based on Actual Test Results	N	Y	Y				In preparation In review at
SNF-2001-003	1111312000	SNF Alternate Fuel Transfer Strategy	N	Y	N				DOE In review at
SNF-2001-004	1111412000	WM02/CP02 Revision Planning Basis - Continuing CSB Operations	N	Y	Y				In review In preparation
SNF-2001-005	11/20/2000	KW Canister Cleaning Design and Schedule Change	TBD	Y	Y				In preparation In preparation
SNF-2001-006	1112012000	Sludge Co-mingling and Water Integration Systems	N	Y	Y				In preparation In preparation
SNF-2001-007	12/01/2000	FY01 Budget Reconciliation to Funding Limitations	-871	Y	Y				In preparation

## 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	0	0	0	0	0	0	0	0
DOE-HQ	0	0	1	0	0	0	0	1
RL	0	0	2	0	0	1	1	4
<b>Total Project</b>	0	0	3	0	0	1	1	5

Only TPA/EA milestones and all FY 2001 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 FY 2001 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.

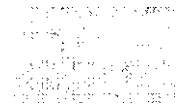
### FY 2001 Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-34-16 (SOO-01-900)	"Initiate Removal of K West Basin Spent Nuclear Fuel"	Due 11/30/00 – Completed one week late.
M-34-06-TO1 (SO4-99-521)	"Initiate K West Basin Spent Nuclear Fuel Canister Cleaning Operations"	Due 12/31/00 – Forecast late, August 31, 2001. <span style="border: 1px solid black; padding: 2px; display: inline-block;">Yellow</span>
M-34-05-TO1 (SO4-01-515)	"Submit DOE Approved Report Debris to Ecology/EPA"	Due 05/31/2001 – On schedule

### DNFSB Commitments

	Nothing to report at this time.
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## MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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### FORECAST LATE - 1

S04-99-521    RL                      Start K West Canister Cleaning Operations    12/31/00    8/31/01  
 1.3.1

**Cause:** Suspended design last summer to simplify system and reduce costs. SNF Project made a project management decision to defer work to FY **2001** and focus on near-term critical path items.

**Impact:** No impact to any other SNF Project baseline schedule activities or TPA/DNFSB milestones.

**Corrective Action:** Currently in design and on schedule; to be started by 8/31/01.

Number	Milestone Title	Status
M-34-12 (S04-97-621)	"Complete Construction of KE Basin Integrated Water Treatment System (IWTS)" Due 03/31/2002	On Schedule
M-34-13B-TO1 (S04-98-356)	"Complete Construction & Installation of KE Basin FRS" Due 03/31/2002	On Schedule
M-34-14B-TO1 606-97-012)	"Complete KE Basin Cask Facility Mods" Due 02/28/2002	On Schedule

#### DNFSB Commitments

	Nothing to report at this time.	
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## PERFORMANCE OBJECTIVES

**Green**

### Move Fuel Away from the River

Expectation: Remove spent fuel from K Basins

Move first MCO of spent nuclear fuel from KW Basin and transport to the CVD Facility for processing by November 30, 2000 (TPA M-34-16),

Status: Completed one week late.

Continue removal of spent nuclear fuel from K Basins (Complete by July 31, 2004)

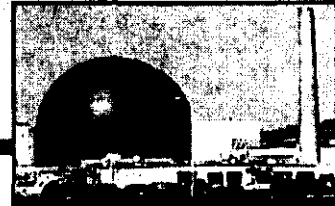
Status: On schedule.

## **KEY INTEGRATION ACTIVITIES**

Spent Nuclear Fuel (SNF) final disposition interface activities, including Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Program implementation, are ongoing with the National SNF Program.

The SNF Project and Waste Management Project continued preparations for K Basins' sludge removal and Shippingport (PA) Pressurized Water Reactor Core 2 SNF removal.

Neutron Radiography Facility Training Research and Isotope Production General Atomics (TRIGA) and Fast Flux Test Facility (FFTF) SNF relocation planning is ongoing with the FFTF Project.



# **Section E**

## ***Advanced Reactors Transition***

### **PROJECT MANAGERS**

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**D.B. Klos, FH**  
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## **SUMMARY**

The Advanced Reactors Transition (ART) Program, WBS 1.12.1.1, PBS RL-TP11, consists of the 309 Building and the Nuclear Energy (NE) Legacies activities.

NOTE: Cost/Schedule data contained herein is as of November 30, 2000. All other information is as of December 28, 2000, unless otherwise noted.

For the month of November, surveillance and maintenance activities continued on the 309 Building and NE legacies. The annual 309-Plutonium Recycle Test Reactor (PRTR) Stack High-Efficiency Particulate Air (HEPA) efficiency test was performed. Preventative maintenance on the polar crane and slide up door were completed. Assays were performed on four low-level radioactive waste boxes in preparation for waste disposal. Inspection of fire barriers, doors, and dampers in the 337B building was completed. There were no items requiring repair.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that there are no milestones due.

## **ACCOMPLISHMENTS**

- Surveillance and maintenance activities on 309 Building and NE legacies continued.
- Annual 309-PRTR Stack HEPA efficiency test performed, and preventative maintenance on polar crane and slide up door completed.
- Assays on four **309** Bldg-PRTR low level radioactive waste boxes performed in preparation of waste disposal.
- Inspection of fire barriers, doors, and dampers in the 337B building completed (no items requiring repair).

## **SAFETY**

Safety data for ART is included in a separate Fast Flux Test Facility (FFTF) report.

## **CONDUCT OF OPERATIONS / ISMS STATUS**

### **CONDUCT OF OPERATIONS**

Conduct of operations data for ART is included in a separate FFTF report.

### **ISMS STATUS**

The project continues to work on improvement initiatives that resulted from the ISMS Phase II readiness review. These initiatives include improving the Automated Job Hazard Analysis (AJHA) process and worker involvement in work documentation preparation.

### **BREAKTHROUGHS/ OPPORTUNITIES FOR IMPROVEMENT**

No breakthroughs or opportunities for improvement are identified at this time.

### **UPCOMING ACTIVITIES**

- Ship Thermal Transient Loop cold trap offsite by March 30, 2001. (Date is dependent on receiving a Department of Transportation exemption on the shipping container.)
- Continue Fuel Transfer Pit cleanout in the 309 Building/PRTR facility; estimated completion date is January 30, 2001.

### **FY TO DATE COST PERFORMANCE (\$M):**

	<b>BCWP</b>	<b>ACWP</b>	<b>VARIANCE</b>
<b>Advanced Reactors Transition</b>	<b>\$0.2</b>	<b>\$0.1</b>	<b>\$0.1</b>

The \$0.1 million (49 percent) favorable cost variance was due to lower-than-anticipated surveillance and maintenance (S&M) costs.

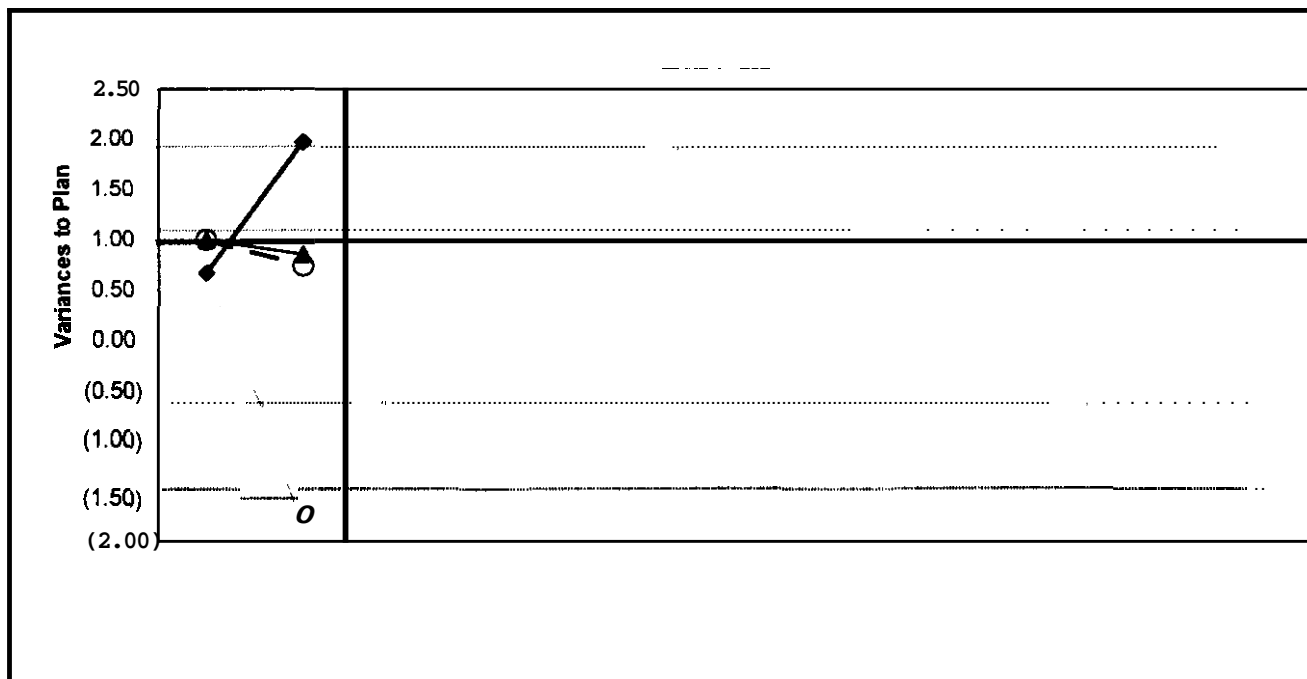
### **FY TO DATE SCHEDULE PERFORMANCE (\$M):**

	<b>BCWP</b>	<b>BCWS</b>	<b>VARIANCE</b>
<b>Advanced Reactors Transition</b>	<b>\$0.2</b>	<b>\$0.3</b>	<b>-\$ 0.0*</b>

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

By PBS		FYTD								PEM					
		BCWS	BCWP	ACWP	SV	%	CV	%							
PBS TP11	Advanced	\$	273	\$	234	\$	119	\$	(39)	-14%	\$	115	49%	\$	1,486
WBS 1.12	Reactors Transition														
	Total	\$	273	\$	234	\$	119	\$	(39)	-14%	\$	115	49%	\$	1,486

## COST/SCHEDULE PERFORMANCE INDICES (MONTHLY AND FYTD)



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	1.00	0.74										
MONTHLY CPI	0.67	-1.73										
FYTD SPI	1.00	0.86										
FYTD CPI	0.67	1.98										
MONTHLY BCWS	\$123	\$150	\$167	\$134	\$112	\$113	\$113	\$124	\$97	\$97	\$124	\$130
MONTHLY BCWP	\$123	\$112										
MONTHLY ACWP	\$183	-\$65										
FYTD BCWS	\$123	\$273	\$439	\$574	\$686	\$799	\$913	\$1,037	\$1,134	\$1,231	\$1,355	\$1,486
FYTD BCWP	\$123	\$234										
FYTD ACWP	\$183	\$119										

## COST VARIANCE ANALYSIS: (\$0.1M)

### WBS/PBS

### Title

#### 1.12/TP11 Advanced Reactors Transition

**Description and Cause:** The favorable cost variance was due to lower-than-anticipated S&M costs.

**Impact:** The S&M budget will be reduced.

**Corrective Action:** A Baseline Change Request is in process to reduce the S&M budget.

## SCHEDULE VARIANCE ANALYSIS: (-\$0.0M)

### WBS/PBS

### Title

#### 1.12/TP11 Advanced Reactors Transition

**Description and Cause:** The unfavorable schedule variance was primarily due to the longer-than-anticipated work approval for the 309 Building / PRTR Fuel Transfer Pit cleanout.

**Impact:** No significant impact.

**Corrective Action:** Work is expected to accelerate in January.

## ISSUES

There is nothing to report at this time.

## BASLINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN	BCR TITLE	FY01 COST IMPACT \$000	S C H	T E C H	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
ART-2000-001	11/17/2000	Increase to Base Operations & Carryover Funding	409	X	X	11/27/2000			In Review
ADVANCE WORK AUTHORIZATIONS									
		Nothing to report at this time.							

## **MILESTONE ACHIEVEMENT**

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that there are no milestones due.

<b>Tri-Party Agreement / EA Milestones</b>
Nothing to report at this time.
<b>DNFSB Commitments</b>
Nothing to report at this time.

## **MILESTONE EXCEPTION REPORT**

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
-------------------	--------------	------------------------	----------------------	----------------------

**OVERDUE – 0**

**FORECAST LATE – 0**

## **PERFORMANCE OBJECTIVES**

Nothing to report at this time.

## **KEY INTEGRATION ACTIVITIES**

Nothing to report at this time.





# **Section F**

## ***EM-50***

### ***Science & Technology***

### ***Activities***

	BCWP	ACWP	VARIANCE
Technology Development (EM-50)	\$2.6	\$2.2	\$0.4

The favorable cost variance of 16percent is mostly due to accrual reversals from FY 2000 and costs that have not yet processed through the system for work that was completed.

## FY TO DATE SCHEDULE PERFORMANCE (\$M):

	BCWP	BCWS	VARIANCE
Technology Development (EM-50)	\$2.6	\$3.1	-\$0.6*

\*Rounding

The unfavorable schedule variance of 18percent is primarily the result of delays due to late funding authorizations for BHI and PNNL, and details of work scope being revised in several Technical Task Plans for PNNL.

## MILESTONE ACHIEVEMENT

MILE—ONE 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	0	0	0	0	0	0	0	0
DOE-HQ	0	0	0	0	0	1	0	1
RL	0	0	0	0	0	1	0	1
Total Project	0	0	0	0	0	2	0	2

## MILESTONE EXCEPTION REPORT

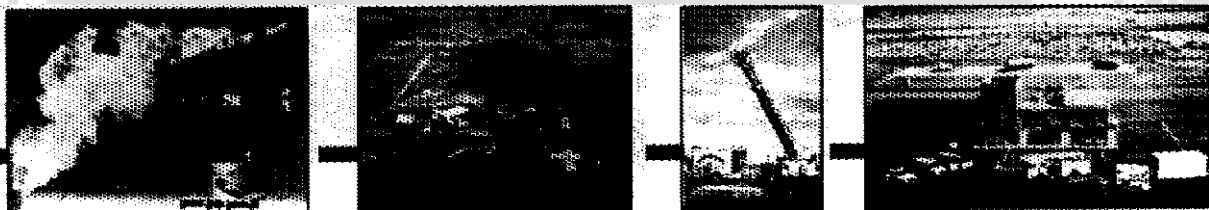
<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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OVERDUE - 0



## **The Future**

Hanford cleanup activities develop assets – people, experience, land, buildings, research and training facilities – that can have a positive affect on our future. They can help solve national and global problems in food production, global warming, pollution and nuclear non-proliferation. The prime contractors and subcontractors at Hanford are implementing economic development initiatives aimed at weaning the Tri-Cities from dependence on federal cleanup dollars. These initiatives are being supported with grants and by freeing up valuable site resources for use by the private sector. Examples of these initiatives are a new industrial building to attract new businesses to the area, job-creation efforts, and providing technical assistance to entrepreneurs. The Volpentest HAMMER Training and Education Center is included in this outcome. HAMMER provides training for the Hanford Site cleanup mission and the DOE complex. The Center also augments economic diversification by creating a state-of-the-art regional training industry for students from across the nation and around the world.



# **Section G**

## ***HAMMER***

### **PROJECT MANAGERS**

**P. W. KRUGER, RL**  
(509) 372-4005

**K.A. McGinnis, FH**  
(509) 376-9403

## **SUMMARY**

The Hazardous Materials Management and Emergency Response (HAMMER) mission area consists of the HAMMER project, WBS 1.9.1.1, Project Baseline Summary (PBS) HM01.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of November 30, 2000. All other information is as of December 21, 2000.

Volpentest HAMMER's first priority is to deliver hands-on training to the Hanford workforce. During November one hundred ninety classes were conducted at the Volpentest HAMMER facility, for a total of 2,636 Hanford site student days. Highest attended health and safety classes included Hazardous Waste Operations, Respiratory Protection, Radiation Worker II Requalification, RCT Cycle Training and Basic Medic First Aid training.

Conducted two successful special Respiratory Protection Training's in support of Hanford Site needs:

- 1) The first mock up involved training T-Plant personnel on supplied airline bottle cart. The scope of work at T-Plant was to enter a containment tent to open barrels of low level radiological solid waste, inventory the contents, and repack into 55-gallon barrels (doing all of the activities with the personnel on supplied air respirators). T-Plant personnel were very supportive of a mockup of the job site at HAMMER and conducting the respiratory training in a realistic work place setting. At HAMMER a containment tent, barrels, airline respirators, continuous air monitors, and similar personal protective clothing were arranged to simulate the working environment. This course was offered at the HAMMER Facility on November 27-28, 2000.
- 2) The second mock up involved a different scope of work in the 300 area where an employee would be painting a vault at the bottom of a 20-foot ladder. HAMMER mocked-up the Self-contained Breathing Apparatus (SCBA) building to simulate the real job site. The participants entered a vault opening in the attic of the SCBA building in SCOTT SKA-PAK's and fall protection equipment and descended 24 feet down a ladder to a simulated vault. The paint spray was simulated using a fogging smoke. The participants were given a one-on-one practical exam including instructor-initiated loss of air and appropriate response on both the bottle cart and the SCOTT SKA-PAK while performing the job task in the simulated work area.

The two mock-ups were well received from all personnel involved. In addition this demonstrates the flexibility of HAMMER's props to meet customers needs and offer cost-effective training in a non-hazardous environment.

OSHA offered a Trenching and Excavation Course for Competent Persons at the HAMMER facility through D-2000 Safety Solutions. This three-day course, delivered on November 1-3, 2000, covered all training requirements for competent persons as outlined in 29 CFR 1910 and 29 CFR 1926, specifically. Attendees included Washington State Labor and Industries Compliance Officers and Consultants, individuals from major Hanford contractors,

local Public Utility District employees and neighboring city employees. This course received excellent reviews and HAMMER has received several requests by other employers to offer another class. In response to these requests, arrangements are being made to offer this class in March of 2001.

Fiscal-year-to-date milestone performance (EA, DOE-HQ and RL) shows that no milestones were due in November and no future milestones are forecast late.

## **ACCOMPLISHMENTS**

- Trained 2,636 Hanford site student days at HAMMER.
- Conducted two special Respiratory Training's in support of Hanford Site needs.
- Conducted OSHA Trenching and Excavation Course for Competent Persons.

HAMMER currently has no status to report in the areas of ISMS Status, Breakthroughs and Opportunities for Improvement.

## **UPCOMING ACTIVITIES**

- Conduct HAMMER Steering Committee Meeting, April 2001

### **FY TO DATE C o n PERFORMANCE (\$M):**

	BCWP	ACWP	VARIANCE
HAMMER	\$0.8	\$0.8	\$0.0

### **FY TO DATE SCHEDULE PERFORMANCE (\$M):**

	BCWP	BCWS	VARIANCE
HAMMER	\$0.8	\$0.8	\$0.0

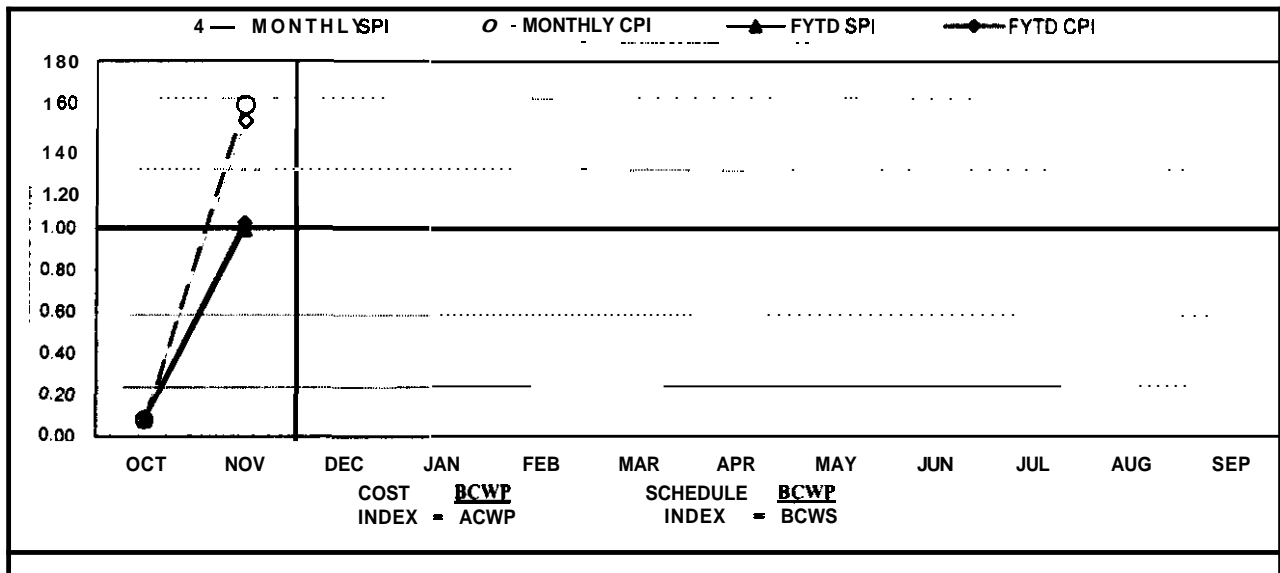
The \$0.0 million (0 percent) schedule variance is insignificant.

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



		FYTD							
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM
PBS HM01	Hammer	\$ 842	\$ 838	\$ 816	\$ (4)	0%	\$ 22	3%	\$ 5.561
WBS 1.9.1									
Total		\$ 842	\$ 838	\$ 816	\$ (4)	0%	\$ 22	3%	\$ 5.561

## COST/SCHEDULE PERFORMANCE INDICES (MONTHLY AND FYTD)



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.08	1.59										
MONTHLY CPI	0.09	0.52										
FYTD SPI	0.08	1.00										
FYTD CPI	0.09	1.03										
MONTHLY BCWS	\$ 332	\$ 510	\$ 443	\$ 487	\$ 421	\$ 443	\$ 443	\$ 554	\$ 421	\$ 421	\$ 554	\$ 532
MONTHLY BCWP	\$ 27	\$ 811										
MONTHLY ACWP	\$ 281	\$ 534										
FYTD BCWS	\$ 332	\$ 842	\$ 1,285	\$ 1,772	\$ 2,193	\$ 2,636	\$ 3,080	\$ 3,633	\$ 4,054	\$ 4,475	\$ 5,029	\$ 5,561
FYTD BCWP	\$ 27	\$ 838										
FYTD ACWP	\$ 281	\$ 534										

## C o n V A R I A N C E A N A L Y S I S : ( \$ 0 . 0 M )

### WBS/PBS    TITLE

#### 1.9.1.1/HM01 HAMMER

**Description and Cause:** The variance is in within thresholds.

**Impact:** None.

**Corrective Action:** None.

## SCHEDULE VARIANCE ANALYSIS:(\$0.0M)

### WBS    TITLE

#### 1.9.1.1/HM01 HAMMER

**Description and Cause:** The variance is within thresholds.

**Impact:** None.

**Corrective Action:** None.

## ISSUES

Nothing to report at this time.

PROJECT CHANCE NUMBER	DATE ORIGIN	BCR TITLE	FY00 COST IMPACT \$000	S C H	T E C H	DATE TOCCB	CCB APR'YD	RL APR'VD	CURRENT STATUS
HMR-2000-003	7/26/00	FY-2001 MYWP Bridge Change Request	0	X	X	8/25/00		11/2/00	Approved
HMR-2001-001	12/6/00	Incorporate FY 2000 Carryover & Emerging Needs into FY 2001 Baseline	754	X	X	12/21/00	NA	NA	At FH CCB
HMR-2001-002	12/7/00	Delete Installation of the TSB Air Conditionine	-95			NA	NA	NA	Project Approved
		Nothing to report.							



## 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	0	0	0	0	0	0	0	0
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	9	0	9
<b>Total Project</b>	0	0	0	0	0	9	0	9

**Green**

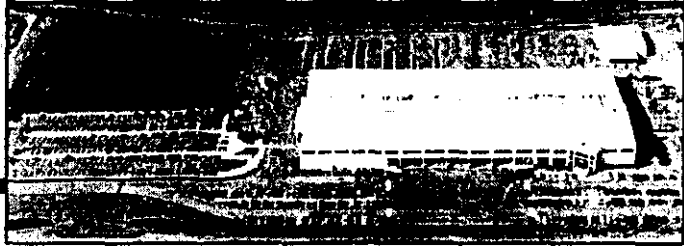
<b>Tri-Party Agreement / EA Milestones</b>
Nothing to report at this time.
<b>DNFSB Commitments</b>
Nothing to report at this time.

## MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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**OVERDUE - 0**

**FORECAST LATE - 0**



# **Multiple Outcomes**

**Projects that bridge more than one outcome are included here.  
These projects include Landlord, Support, and National Programs.  
Further descriptions are included in each section.**



# **Section H**

## ***Landlord***

### **PROJECT MANAGERS**

**S.H. Wisness, RL**  
(509) 373-9337

**D.S. Kelly, FH**  
(509) 376-7334

## **SUMMARY**

The Landlord mission area consists of the Landlord Project, WBS 1.5.1, Project Baseline Summary (PBS) RL-TP13.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of November **30**, 2000. All other information is as of December 28, 2000.

In FY 2001, the Equipment Disposition project provides for disposition of one Well Car and one heavy equipment piece (Auger Drill Truck). Disposition of the Auger Truck has been placed on hold pending FY 2001 funding reductions. Disposition of the Tall Well Car planned for FY 2001 has been initiated to support the shipment of the Tall Well Car in March 2001. The two Burlington Northern Flat Cars at the Richland Port of Benton Rail Yard were shipped December 7 and arrived safely on December 23 at the TARC Facility in South Carolina for cleanup and reuse.

Project L-348, “Fire Damaged 222S Septic System (2607-W6) Replacement” repairs the 222S Septic System, which was severely damaged by the June 2000 fire on the Hanford Site. FFS was authorized to initiate Definitive Design (DD) for this project on October 31 to support construction completion by June 30, 2001. The 60 percent DD package was issued by FFS on December 11 for review and comments were due back to FFS by December 21.

In FY 2001 three abandoned septic systems will be dispositioned in accordance with Washington State requirements. The planning activities have begun on this work to support initiation of field activities in the second quarter of FY 2001. Field visits have identified three abandoned septic systems to be dispositioned in FY 2001 and NEPA reviews are being complete to support system closures in the second **quarter** of FY 2001.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows no milestones are due.

## **ACCOMPLISHMENTS**

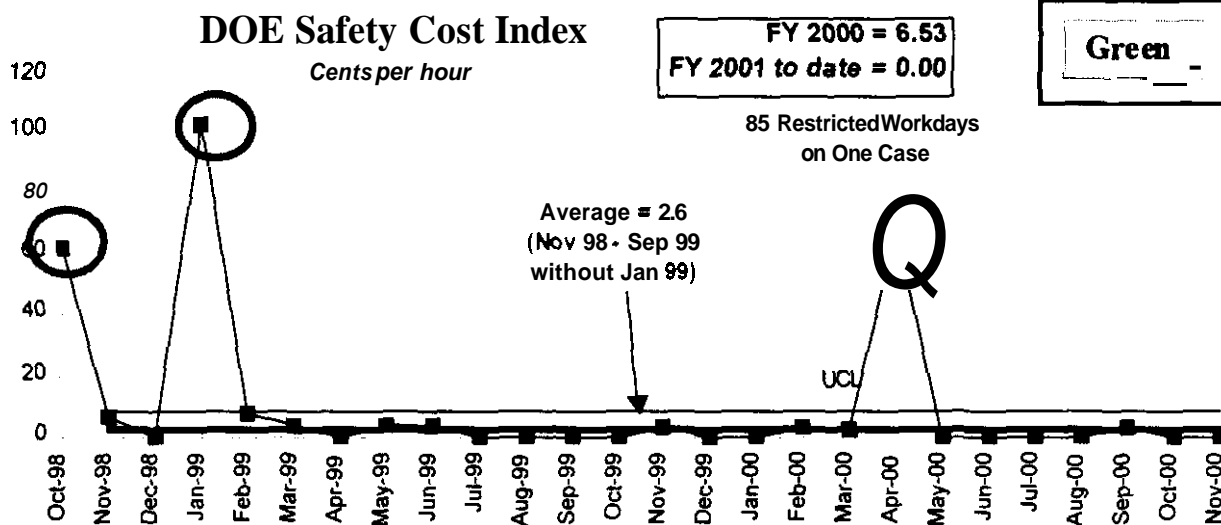
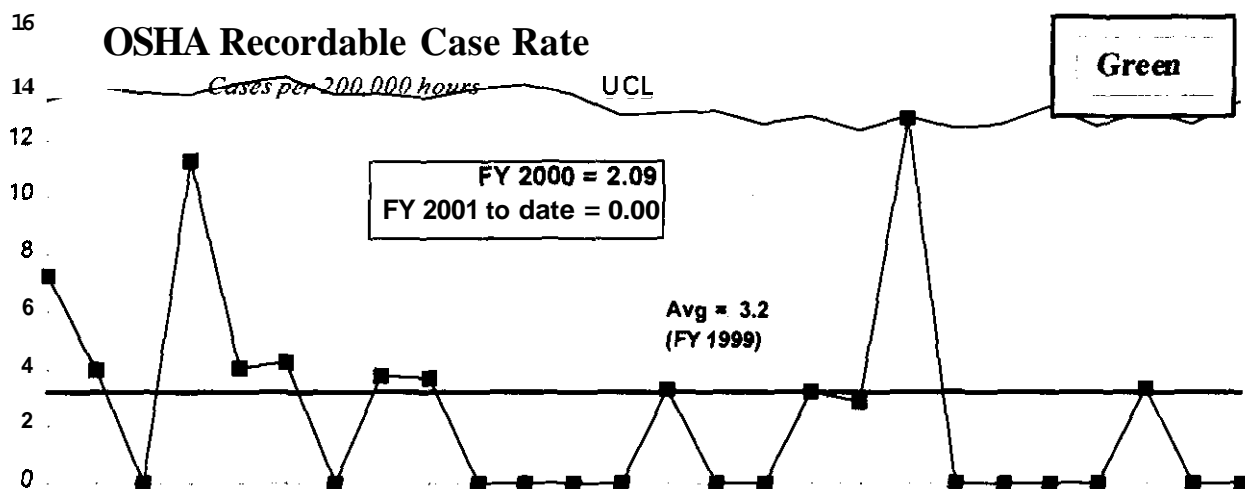
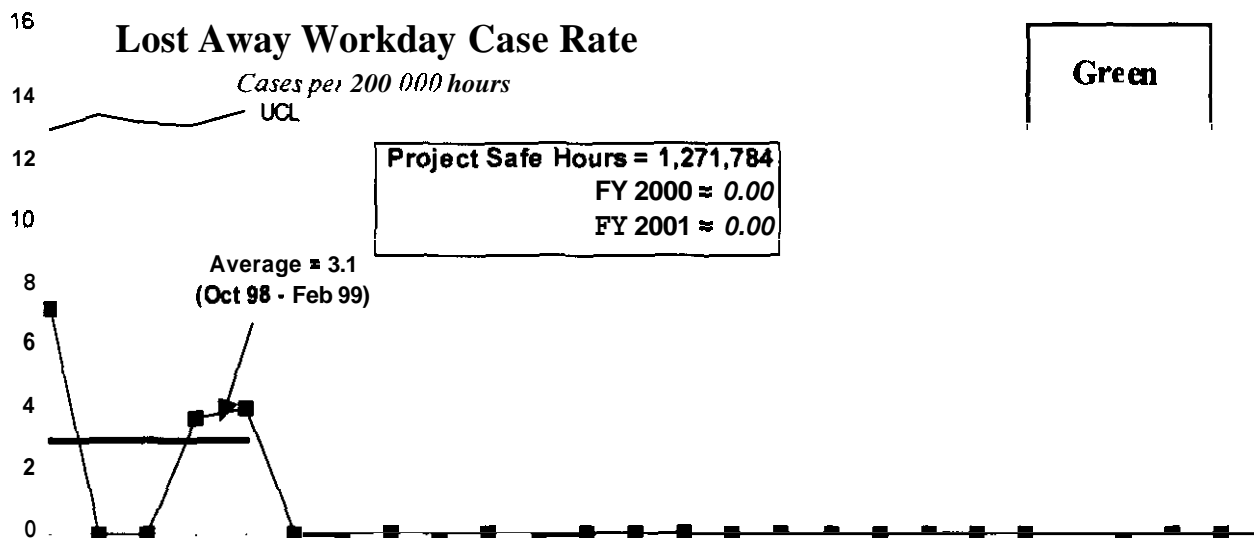
Nine of 11 milestones scheduled for completion this year are trending to complete ahead of schedule and two are expected to complete on schedule.

Landlord Milestone LLC-00-205, “Receive Ambulance by January 29, 2001,” was completed December 20, six weeks ahead of schedule, and within budget.

## **SAFETY**

Landlord has exceeded one and a quarter million project safe hours. There was a significant increase in OSHA recordable case rate for April, and a significant increase in DOE Safety Cost Index in April due to reclassification of cases and restricted days accumulated. The months after April 2000 have returned to normal.

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**Section H–Landlord**





## **ISMS STATUS**

NOTE: The Infrastructure program includes the Landlord Project and the indirect Infrastructure. Both of these areas are covered under one ISMS program, therefore the ISMS activities described below are for the entire Infrastructure program, which includes Landlord.

- Voluntary Protection Program (VPP) application for status was submitted to DOE and the evaluation was conducted November 14 through November 16, 2000. Initial feedback from the evaluation team was extremely positive. Final results from the evaluation are expected in January 2001.

## **BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT**

### **Breakthroughs**

- Continued activities to complete the proposed FY **2002** conversion of indirect expenses to direct Environmental Management PBS budgeting. This conversion will support the movement of most infrastructure services into RL PBS, TP-13, Landlord Program. With this conversion we will be able to further optimize infrastructure services by integrating normal maintenance and operations with capital improvement projects.

### **Opportunities for Improvement**

- The Landlord Master Plan displays the development of basis of estimates, which will validate the baseline in the MYWP as Phase II planning activities continue.

## **UPCOMING ACTIVITIES**

- Complete Project **L-309**, “Replace Main Water Lines” in January **2001**. This Project completion was delayed from December due to the extended time required to release the As-Built drawings and the late invoicing of final project costs.
- Complete installation of a chlorine containment system for Project L-303, “**200** West Area Chlorine Mitigation” in March 2001.
- Issue Notice of Award for Fixed Price Construction for Project **L-298**, “Road Resurfacing” in April 2001.

### **FY TO DATE COST PERFORMANCE (\$M):**

	BCWP	ACWP	VARIANCE
Landlord	\$2.9	\$0.7	\$2.2

### **FY TO DATE SCHEDULE PERFORMANCE (\$M):**

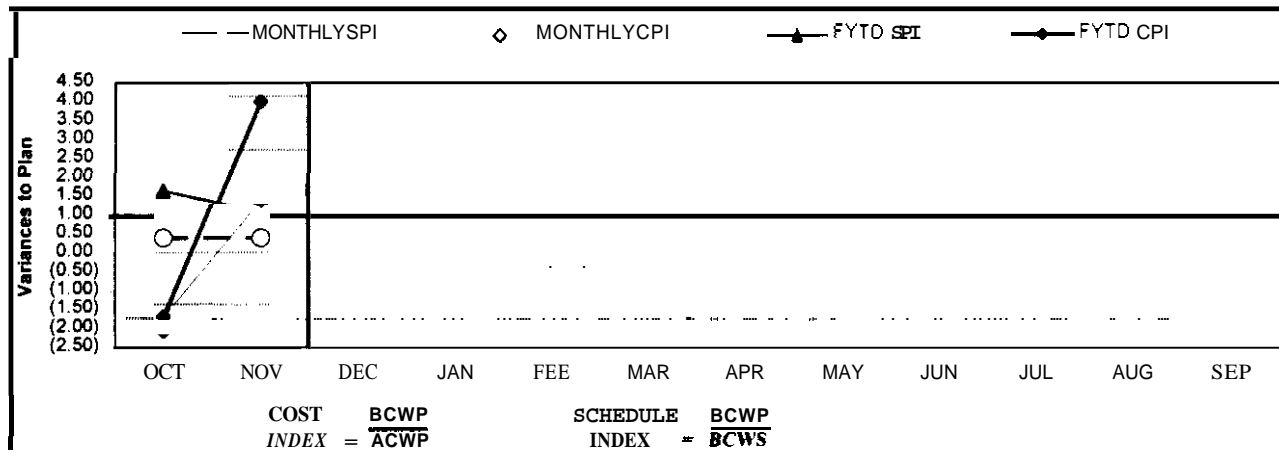
	BCWP	BCWS	VARIANCE
Landlord	\$2.9	\$2.7	\$0.2

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

		FYTD							
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM
PBS TP13	Landlord	\$ 2,709	\$ 2,941	\$ 737	\$ 232	9%	\$ 2,204	75%	\$ 20,283
WBS 1.5.1									
	<b>Total</b>	<b>\$ 2,709</b>	<b>\$ 2,941</b>	<b>\$ 737</b>	<b>\$ 232</b>	<b>9%</b>	<b>\$ 2,204</b>	<b>75%</b>	<b>\$ 20,283</b>

## COST/SCHEDULE PERFORMANCE INDICES (MONTHLY AND FYTD)

Green



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.00	0.00										
MONTHLY CPI	-2.06	1.00										
FYTD SPI	1.66	1.09										
FYTD CPI	-2.06	3.99										
MONTHLY BCWS	\$894	\$1,815	\$1,856	\$1,581	\$1,158	\$1,217	\$1,294	\$2,004	\$1,491	\$1,658	\$2,523	\$2,791
MONTHLY BCWP	\$1,484	\$1,457										
MONTHLY ACWP	(\$719)	\$1,456										
FYTD BCWS	\$894	\$2,709	\$4,565	\$6,147	\$7,304	\$8,521	\$9,815	\$11,819	\$13,310	\$14,968	\$17,492	\$20,283
FYTD BCWP	\$1,484	\$2,941										
FYTD ACWP	(\$719)	\$737										

### COST VARIANCE ANALYSIS: (+\$2.2M)

#### WBS/PBS

#### Title

#### 1.5.1/TP-13

#### Landlord

**Description/Cause:** The favorable cost variance is mainly attributed to accruals for carryover projects being understated in November. It affected several releases under the FFS Contract #5289. Also, an accrual reversal of \$958K for the Department of Interior and Department of Fish and Wildlife for the 24 Command Wildland fire.

**Impact:** No impact to overall project and/or final cost.

**Corrective Action:** The accruals will be corrected in December.

### SCHEDULE VARIANCE ANALYSIS: (+\$0.2M)

#### WBS/PBS

#### Title

#### 1.5.1/TP13

#### Landlord

**Description/Cause:** The favorable schedule variance is attributed to road refurbishments being completed sooner than planned due to good weather conditions. Construction for Project L-270,

DOE/RL-2000-76, Rev. 1

Landlord

H: 5



**PHMC Environmental Management Performance Report – January 2001**  
**Section H-Landlord**

“Emergency Services Renovation,” is ahead of schedule due to favorable weather conditions

**Impact:** No impact to overall project and/or final cost.

**Corrective Action:** The difference in BCWS will be made up in December/January.

## ISSUES

Nothing to report at this time

## BASLINE CHANGE REQUESTS CURRENTLY IN PROCESS (\$000)

PROJECT CHANCE NUMBER	DATE ORIGIN.	BCR TITLE	COST IMPACT SOW	S C H	E C H	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
FH-2001-002	9/25/00	FY2001 Fee Reduction to 90%	(\$107)						At DOE-RL.
LPM-2001-002	12/21/00	Add One RL Milestone and Modify the Date of Another		X					At FH for signature.

## MILESTONE ACHIEVEMENT

**Green**

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	0	0	0	0	0	0	0	0
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	0	0	0	10	2	0	12
<b>Total Project</b>	0	0	0	0	10	2	0	12

## MILESTONE EXCEPTION REPORT

**Number/WBS Level**

**Milestone Title**

**Baseline  
Date**

**Forecast  
Date**

**OVERDUE – 0**

**FORECAST LATE – 0**

## PERFORMANCE OBJECTIVES

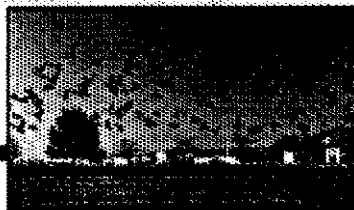
The items listed below are not Performance Incentives. They are performance goals (i.e., milestones and goals between FH and the subcontractor).

Outcome	Performance Goals	Status
<b>Restore the River Corridor for Multiple Uses &amp; Transition the Central Plateau</b>	Project L-276, “Emergency Services Equipment Bay Renovation,” GPP to renovate and expand the 200 Area Fire Station Equipment Bay Facility (609A).	Task order to prepare Definitive Design (DD) and construction bid package was approved and issued to FFS to start DD on December 5. The DD effort will complete in February 2001 to support award of a fixed price construction contract May 2001.
	Project L-339, “PFP Water System Isolation- Install Sanitary Water to WRAP,” GPP to install a water bypass line around PFP to resolve cross contamination issues with the 200 West Area potable water system.	Draft Project Execution Plan/Technical Baseline Document (PEP/TBD) was issued by FFS on December 5 for review. The DD effort is ongoing to support DD completion by April 20, 2001 (RL Milestone LLP-01-530).
	Project L-340, “Install PFP Backflow Preventors” Capital Small Project to install backflow Preventors on the two main potable water lines to PFP to resolve cross contamination issues.	Task Order was issued to FFS on November 9 to initiate DD activities. Draft PEP/TBD was issued on December 5 for review. DD effort is ongoing to complete by March 16, 2001 and to complete construction on an accelerated basis by June 30, 2001 (RL Milestone LLP-01-555).
	Project L-348, “Fire Damaged 222S Septic System (2607-W6) Replacement,” Expense Small Project to repair/replace the 222S Septic System severely damaged by the June 2000 fire on the Hanford Site.	FFS was authorized to initiate DD for this project on October 31 to support construction completion by June 30, 2001. The 60 percent DD package was issued by FFS on December 11 for review.
	Complete <b>Emergency Services renovation</b> of the 200 Area Fire Station.	The main focus at this time is the finishing work in the new Dispatch Area, so this area can become operational in mid-January 2001.
	Shutdown approximately 20 vacant office facilities and deactivate 20 vacant facilities.	Approximately 20 vacant facilities are in the Surveillance and Maintenance (S&M) status, two have been shutdown, and six have been deactivated.
	Capital Equipment replacement purchases of a <b>Fire Engine Pumper Truck, Electrical Utilities Truck</b> , and a 33-Ton Crane.	<b>Vendor quote was placed on November 15 on the</b> Fire Engine Pumper Truck for delivery in September 2001. Expect to place order with a vendor for the 33-Ton Crane in January 2001. Electrical Utilities Truck procurement was placed with the vendor on August 11 and delivery is scheduled for mid-April 2001.
Put Assets to Work for the Future	Disposition One Well Car and one Auger Drill Truck, and S&M of the 212R rail siding where the majority of the remaining regulated rail cars are staged for future disposition.	The initiation of the disposition of the Auger Truck has been placed on hold pending funding reductions. The disposition of the Tall Well Car has been initiated to support the shipment of the Tall Well Car in March 2001.



## **KEY INTEGRATION ACTIVITIES**

- Developed a Long Range Infrastructure Plan, which identifies critical infrastructure projects needed to support the Site's mission needs. Planning and integration meetings were held with Site programs to fully understand and integrate their requirements. The information contained in the Long Range Infrastructure Plan was later requested by RL in the form of a Schedule Options Study for Site Infrastructure, and DOE-HQ in the form of an Infrastructure Restoration Plan.
- Supported the Office of Environmental Management (EM) in reviewing infrastructure budget and policy issues as part of the Infrastructure Life Extension Campaign. The effort might result in an addendum to EM's FY 2002 budget request to the Office of Management and Budget.



# **Section I**

## ***support***

### **PROJECT MANAGERS**

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<b>SSE</b>	W.W. Ballard, RL	(509) 376-6657
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<b>ECP</b>	S.H. Wisness, RL	(509) 373-9337
	J.W. Hales, FH	(509) 376-4069
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## SUMMARY

Mission Support, Project Baseline Summary (PBS) OTOL, consists of four sub-projects:

- Planning and Integration [Work Breakdown]
- Structure (WBS 1.8.2.1)]
- Systems Engineering (WBS 1.8.2.2)
- Environmental Compliance (WBS 1.8.2.3)
  - The Environmental Compliance Program is composed of two elements. These two elements were stand-alone programs known as the Hanford Environmental Management Program (HEMP) and the Effluent and Environmental Monitoring Program (EEM) prior to FY99. Although there is a single program, these elements retain their identity on the Integrated Priority List as two separate Units of Analysis.
- Public Safety and Resource Protection (WBS 1.8.2.4)

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of November 30,2000. All other information is as of December 17,2000 unless otherwise noted.

## Project Controls

**FY 2002 IPABS Update** — The IPABS limited update for the FY 2002 budget request to Congress is due on January 10,2001, with split deliverables (TBD) due to DOE-HQ on January 12 and 19,2000. IPABS was open for input on December 20,2000, and the DOE-HQ "how to use the system" guidance was available on that same date. DOE-HQ will issue the Budget Authority targets for the deliverable. Typically, the January IPABS deliverable has been a limited two-year update. However, due to FH's planned conversion to the new Outcomes-based PBS structure in early January, FH will provide full life cycle data in the new PBS structure, and FY 2001 final data in the current PBS structure. The FY 2001 data will become the basis for EM Management Commitments with DOE-HQ, and then between DOE-HQ and Congress.

**Multi Year Work Plan (MYWJP) Phase II Cost Baseline Exhibits** — New cost baseline exhibits have been developed for the Project Execution Reporting Module (PERM) to support the Phase II MYWP and are currently in test. These exhibits allow for formula calculation of escalation and fee amounts over the life cycle of the project baseline. The Phase II Baseline Updating Guidance (BUG) directs these exhibits to display to level five of the restructured FY 2002 Outcomes-based Work Breakdown Structure (WBS). Further modifications to these exhibits are necessary to comply with the guidance; detailed specifications are forthcoming from RL Mission Planning Division (MPD) pending contract re-negotiations.

**MYWJP Summary Schedule Product** — Based on discussions with RL/MPD, an effort was initiated to develop an off-line schedule, which is now tentatively due for delivery to RL on January 10,2001. This summary schedule will be developed using the Projects' detailed schedules and summarizing them to the fourth level of the FY 2002 WBS as provided by RL in November. A code value was developed for summarizing data, and provided to project personnel to code their

existing schedule detailed activities. Completion of this product will depend on the update (rephrasing) of Project detail schedule activities reflecting final decisions concerning the RL Preferred Schedule Option.

**Safeguards and Security (SAS)** — DOE-HQ has given final direction to make **SAS** a DOE-HQ direct-funded National Program within the Environmental Management (EM) Program.

**Support for RL Integrated Science and Technology (S&T) Plan** — Project Controls and Technology Management are supporting the activities to provide a Site perspective on major challenges impacting the cleanup mission. This is a Site-wide S&T planning effort initiated following a recent DOE-HQ/EM-50 visit to the Hanford Site. The intent is to provide a Site integrated view of opportunities for application of S&T that are inherent in the current path forward for cleanup. A working session was held with the Regulators, on December 13, 2000 to review this activity. A draft of the Site plan is targeted for completion in the January/February 2001 time frame.

**Project Controls Leadership Forum** — The Project Controls group held its initial site-wide Leadership Forum on November 30, 2000. Primary and alternate Points of Contact (POCs) representing each of the major site organizations were in attendance. The intent of the forum is to improve communications via consistent and timely dissemination of information to all Project Controls personnel on site, facilitate the bonding of all Project Controls staff as a single site-wide organization, and initiate joint effort on Project Controls issues where opportunities for improvement exist.

The Project Controls Charter was distributed, and reads as follows:

*Project Controls is responsible to Project Management for the creation and maintenance of cost and schedule plans for defined scopes of work. Project Controls is also responsible for the analysis, forecasting, and reporting of performance against cost and schedule plans.*

Topics of information additionally shared and discussed included:

- Site-wide Project Controls staffing (as compared to the March 2000 Tim D. Martin benchmarking study)
- Results of the Draft Fiscal Year (FY) 2002 life cycle submittal
- Expected RL review process; the limited FY 2002 update and the FY 2003 Budget Development plan
- Outline of the new Cost Control and Reporting requirements
- New requirements for coding of detail schedules and life cycle cost loads in P3
- HANDI reporting enhancements
- Training plans for FY 2001 (inclusive of training currently available).

**Performance Management Meetings** — November's Performance Management Meetings (PMMs). summarizing FH's FY 2000 performance, were held as scheduled. Due to overriding priorities associated with the FH contract extension negotiations, the December PMMs addressing "The River," "The Plateau," and the "PHMC Services, Support and Comprehensive

## **PHMC Environmental Management Performance Report –January 2001**

### **Section I –Mission Support**

Performance Incentives” were all cancelled. Cancellation notwithstanding, the pre-meeting handout materials were distributed to all invitees as planned.

**Environmental Management Performance Report (EMPR)** — The November EMPR was delivered on schedule on Friday, November 10,2000. This Report, documenting FY 2000/Year-End performance, included summaries of each Project’s accomplishments for FY 2000, as well as a list of FH’s overall “Top Five” accomplishments. To add focus to each accomplishment, they were individually categorized into one of three groups: *Momentum*, *Progress*, and *Completion and Removal*.

The December EMPR is currently in its final review cycle, and on schedule for delivery on December 20,2000.

**Business Management Oversight Process (BMOP) Status** — Due to other priorities within RL Analysis and Evaluation Division, a January 2001 release date is anticipated for the reissue of the final FY 2001 BMOP expectations document. Final comments/changes to the document are currently being reviewed.

**Performance Execution and Reporting Module (PERM) Status** — Documenting FH’s September FY 2000/Year End performance data, the electronic batch feed to the DOE-HQ Integrated Planning and Budgeting System-Project Execution Module (IPABS-PEM) was made on November 3, 2000, on schedule. After transmittal, the PERM dataset was rolled over to accommodate the collection of FY 2001 data. October 2001 performance data was subsequently sent to DOE-HQ on November 24,2000. November’s performance data will be due to DOE-HQ on December 27,2000.

## **Systems Engineering and Integration (SE&I)**

Systems Integration provided support to: the Chemical Management Program to determine if PassPort had the capabilities to manage chemical inventory data at Hanford; the River Corridor Accelerated Deactivation efforts; and to the development of the RL Scorecard Metrics. Systems Integration is developing the Interface Management Process (including known ICDs and MOUs) and Core Processes.

## **Environmental Compliance Program (ECP)**

On December 1 Washington Department of Health (WDOH) issued its temporary approval to RL to operate the present configuration of the Canister Storage Building (CSB) air handling system. Within this approval letter, WDOH requested that by January 29,2001 information pertaining to training requirements, personnel required to be trained, training instructors and their qualifications, and procedures specific to assuring conformance with American Society of Mechanical Engineers/American National Standards Institute (ASME/ANSI) standards contained in WDOH approvals be provided. RL Regulatory Compliance and Analysis held a meeting on December 7 with contractor staff to determine how to address this request. At the December 5, Routine Technical Assistance Meeting with WDOH, it was stated that a future WDOH

expectation for Notice of Construction (NOC) applications is that they spell out which ASME/ANSI standards we intend to comply with, and which we do not consider applicable and why. Up until now our applications have simply said we will comply with applicable standards. This newly stated expectation is a result of the ASME/ANSI conformance issues at the CSB.

On December 12, 2000 additional talks were held in Lacey with senior management from Ecology and DOE to discuss issues associated with Land Disposal Restrictions (LDR) compliance. DOE and Ecology legal counsels are deposing Ecology and Hanford site employees to support parallel pending litigation. Ecology plans on issuing the revision to the Permit incorporating Modification E by the end of January 2001. Ecology recently requested to have further discussions on the waste analysis plan (WAP) for the 222-S Laboratory Complex (submitted in Modification F) to be consistent with WAPs contained in Modification E. DOE and the contractors are disappointed in Ecology's request, since one year was spent negotiating the 222-S Laboratory Complex WAP with Ecology before the August submittal of the permit application.

The first Site Wide Monthly Ecology Compliance Inspector, RL and Contractor Environmental Forum was held on November 22, 2000. This is a forum for the regulators and the regulated to discuss requirements and compliance interpretations.

Preparation of the calendar year 2000 Hanford **Site** Tier Two Emergency and Hazardous Chemical Inventory has begun. Facility contacts were confirmed on November **17, 2000**. A call letter was prepared and transmitted to facility/project managers and ECOs on November 20, **2000**.

The environmental monitoring schedule for calendar year 2001 has been prepared. This schedule includes all sample collection for ambient air, soil, vegetation, and thermo luminescent dosimeters (TLDs).

Meetings were conducted with PNNL and BHI to discuss the preparations for the upcoming 2000 Dangerous Waste Report (DWR). **The** schedule **for** preparing the DWR was reviewed including important tasks and scheduled completion dates. Contractors were asked to consult with their management chain to identify the managers responsible for certifying the completeness and accuracy of the DWR. A review of **the** certification process was made and discussed.

Nearly 180 Hanford Site and regulator staff attended the RCRA refresher training presented by HAMMER and McCoy and Associates on December **5-7, 2000**. The course presents **all** aspects of RCRA, including land disposal restrictions. McCoy's training is considered premier in the industry.

## **Public Safety and Resource Protection (PSRP)**

Nothing to report at this time.



## **ACCOMPLISHMENTS**

### **Project Controls**

- The deliverable, Add FY 2000 Completed Performance Measures into IPABS was accomplished on November 21, 2000.
- The deliverable, Submit Preliminary FY 2003 OMB A-11, Part B crosscuts was delivered on November 15, 2000 as scheduled.
- The deliverable, Monthly EMPR was delivered on November 6, 2000 as scheduled.
- The deliverable, Provide data feed for EMPR/PHMC/DSMMR via PEM for October was completed on November 26, 2000.

### **Systems Engineering and Integration**

Nothing to report at this time

### **Environmental Compliance**

#### **Air Compliance**

- Management and integration support was provided on the asbestos site wide program in billing verification and tracking asbestos Notice of Intent (NOI) approvals for the site contractors, including contact with the Benton Clean Air Authority (BCAA). A call for site wide facility input (pursuant to WMP-GD-ES-401) was compiled for incorporation into the annual asbestos notification of intent. This action will satisfy completion of an ECP milestone due to the BCAA December 31, 2000.
- Coordination support was provided during the November, December and January Ecology Air technical assistance visits. An Ecology air technical assistance visit was conducted within the 300 Area (FH -River Corridor Project) during November. There were no compliance issues identified.

#### **Inspections/Assessments**

- The following regulatory inspection/assessment was provided during this report period
  - 11/13 • FFTF Follow-up inspection
  - 11/10 - Ecology Follow-up Inspection of WSCF
  - 2/4 - Groundwater Sampling Event (Ecology) of T, TX, and TY Farm
  - 12/4 • WDOH Inspection of WSCF
  - 11/30 • Tour of CSB, CVDF, and 100 KW Basin (Ecology Compliance Inspectors)
  - PFP Stack Investigation

### **Project Support (ECP funded)**

- Fieldwork was completed for 222-S Polychlorinated Biphenyl (PCB) compliance assessment. A draft report was submitted for review.
- The Analytical Services Provider (ASP) Environmental Center of Expertise member requested that a white paper be developed on the waste designation and land disposal restriction approach at the 222-S Laboratory Complex. The white paper was prepared, and issues were resolved between ASP and the Waste Services organization in the Waste Management Project. The white paper developed into a 2-page decision document signed by ASP, Environmental Services, and FH counsel.
- HNF-PRO-459, Environmental Training, Revision 3 was issued. After months of integrating Dangerous Waste Training Plan (DWTP) needs with HNF-PRO-459 text, the procedure was issued. Project Managers will need to draft new DWTPs according to a schedule determined by the Environmental Center of Expertise member for each project/service provider. A DWTP template was also prepared in order to ensure that new DWTPs are prepared in accordance with HNF-PRO-459. In addition, the Facility Emergency and Hazard Information Checklist (FEHIC) on Site Forms have been revised consistent with the HNF-PRO-459 revision.
- The 200 Area Liquid Waste Processing Facilities Environmental Compliance Officer requested Environmental Services prepare a RCRA permit modification package for the 242-A Evaporator Waste Analysis Plan and to their Building Emergency Plans. The package has been prepared after receiving comments from Ecology.
- Several facility visits were conducted to inspect PCB storage areas and review PCB inspection files. An assessment-working file was assembled in accordance with WMP-GD-ES-101.

### **Environmental Notifications and Reporting**

- Regulatory reporting was coordinated for seven (7) non-reportable releases of a hazardous substance and/or a petroleum product released to the environment. All of these releases were cleaned up and disposed of per state and federal requirements. There were no reportable events with a release to the environment. The FH Environmental SPOC reported Eight (8) reportable code non-compliance events and one (1) informational call directly to the regulators.

### **RCRA Permit**

- Milestone ECP-01-303, Quarterly Class 1 Modifications to the Hanford Facility RCRA Permit was completed on December 13, 2000 more than two weeks ahead of the January 2, 2001 due date.
- In response to an Ecology request, Hanford RCRA Permit Modification Notification Forms

**PHMC Environmental Management Performance Report - January 2001**  
**Section I - Mission Support**

were completed for changes incorporated into the General Information Portion (DOEIRL-91-28, Rev.5) of the HF RCRA Permit. The modification forms were submitted on November 27 in response to Ecology's request. The General Information Portion was submitted last August as part of the Class 3 Permit Modification F package. Ecology requested these forms to support their completeness review of documentation supporting Modification F.

- Tentative agreement has been reached with Ecology on changes to the Corrective Action Permit language of the HF RCRA Permit, Dangerous Waste Portion.
- The triennial update of DOE/RL 88-21 *Hanford Facility Dangerous Waste Part A Permit Application* was prepared and transmitted.

**Air & Water Program**

- The monthly Discharge Monitoring Report for October 2000 was transmitted to the Director, Office of Water, EPA Region 10 (with copies to Ecology and RL) as required by the site-wide NPDES Permit.
- The final draft of the Class V Underground Injection Control Well (UIC) Registration was provided for review to all prime contractors on December 12, 2000.
- Environmental Services staff attended a three-day course on the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) class from November 26 to November 28, 2000.
- The Federal Facility Data Quality Review (an EPA database on Internet, listing all non-compliances, inspections etc.) was reviewed for Clean Water Act issues and these issues were tabulated.
- The State Waste Discharge Permit ST-4501 renewal application, for FFTF was reviewed

**NEPA**

- On November 16, 2000, an Environmental Assessment (EA) determination approval letter was received from the DOE-RL Manager for K Basins sludge storage at the 221-T Building. On December 4, 2000, the EA #1369 was received from DOE HQ and assigned to the Draft EA for K Basins sludge storage at 221-T Building, on the Hanford Site.

**Chemical Management**

- The Web page for the Chemical Management Program (<http://www.rl.gov/cml?/>) is being revised to include the Facility Vulnerability Assessment. The current status of the Chemical Management Program can be found on the Web page in the Newsletter, which is posted there every other week. Chemical criteria have been added to the page, and interim documentation/guidance is in preparation. Both of these topics will be listed under the

overall heading of "Guidance."

- The conversion of HNF-PRO-2258, "Chemical Management," to a Requirements Document (RD) is in progress. This document will address the various elements of the Chemical Management Program (CMP), and will list the drivers, the procedures that implement the CMP elements, and the roles and responsibilities of those involved.

## **PUBLIC SAFETY AND RESOURCE PROTECTION (PSRP)**

- Several Surface Environmental Surveillance Project (SESP) staff participated in the Bioassay, Analytical and Environmental Radiochemistry (BAER) Conference held in Seattle, WA, November 12-17. Project staff member B.M. Gillespie was instrumental in the planning, organization and administration of the conference. Additionally, two oral presentations and one poster presentation were given that involved SESP staff as indicated below.
  - *"Hanford Range Fire 2000 - Monitoring Challenges and Public Assurance Issues"* November 13, 2000, T.M. Poston and B.M. Gillespie.
  - *"Relationship of Tritium in Milk and Groundwater Around the Hanford Site"* November 16, 2000, T.M. Poston, M.L. Wright, and D.J. Vanni.
  - *"Measurement of Tritium in Gas Phase Soil Moisture and Helium-3 in Soil Gas at the Hanford Town site and 100-K Area"* Olsen, K.B., G. W. Patton, P.E. Dresel, J.C. Evans, and R. Poreda.
- A presentation was made to the Hanford Natural Resources Trustees Council on November 17 discussing the potential effects of strontium-90 releases into the Columbia River at the 100-N Area.
  - *"Risk of Sr-90 to Salmon in the Hanford Reach 100-N Springs"* T.M. Poston.
- Program staff reviewed and redrafted pertinent sections of the *Site Environmental Monitoring Plan* during November. Sections were reviewed and the document was published and distributed on November 15, completing RL Milestone RL-OT01-4103 fifteen (15) days ahead of schedule.
- The Cultural Resources Project completed the revision of the Hanford Cultural Resources Management Plan during November. It is now being duplicated and 40 copies will be delivered to DOE-RL for distribution to external reviewers during the December/January timeframe.

## **ISMS STATUS**

Nothing to report at this time.

## **BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT**

Nothing to report at this time.

## **UPCOMING ACTIVITIES**

- The Annual Benton County Air Authority (BCAA) Asbestos Notification is due December 31, 2000.
- Ecology has again delayed issuance of Modification E of the Hanford Facility RCRA Permit (will incorporate WRAP and CWC units), and is now projecting this will occur after January 1, 2001. It has been proposed to Ecology that some of the positive permitting agreements that came out of the recent 222-S Part B Permit application workshops be considered in permit conditions prepared for Modification E. To date, Ecology has stated it will consider only the 222-S agreements in finalizing Modification E.
- The Quarterly RCRA Permit Class I Modification Notification is due January 2, 2001.
- Work is in progress on the next Quarterly NESHAP Status Report, which is due on January 29, 2001. Efforts have also been initiated on the CY 2000 Hanford Site Annual Dangerous Waste Report and the CY 2000 EPCRA Tier II Emergency & Hazardous Chemical Inventory Report; both reports are due to RL on February 21, 2001.
- The Annual Dangerous Wastes Reports and Tier II Emergency and Hazardous Chemical Inventories are due February 21, 2001.
- Environmental Services will compile hazardous chemical information from the Hanford facilities to prepare the Tier Two Emergency and Hazardous Chemical Inventory Report, which is due February 21, 2001 (Milestone ECP-01-501).
- Environmental Services will compile the dangerous waste generation and Waste Management activities on site for the Hanford Annual Dangerous Waste Reports, which are due February 21, 2001 (Milestone ECP-01-503).
- The annual Surface Environmental Surveillance Project design review process has been initiated and will culminate with the revision and distribution of the "CY 2000 Hanford Site Environmental Surveillance Master Sampling Schedule" by the end of February 2001.
- The annual SESP design review process has been initiated and will culminate with the revision and distribution of the "CY 2000 Hanford Site Environmental Surveillance Master Sampling Schedule" by the end of February 2001.
- Summaries of CY 2000 Biodiversity Plot Monitoring Data and the Sage Brush Die-Off observed during the previous fiscal year will be completed during March 2001.
- The annual "Climatological Data Summary Report for CY 2000" is scheduled for completion and distribution by the end of May 2001.
- The annual *Climatological Data Summary Report for CY 2000* is scheduled for completion and distribution by the end of May 2001.

## **FY TO DATE C o n PERFORMANCE (M):**

	<b>BCWP</b>	<b>ACWP</b>	<b>VARIANCE</b>
<b>Mission Support 18</b>	\$3.4	\$3.4	\$0.0

The cost variance is insignificant.

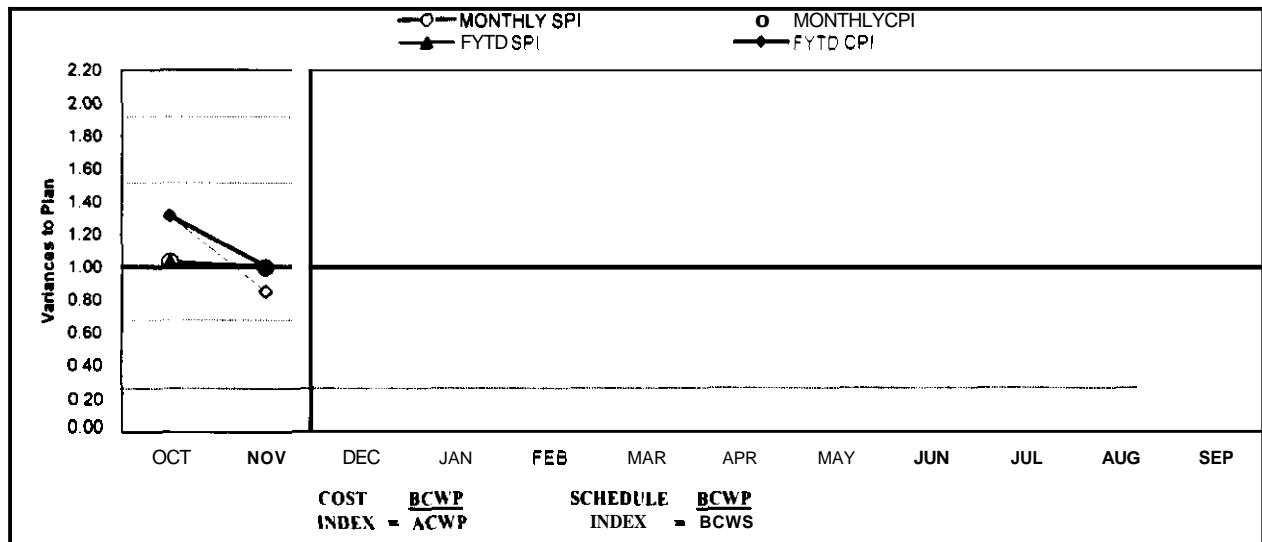
## FY TO DATE SCHEDULE PERFORMANCE (M):

	BCWP	BCWS	VARIANCE
Mission Support 1.8	\$3.4	\$3.4	\$0.0

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

		FYTD							
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM
PBS OTOI	Mission Support Other MYPs	\$ 3,403	\$ 3,436	\$3,427	\$ 33	1.0%	\$ 9	0.27%	\$24.137
WBS 1.8.2									
Total		\$ 3,403	\$3,436	\$3,427	\$ 33	1.0%	\$ 9	0.27%	\$24,137

## COST/SCHEDULE PERFORMANCE INDICES (MONTHLY AND FYTD)



FY 2001	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	1.03	0.99										
MONTHLY CPI	1.31	0.85										
FYTD SPI	1.03	1.01										
FYTD CPI	1.31	1.00										
MONTHLY BCWS	\$1,435	\$1,968	\$1,940	\$2,026	\$1,842	\$2,022	\$2,113	\$2,378	\$1,901	\$1,922	\$2,227	\$2,363
MONTHLY BCWP	\$1,482	\$1,954										
MONTHLY ACWP	\$1,131	\$2,296										
FYTD BCWS	\$1,435	\$3,403	\$5,343	\$7,370	\$9,212	\$11,234	\$13,348	\$15,725	\$17,626	\$19,548	\$21,774	\$24,137
FYTD BCWP	\$1,482	\$3,436										
FYTD ACWP	\$1,131	\$3,427										

## C o n V A R I A N C E A N A L Y S I S : ( \$ 0 . 0 M )

**WBS/PBS****Title****1.8.2/OT01****Mission Support****Description/Cause:** There is no reportable cost variance this month.**Impact:** No impact.**Corrective Action:** No corrective action required.

## S C H E D U L E V A R I A N C E A N A L Y S I S : ( \$ 0 . 0 M )

**WBS/PBS****Title****1.8.2/OT01****Mission Support****Description/Cause:** There is no reportable schedule variance this month.**Impact:** No impact.**Corrective Action:** No corrective action required.

## I S S U E S

**Reconciliation of FH Project Cost Baselines:** Inconsistencies were found while reconciling Program Baseline Summary (PBS) Life Cycle Cost Baselines reflected in the DOE-HQ Integrated Planning and Budgeting System (IPABS) with baselines provided in the RL Summary Schedule. It became apparent that some increased discipline is needed to maintain life cycle baselines consistent with approved baseline changes.

**Impact:** The inconsistencies hamper FH Project Controls in providing DOE-HQ with accurate baseline data in support of the proposed PBS restructure.

**Corrective Action/Status:** The Project Controls Leadership Forum met on November 30, 2000. When MYWP, Phase 2 Updates are completed for life cycle baselines, the reconciliation will be complete. Ongoing reviews will be conducted to ensure consistency.

**Funding Disconnect to Fiscal Year (FY) 2002 Work Plans:** FH is in the process of developing work plans for FY 2002 and beyond that incorporate the revised strategy, which focuses on completion of work on the river corridor by 2012.

**Impact:** A roll-up of this new plan resulted in an estimated \$54 million higher than projected funding in FY 2002. Cost drivers are:

- Repricing that reflects labor rates, employee benefits costs, and fee amounts \$16.1 million higher than the previous estimate,
- Scope growth and additions of \$14.5 million,
- Work scope not funded in 2001 rolling into 2002 for \$12.4 million,
- Other costs of \$11.0 million.

**Corrective Action/Status:** FH is working to resolve this disconnect. Potential solutions include restoration of funding in 2001 to complete some deferred work, a change of schedule to move out work scope, deletion of low value scope, and truing up to new contract strategies.

**Extension of FY 2001 MYWP Phase II Deliverables Due Dates:** On December 4, 2000, the informal version of Amendment 1 of the Phase II BUG was provided (i.e., not via formal transmission through FH Contracts). The Amendment identified an extension of the due date for meeting the Comprehensive Performance Incentive (PI) deliverables associated with the MYWPs Phase II (in both the current and revised WBS/Project Baseline Summary [PBS] structure) from December 15, 2000, until January 10, 2001.

**Impact:** As the Amendment (and the extension of the PI due date) has not yet been formalized through the FH Contracts organization; FH is now in jeopardy of missing the December 15, 2000 deliverables' due date.

**Corrective Action/Status:** FH Project Controls personnel are working with RL/MPD staff to analyze the reasons for the increases and a path forward. Proposals for rephasing were requested for Preferred Schedule Option Case team to review.

**IPABS Budget Authority Deliverable Due January 10, 2001:** The Integrated Planning and Budgeting System (IPABS) Budget Authority (BA) targets will not be received until January 2, 2001, or later from DOE-HQ, but the associated BA deliverable is due by January 10, 2001. FH planned to meet this deliverable by electronically providing the MYWP Phase II data.

**Impact:** However, if the DOE-HQ BA guidance differs significantly from what will be provided in the MYWP Phase II data, the PBS owners will have an extremely short turnaround (at most six working days) to manually update IPABS (BA, metrics, technical, milestones, etc.).

**Corrective Action/Status:** FH staff is preparing the data as much as possible, and developing approaches for data linkages to ensure the target date can be met.

**PSRP Baseline:** PS&RPP staff are addressing adjustments to the FY 2001 budget based on a labor rate reprice, potential FY 2000 carryover and supplemental funding for tire recovery, and a potential **DOE-HQ tax**.

**Impact:** These adjustments may result in some **loss of** scope from the program.

**Corrective Action/Status:** Once the re-pricing is completed and potential funding adjustments are finalized, the revised scope and cost estimates will be forwarded to DOE-RL.



## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS (\$000)

PROJECT CHANGE NUMBER	DATE ORIGIN	BCR TITLE	FY00 COST IMPACT \$000	CH	TECH	DATE TO CCB	CCB APPROVAL	RL APPROVAL	CURRENT STATUS
SPI-2000-008	7/28/00	Baseline Modifications to Support FY 2001 MYWP Update							In Progress
SSE-2000-002	10/18/99	FY 99 Carryover							RWOA-F
SSE-2000-004	7/26/00	FY 2000 to FY 2001 BCR							In Progress
ECP-2000-003	12/15/00	Utilization of ECP FY - 99 Uncoated Carryover	\$449						RWOA-F
FH-2001-001	9/12/00	Base Ops Reduction for PHMC Projects	-\$535		X				Draft Prepared
FH-2001-002	9/25/00	FY2001 Fee Reduction to 90%	-\$129						Draft Prepared
PSR-2000-003	8/17/00	Revise Cultural resources Baseline to delete Scope due to Holdback of Funding for DOE-RL Intern	-\$50			08/22/00	08/22/00		In Progress
ADVANCE WORK			AUTHOR	REVISIONS					
		Nothing to report.							

## 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	0	0	0	0	0	0	0	0
DOE-HQ	0	0	0	0	0	0	0	0
RL	1	0	0	0	0	6	0	7
<b>Total Project</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>7</b>

Only TPA/EA milestones and all FY 2001 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 FY 2001 TPA/EA milestone achievement and a Milestone Exception Report follows.

<b>FY 2001 Tri-Party Agreement / EA Milestones</b>			
Number	Milestone Title	Baseline Date	Actual Completion Date/Status
ECP-01-901	Issue Quarterly NESHAP Status Report to RL for EPA	10/20/2000	10/17/2000
ECP-01-902	Issue Quarterly NESHAP Status Report to RL for EPA	1/29/2001	
ECP-01-904	Issue Quarterly NESHAP Status Report to RL for EPA	4/2/2001	
	for EPA		
<b>DNFSB Commitments</b>			
	Nothing to report at this time.		

## **MILESTONE EXCEPTION REPORT**

Nothing to report at this time.

## **PERFORMANCE OBJECTIVES**

Nothing to report at this time.

## **KEY INTEGRATION ACTIVITIES**

Specific components of the PS&RP Program are identified as a critical core project within the Groundwater/Vadose Zone Integration Project. As such, key activities relevant to both programs were integrated into FY 2001 detailed work plans as appropriate.



# **Section J**

## ***National Programs***

## **SUMMARY**

DOE EM is responsible for a variety of National Programs. DOE-HQ typically provides operations policy and programmatic guidance to one or more field office that serve as lead for individual programs. FH currently supports the following National Programs: Transportation and Packaging (PBS OT02) and Pollution Prevention and Waste Minimization (PBS WM07).

Transportation and Packaging provides full-service transportation and packaging capabilities. Packaging services for radioactive and hazardous cargo is provided, including regulatory safety-basis documentation, certification, and licensing. Packaging plans and logistical studies for major shipping campaigns are also provided, as well as approved training courses in transportation safety and waste management. Transportation and traffic logistics management, engineering and operational support to offsite customers, carrier selection and evaluation, automated transportation management systems used by the U.S. Department of Energy (DOE) complex and commercial vendors, and international transport of hazardous and radioactive packages are other services provided.

Pollution Prevention and Waste Minimization (P2/WMin) coordinates the development and implementation of a Hanford Site P2/WMin Program to comply with Federal, state, and DOE directives. The program's purpose is to achieve Site objectives through effective and efficient methodologies tailored to generator activities and operations.

## **ACCOMPLISHMENTS**

- A FH letter was issued completing Milestone YP2-01-002, Hanford Site Fiscal Year 2000 P2/WMin Final Goal Status. This was completed nine days early.
- Electronic input of the RL FY 2000 Annual Report of waste generation and pollution prevention progress was completed November 30, 2000, one month early. This signed copy will be transmitted to RL for submittal to SAIC on December 3, 2000.
- P2/WMin has initiated a P2/WMin project with JANTEC to reduce the quantity of junk mail received on site.
- The fourth quarter and FY waste avoidances for the year were verified for the RL P2/WMin Program Manager and the initial FY 2001 PHMC waste generation performance indicators for October were provided.

### **FY TO DATE Con PERFORMANCE (\$M):**

	<b>BCWP</b>	<b>ACWP</b>	<b>VARIANCE</b>
<b>National Programs</b>	\$0.5	\$0.2	\$0.3

The \$0.3 M (59 percent) favorable cost variance is mainly attributed to an accrual reversal in October.

### **FY TO DATE SCHEDULE PERFORMANCE (\$M):**

	<b>BCWP</b>	<b>BCWS</b>	<b>VARIANCE</b>
<b>National Programs</b>	\$0.5	\$0.5	\$0.0

### **FY 2001 Cost/SCHEDULE PERFORMANCE - ALL FUND TYPES** **CUMULATIVE TO DATE STATUS - (\$000)**

		<b>FYTD</b>							
<b>By PBS</b>		<b>BCWS</b>	<b>BCWP</b>	<b>ACWP</b>	<b>SV</b>	<b>%</b>	<b>CV</b>	<b>%</b>	<b>PEM</b>
<b>PBS OT02</b>	Transportation &	\$ 155	\$ 154	\$ (63)	\$ (1)	-	\$ 216	-	\$ 1,585
<b>WBS 1.11.1</b>	Packaging (RL 7601)								
<b>PBS WM07</b>	Waste Minimization	\$ 369	\$ 368	\$ 278	\$ (1)	0%	\$ 90	24%	\$ 2,136
<b>WBS 1.11.2</b>	(RLHQ 7770)								
<b>Total</b>		<b>\$ 523</b>	<b>\$ 522</b>	<b>\$ 216</b>	<b>\$ (1)</b>	<b>0%</b>	<b>\$ 306</b>	<b>59%</b>	<b>\$ 3,721</b>



**WBS/PBS**

### 1.11.1/OT02

**Description and Cause:** The favorable cost variance is due to an accrual reversal in October

**Corrective Action:** Nothing to report at this time.

## Pollution Prevention/Waste Minimization

**Description and Cause:** The favorable cost variance is due to staffing shortfall and various Return on Investment (ROI) projects behind the original plan.

**Impact:** None.

**Corrective Action:** Actuals will catch up to budget as ROI projects are completed.

**WBS/PBS**

## 1.11.1/OT02

**Description and Cause:** There is no schedule variance at this time.

**Impact:** None.

**Corrective Action:** Nothing to report at this time.



# Environmental Management Performance Report

January 2001



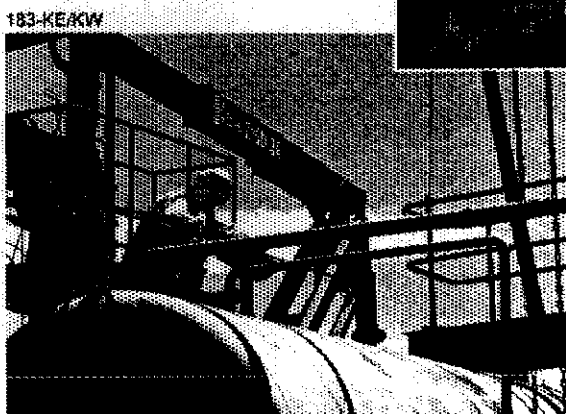
A chemical injection  
tanker used for ISRM



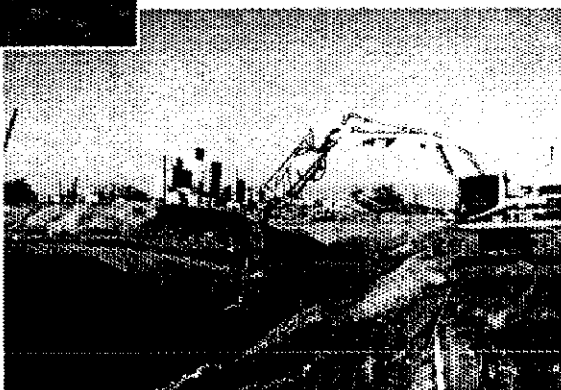
DR Reactor



Newly opened ERDF  
Cells #3 and #4



183-KE/KW



Concrete demolition at  
the 100 F Area

*Focused on Progress...*

*Focused on Outcomes!*

Financial/Performance Measures data as of monthend November  
All other data as of December 21 (unless otherwise noted)



Department of Energy  
Richland Operations Office



Bechtel Hanford, Inc.  
Environmental Restoration Contractor

E0101002.3



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
**ENVIRONMENTAL RESTORATION**  
**JANUARY 2001**

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# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

## INTRODUCTION

The monthly Environmental Restoration (ER) Environmental Management Performance Report consists of three sections: Section A - Executive Summary, Section B - Restoring the River Corridor Project Summaries, and Section C - Transitioning the Central Plateau Project Summaries. All cost, schedule, milestone commitments, performance measures, and safety data is current as of November 30. Accomplishments, Issues and Integration items are current as of December 21, unless otherwise noted.

**Section A – Executive Summary.** This section provides an executive level summary of Bechtel Hanford, Inc.'s (BHI) performance information for the current reporting month and is intended to bring to Management's attention that information considered to be most noteworthy. The Executive Summary begins with a description of notable accomplishments that are considered to have made the greatest contribution toward safe, timely, and cost-effective cleanup. Major commitments are summarized that encompass Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones, and FY01 Environmental Management (EM) corporate performance measures. Safety statistics are also included. Issues that require management and/or regulator attention and resolution status are addressed. Fiscal year-to-date ERC Project cost and schedule variance analysis is summarized. The Key Integration Activities section highlights site activities that cross contractor boundaries and demonstrates the shared value of working as a team to accomplish the work. The Executive Summary ends with a listing of major upcoming planned key events within a 90-day period.

**Section B – Restoring the River Corridor.** This section contains more detailed monthly activity information and performance status for the three projects within the 'Restoring the River Corridor' outcome. These three projects consist of the Remedial Action and Waste Disposal (RAWD) Project, Decommissioning Projects, and the Program Management and Support (PM&S) Project.

**Section C – Transitioning the Central Plateau.** This section contains more detailed monthly activity information and performance status for the two projects within the 'Transitioning the Central Plateau' outcome. These two projects consist of the Groundwater/Vadose Zone (GW/VZ) Integration Project and the Surveillance/Maintenance and Transition (SM&T) Projects.

Information in this report is identified with a green, yellow, or red text box used as an indicator of the overall status. Green indicates work or issue resolution is satisfactory and generally meets or exceeds requirements; yellow indicates that significant improvement is required; and red indicates unsatisfactory conditions requiring immediate corrective actions.

# **Section A: Executive Summary**

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
JANUARY 2001**

**SECTION A – EXECUTIVE SUMMARY**

Financial / Performance Measures data as of month-end November.  
All other data as of December 21, 2000 (unless otherwise noted).

**NOTABLE ACCOMPLISHMENTS:**

***RIVER CORRIDOR:***

*The first of several shipments of ion exchange modules was received From K Basins on November 28 and disposed in ERDF. The shipment was unloaded onto the floor of Cell #4 using a crane. Considerable cost savings will be realized compared to previous disposal methods.*

*The 100B/C Area pipeline remediation contract was awarded on November 28. A Tri-Party Agreement (TPA) change request is being prepared that will establish two new interim milestones for the start and completion dates for the 100B/C pipeline remediation workscope.*

*Remobilization activities were completed at the 100H Operable Unit on November 29 due to additional plumes encountered during confirmation sampling. Further excavation is required to remove 6,804 metric tons (7,500 tons) of additional waste.*

*The first draft Cleanup Verification Package (CVP) for the 100H Operable Unit was delivered to the regulators for review. This draft is the first CVP that incorporates a streamlined approach for regulator approval. If accepted, significant time and cost savings could be realized.*

*Removal of the cover panels from the 116-N-3 Crib progressed during November in the 100N Area, even though significantly higher radiation levels caused changes in remediation methodology. Demolition of the highly contaminated crib cover panels and concrete girder supports is being performed while buried under dirt, along with additional dust suppression, due to high contamination levels. Higher than expected contamination levels have resulted in revisions to the methods of demolition and removal of the crib components in order to achieve as low as reasonably achievable (ALARA) goals.*

*On November 30, the procurement package for the remediation of the J.A. Jones and 600-23 waste sites (near the Wye Barricade) was issued for bid proposals. A site walkdown and an amendment with clarifications were also completed. The contract was awarded on December 11 and contractor mobilization began.*

*Reactor ISS progressed at both F and DR Reactors. Preparations to begin pourbacks at both reactors in December are in progress. ISS design and removal of hazardous material continued at D and H Reactors*

*Removal of seven vessels within the 233-S Plutonium Concentration Facility is being accelerated from the outyears into FY01 and FY02. The total 15 vessels are now scheduled for removal by June. The project is being rebaselined to accommodate the new FY01-FY02 activities. A portion of the accelerated scope is an initiative challenge to be paid for through efficiencies accomplished when performing other ER work. Accelerating vessel removal will allow for completion of 233-S decommissioning approximately one year early and provide a significant dollar savings (the new completion date will be in late FY04).*

*A waste management/transportation workflow process with time and resource requirements was developed as part of the ERC effort to improve the efficiency for designating, packaging, and shipping of waste. This process improvement, using the Six Sigma productivity improvement methodology, will increase the overall ability of the ERC to manage a higher volume of waste while continuing to meet regulator/ deadlines and project schedules.*

Green

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
**ENVIRONMENTAL RESTORATION**  
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**NOTABLE ACCOMPLISHMENTS continued:**

*Work progressed in developing the ER Project Baseline Update (multiyear work plan). This update, originally planned for completion on December 15, is now planned to be complete by January 10, to incorporate DOE adjustments.*

**CENTRAL PLA TEAU:**

*The Groundwater/Vadose Zone (GW/VZ) Integration Project completed history matching on release models and the ecological risk assessment model for the System Assessment Capability (SAC) Rev. 0. This effort successfully demonstrated that the results predicted by SAC Rev. 0 were consistent with predictions made with past assessments. The models are now ready for use in the initial assessment.*

*The first phase of the In Situ Redox Manipulation (ISRM) Project was completed two months ahead of schedule on November 1, which satisfied completion of TPA Milestone M-16-27A (due December 31). Phase I included installing 16 wells and successfully injecting/withdrawing chemicals from ten of the wells.*

*Installation of the ten planned Resource Conservation and Recovery Act (RCRA) wells is nearing completion and is expected to be completed by December 31 to meet TPA Milestone M24-00L.*

*The soil gas/groundwater sample and analysis plan was revised regarding the tritium investigation of the 618-11 Burial Ground. Results were also received from the groundwater grab samples and are being evaluated.*

*All groundwater pump and treat systems operated above the planned 90% availability levels in November. Since system inception, the five pump and treat systems have processed over 4.5 billion liters of groundwater, removing approximately 4,812 kilograms of carbon tetrachloride, 208 kilograms of chromium, and 0.92 curies of strontium. Approximately 210 million liters of groundwater have been processed in FY01, removing approximately 230 kilograms of carbon tetrachloride, 14 kilograms of chromium, and 0.038 curies of strontium.*

*A TPA change package was approved by the regulators on November 6 that replaced the 200-PW4 operable unit work plan with the 200-PW-1 operable unit work plan, which has higher risk sites for carbon tetrachloride contamination.*

*Major roof repairs were completed at B Reactor. Repairs included sealing damaged roof sections, caulking joint cracks on the concrete panels, and isolating the supply ventilation ducting leading into the building. Ductwork was also sealed.*

*Interim stabilization activities were initiated at the 218-W-2A waste burial site. The burial ground is an industrial waste burial site that contains 19 trenches of miscellaneous radioactive solid waste from facilities located in the 200 West Area.*

*A TPA change request was approved that revised the completion date for the B Reactor Surveillance and Maintenance Plan from June 30, 2001 to a "to be determined" date.*

**Green**

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
**ENVIRONMENTAL RESTORATION**  
JANUARY 2001

**MAJOR COMMITMENTS:**

Green

<b>Total Tri-Party Agreement Milestones Due in FY01</b>	<b>14</b>
<i>Total Planned Through November</i>	<i>0</i>
<i>Total Completed Through November</i>	<i>2</i>

<b>Remaining Tri-Party Agreement Milestones to be Completed in FY01</b>	<b>12</b>
<i>Forecast Ahead of schedule</i>	<i>6</i>
<i>Forecast On Schedule</i>	<i>3</i>
<i>Forecast Unrecoverable</i>	<i>3</i>

**EM Corporate Performance Measures:**

	<b>DWP FY01</b>	<b>FY01 Mgmt Commitments</b>	<b>Current Baseline</b>	<b>Forecast for FY01</b>	<b>Completed YTD</b>
<b>Waste Site Excavations</b>	12	12	16	16	3
<b>*Technology Deployments</b>	0				

Green

*\*A technology deployment plan will be developed in January 2001 as identified in the DWP.*

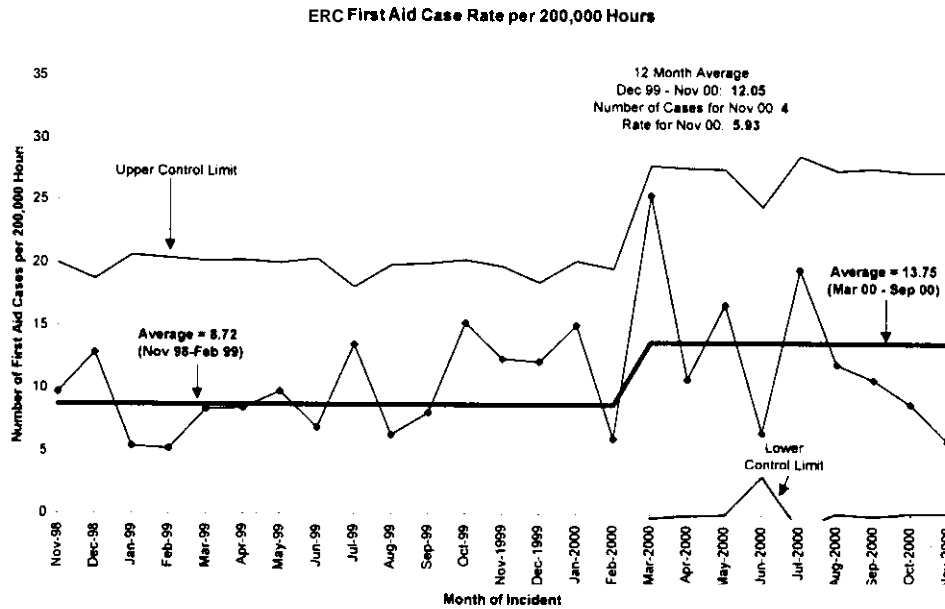
# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

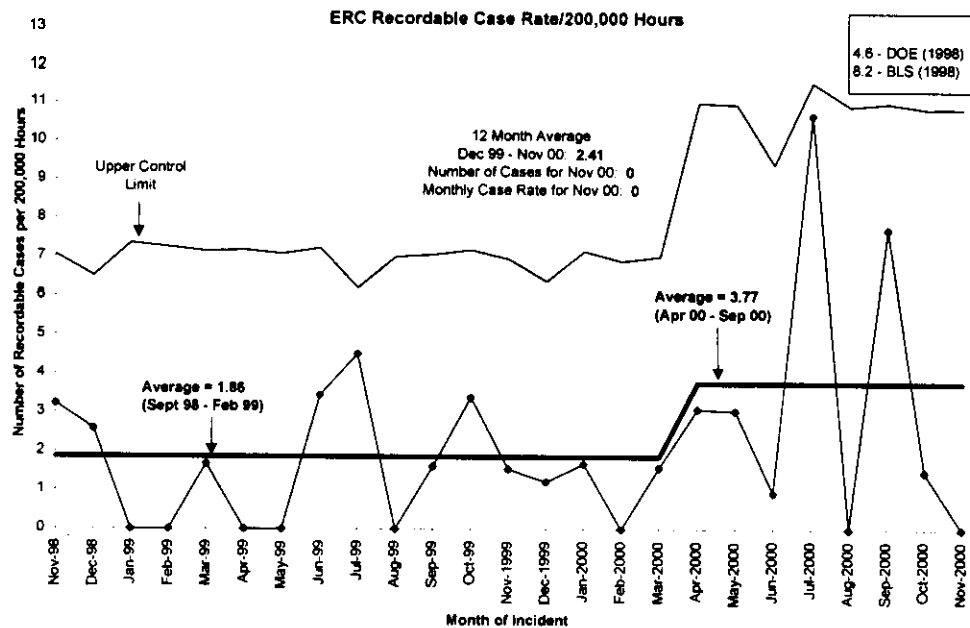
### SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract):

Green



The ERC first aid case rate for the past four months indicates a favorable trend in incident reduction.

Green



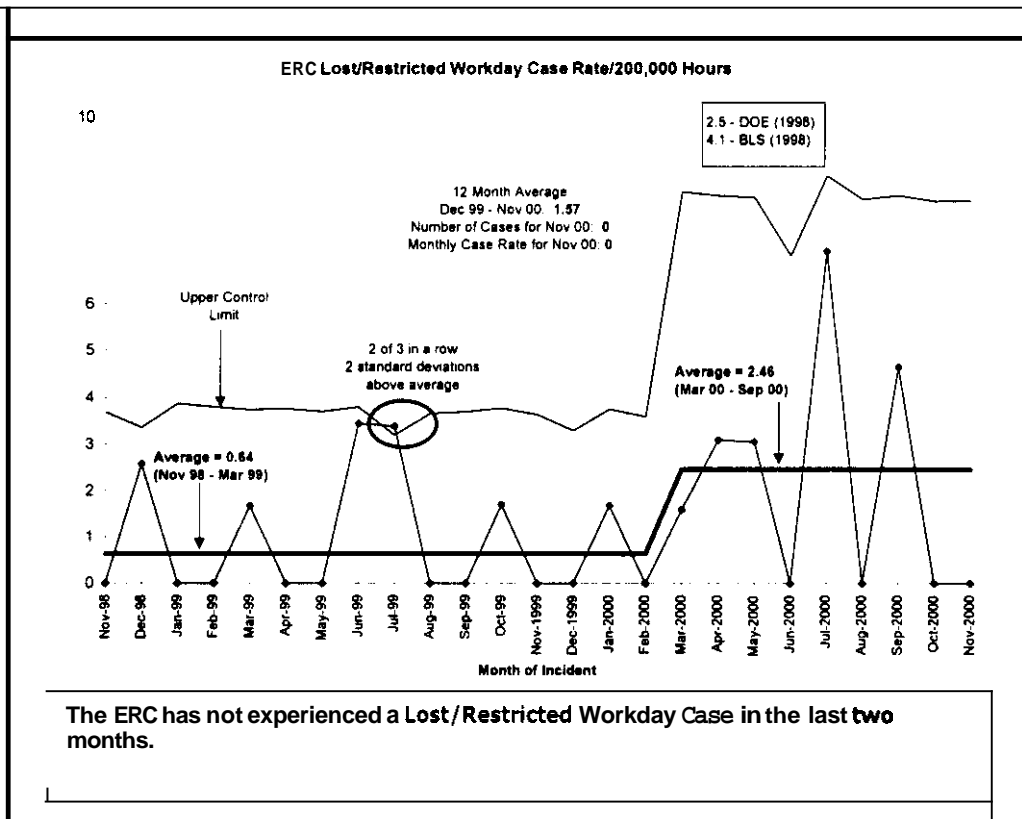
The ERC did not experience a Recordable Case during November.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

#### SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract) continued:



**Green**



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
**ENVIRONMENTAL RESTORATION**  
**JANUARY 2001**

**SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract) continued:**

*safety:*

	YTD	Current Month (Nov)	Current Month Comments
<b>First Aid</b>	11	4	(1) contusion, (1) bite, (1) strain, (1) imitation
<b>OSHA Recordable</b>	1	0	N/A
<b>Restricted Workday Case</b>	0	0	N/A
<b>Lost Workday Case</b>	0	0	N/A

**Green**

The ERC, as of December 16, 2000, reports 129,850 hours since the last lost workday incident. The incident occurred on November 13, 2000 and a meal lost time on November 15, 2000.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

#### SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract) continued:

##### ISMS:

**DOE EM Performance Agreement:** Maintain and improve the approved Integrated Safety Management System (ISMS).

Green

##### status:

- Implementation of the new hazard evaluation process continued. A surveillance of the new process was completed to identify potential problem areas which need extra attention to ensure the process is appropriately implemented.
- Held a meeting with DOE to discuss the process to be used to review, update, and submit for RL approval, safety performance objectives, performance measures, and commitments.
- Continued employee awareness of ISMS through the ISMS Question of the Day Program.
- Actively supported the Hanford hosted DOE ISMS Workshop; participated in planning the workshop, coordinating breakout sessions, giving presentations, providing a poster display, and attending the workshop.

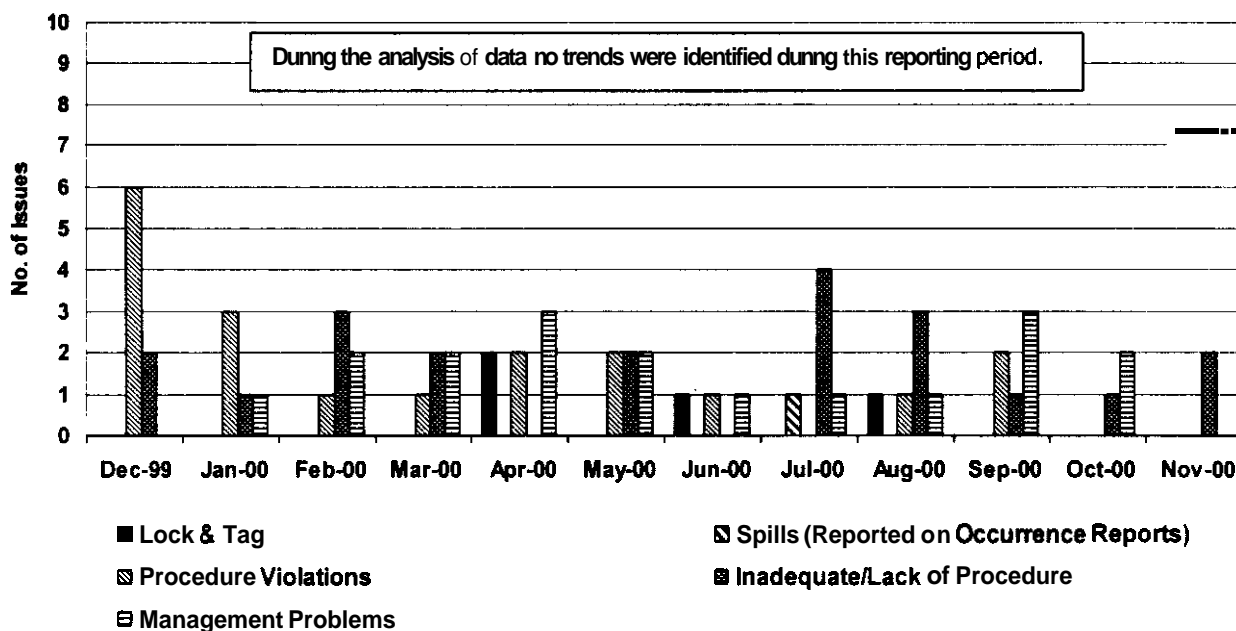
##### Conduct of Ops:

#### ERC-CATS (Corrective Action Tracking System) Trend Data 12/1/99 through 11/30/00

	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00
Lock & Tag	0	0	0	0	2	0	1	0	1	0	0	0
Spills (Reported on Occurrence Reports)	0	0	0	0	0	0	0	1	0	0	0	0
Procedure Violations	6	3	1	1	2	2	1	0	1	**2	0	0
Inadequate/Lack of Procedure	2	1	3	2	0	2	0	4	3	1	*1	2
Management Problems	0	1	2	2	3	2	1	1	1	3	**2	0

\* Trend data not received until November.

\*\* Trend data for one item not received until November



November Conduct of Ops Issues Continued on Next Page...

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
**ENVIRONMENTAL RESTORATION**  
**JANUARY 1001**

**SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract) continued:**

**November Conduct of Ops Issues:**

**Procedure Problem:**

**Condition Description:** Documents such as the ISRM and HR3/KR4 Remedial Design Report and Remedial Action Work Plans (DOE/RL 99-51 and DOE/RL 96-90) contain requirements that are approved by the regulators and are legally enforceable. These documents also reference internal BHI procedures that satisfy the requirements in the above two regulatory documents. BHI documents such as the Field Logbooks Procedure 1.5 in the Environmental Investigation Procedures (BHI-EE-01, Procedure 1.5) and the Field Support Operating Procedures (BHI-FS-04) specify the requirements for field sampling procedures and data and record keeping of field screening results, groundwater elevations, groundwater contaminant concentrations, purged water volumes, and other pertinent information. There is no documentation of evidence that the project personnel are familiar with all the requirements in these enforceable documents. Also, in some cases, the requirements in the two procedures mentioned above are inconsistent and not being met as intended.

**Corrective Action Plan:** BHI-FS-04, Vol. 1, D-100-002, will be revised to address recordkeeping requirements consistent with BHI-EE-01, Procedure 1.5, and a sampling logbook will be provided for project personnel. This procedure will also be revised to eliminate the requirement for alkalinity testing. Target completion date is 2/15/01. A process sampling and analysis plan will be prepared to document requirements for field screening. Target completion date is 3/01/01.

Green

**Condition Description:** The instrument specialist who prepares the chromium standards stated that they are not NIST traceable. The chromium standard used by the NPO is not labeled with the units for the concentration of the standard; all that was provided was 0.09. The label on the standard was also not initialed by the preparer, nor was it tracked with a unique number. Because the standards used for the project are prepared at a separate location and consist of many standards related to a number of field screening analyses performed on groundwater projects, it is recommended that a separate assessment be performed at the facility used by the instrument specialists at 100 N.

**Corrective Action Plan:** Project procedures were reviewed for requirements on the preparation of standards. Conduct cost/benefit analysis of alternatives for standards preparation (i.e., prepare at 100-N Water Plant, purchase vendor-supplied standard, etc.) Target completion date is 1/15/01. If analysis determines that it is appropriate to have instrument technician prepare standards at 100-N water plant, develop procedure. Target completion date is 2/15/01.

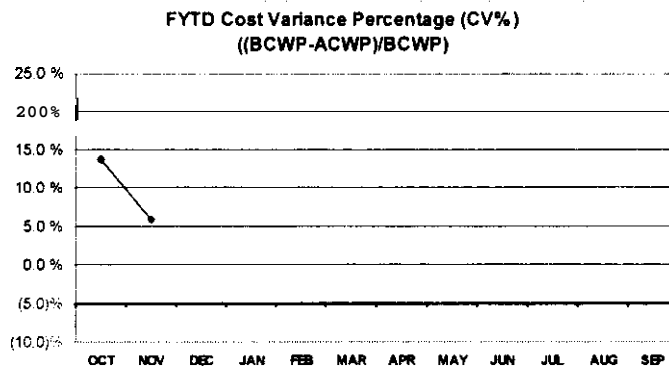
Green

**REGULATORY/EXTERNAL/DOE-RL & HQ ISSUES AND REQUESTS:**

Refer to individual Project issues in the following Section B and Section C.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT ENVIRONMENTAL RESTORATION JANUARY 2001

## TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract):

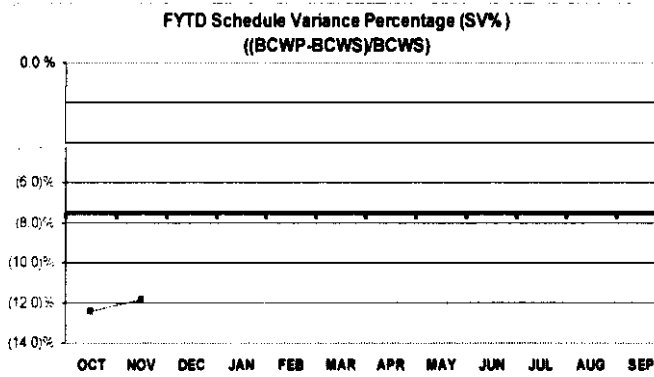


Green

*Desired performance is better than -5.0%.*

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	EAC w/ Carry Over
<b>CURRENT PERIOD</b>													
ACWP	9,656	10,998										16,615	
BCWP	11,195	10,749										15,991	
<b>FISCAL YEAR TO DATE</b>													
ACWP	9,656	20,654											
BCWP	11,195	21,944											
CV	1,539	1,290											
CV%	13.7%	5.9%											
EAC (Cumulative)	9,656	20,654	38,593	51,672	63,890	76,981	93,504	106,275	119,331	134,022	146,852	160,550	160,963
Yr End Budget Variance	195	957											

*For variance explanation by PBS, see Project Status Section of each project.*



Green

*Desired performance is better than -7.5%.*

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DWP	11,110	10,186	12,233	10,282	10,058	11,813	14,703	11,619	11,559	13,381	11,497	13,404
DWP (Accum)	11,110	21,396	33,629	43,911	53,968	65,711	80,484	92,103	103,662	117,043	128,540	141,944
BCWS	12,782	12,103	15,644	11,609	11,572	13,576	16,755	12,659	11,816	14,675	12,890	14,415
BCWP	11,195	10,749										
BCWS	12,782	24,885	40,529	52,138	63,710	77,287	94,041	106,700	119,516	134,202	147,091	161,507
BCWP	11,195	21,941										
SV	(1,587)	(2,940)										
SV%	(12.4%)	(11.8%)										

*For variance explanation by PBS, see Project Status Section of each project.*

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

### TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract) continued:

#### FY01 PERFORMANCE M D NOVEMBER 2000 (\$K)

	FY01 DWM BOWS	CURRENT BOWS	FYTD			YTD SCHEDULE VARIANCE		YTD COST VARIANCE		FAC
			BOWS	BCWP	ACWP	\$	%	\$	%	
ER01 100 Area R/A	29617	31417	3949	3671	3472	-278	-7.0%	199	5.4%	30770
ER03 300 Area R/A	4127	4518	487	338	254	-149	-30.6%	84	24.9%	4426
ER04 ER Waste Disposal	17420	18070	2807	2867	2466	260	10.0%	401	14.0%	18076
RA-Subtotal	51164	54005	7043	6876	6192	-167	-2.4%	684	9.9%	53272
ER02 200 Area R/A	443	4986	377	256	213	-121	-32.1%	43	16.8%	4913
ER08 GW Management	24942	29524	4649	3787	3697	-862	-18.5%	90	2.4%	29825
VZ01 GWWZ	10833	11885	2407	1862	1788	-545	-22.6%	74	4.0%	12049
GWVZ-Subtotal	36218	46395	7433	6906	6698	-1628	-20.6%	207	3.5%	46787
ER08 D&D	71951	9968	2667	2267	2236	-400	-15.0%	31	1.4%	9945
DD-Subtotal	71961	9968	2667	2267	2236	-400	-15.0%	31	1.4%	9946
ER05 S&M	13024	14249	2289	2138	2002	-151	-6.6%	136	6.4%	14112
ER07 Long-Term S&M	59	59	2	2	0	0	0.0%	2	100.0%	58
SM-Subtotal	13083	14308	2291	2140	2002	-161	-6.6%	138	6.4%	14170
ER10 ERC PM&S	28984	30449	4538	4447	4217	-91	-2.0%	230	5.2%	30408
ER10 RL PM&S	5300	6381	913	309	309	-604	-66.2%	0	0.0%	6381
PM-Subtotal	34284	36830	5451	4756	4526	-695	-12.7%	230	4.8%	36789
<b>GRAND TOTAL</b>	<b>141944</b>	<b>161506</b>	<b>24885</b>	<b>21944</b>	<b>20654</b>	<b>-2941</b>	<b>-11.8%</b>	<b>1290</b>	<b>5.9%</b>	<b>160963</b>

Green

#### **Cost/Schedule Status:**

##### **Cost Variance Summary**

At the end of November, the ER Project **had performed \$21.9M** worth of work, at a cost of **\$20.7M**. This results in a favorable **cost** variance of **\$1.3M (+5.9%)**. The positive cost variance is attributed to less labor required to complete remediation closeout verification packages (CVPs) due to use of a streamlined format and consolidation of waste sites; increased remediation quantities have resulted in lower unit costs (economies of scale); shifting craft personnel between remediation sites has resulted in labor and supervision savings.

##### **Schedule Variance Summary**

Through November, the ER Project is **\$2.9M (-11.8%)** behind schedule. The negative schedule variance is attributed to unplanned utilization of RCRA well drilling crews to support the 618-11 Burial Ground tritium investigation; groundwater modeling and monitoring activities delayed while completing FY00 carryover high-priority work; higher than anticipated radiation levels at 100-NR-1 crib is slowing remediation work; asbestos abatement at D and H Reactor ISS delayed to incorporate late request for documentation changes to the Removal Action Work Plan; late start on some 233-S work to allow additional radiation safety analysis; and late billing of site-wide assessments.

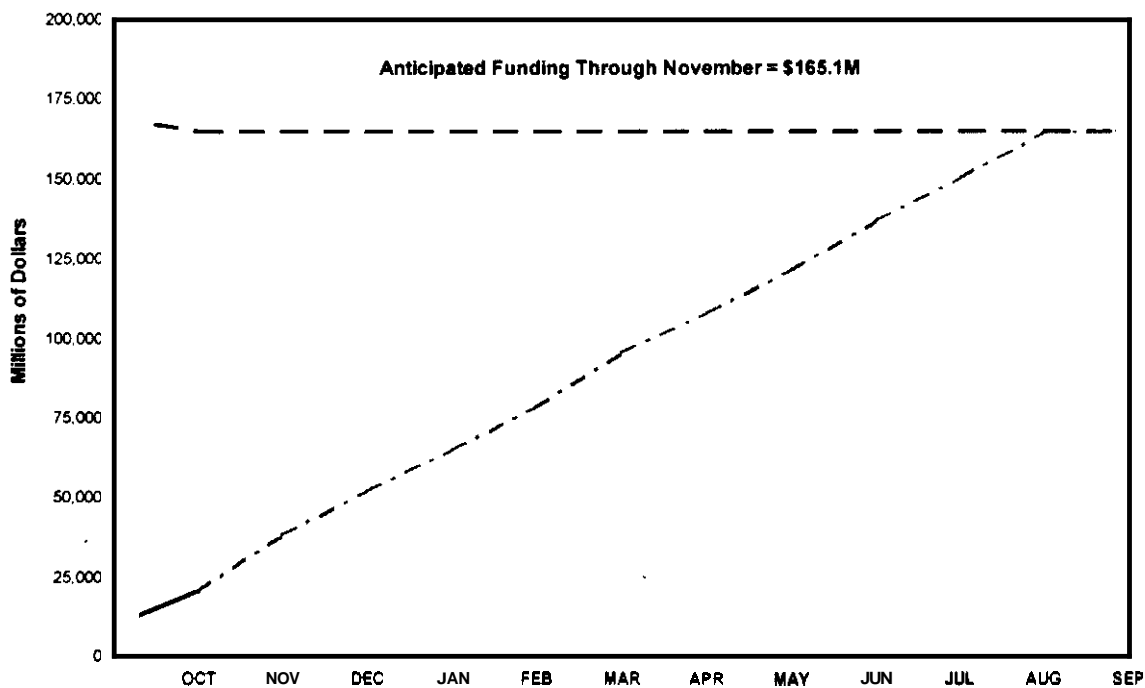
# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

#### TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract) continued:

#### FY2001 Funds Management



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	2001	EAC TOTAL
<b>ANTICIPATED FUNDING</b>	166,832	166,100	166,100	166,100	166,100	166,100	166,100	166,100	166,100	166,100	166,100	166,100	Est. Sep. Carryover	
<b>APPROVED SCOPE</b>														
1 Actual Cost	9,656	20,654												
2 Current Monthly EACs	9,656	10,998	17,839	13,078	12,218	13,090	16,524	12,770	13,068	14,881	12,830	13,889		
3 Cumulative EAC	9,656	20,654	38,593	51,671	63,889	76,979	93,503	106,273	119,339	134,020	146,850	160,548	413	166,963
<b>ESTIMATED FUTURE APPROVED BCPs</b>														
4 ER08 BCP-21026 Uranium Investigation Support to EM-50			0	20	0	0	0	0	0	0	0	0	0	20
5 Subtotal Approved Scope Changes			5	20	0	0	0	0	0	0	0	0	0	25
<b>ESTIMATED PENDING BCPs</b>														
6 ER01 BCP-21045 Remedial Action Scope Reduction due to Funding Reduction				(61)	(61)	(61)	(61)	(612)	(252)	(252)	(251)		0	(1,851)
7 ER03 BCP-21045 300-FF-2/1 Regrade Deferral, Leachability Study									(75)	(75)	(75)	(75)	0	(301)
8 ER05 BCP-21066 S&T Scope Pending, Offsets Reduction											(800)		0	(800)
9 ER06 BCP-21002 Continue 100 Area Reactors ISS				913	958	872	1,068	797	1,347	1,399	1,082	1,085	0	9,843
10 ER08 BCP-21003 Borehole Drilling Support (Grand Junction)										241	254	305	0	800
11 ER02 BCP-21076 Deter 200-CS-1 Field Scope Into FY02			(35)	(17)	(94)	(180)	(260)	(96)	(51)	(27)	(23)	(13)	0	(701)
12 ER06/VZ01 BCP-21067 GWVZ Reductions due to Funds Reduction				(81)	(61)	(61)	(61)	(61)	(61)	(61)	(61)	(61)	0	(730)
13 VZ01 BCP-21029 FY00 into FY01 Carryover for Sandia Lab & Argonne Nat'l Lab			105	108									0	211
14 ER10 FCP-21068 PMAS Scope Reductions due to Funds Reduction												(200)	0	(200)
15 ALL Pending Scope Reductions/Efficiencies			(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	(232)	0	(2,244)
16 Subtotal December FY2001 Approved BCPs + Pending BCPs			(160)	648	321	418	418	(223)	688	972	82	798	0	4,137
<b>Current Monthly EAC + December FY2001 Approved BCP's &amp; Pending BCP's</b>	9,656	10,998	17,779	12,728	12,748	13,508	16,839	12,547	12,711	15,883	12,913	14,497		
<b>Cumulative EAC + December FY2001 Approved BCP's &amp; Pending BCP's</b>	9,656	20,654	38,433	52,169	64,908	78,418	95,256	107,962	121,613	137,278	150,189	164,686	413	166,100

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

#### PERFORMANCE OBJECTIVES:

*Refer to individual Project information in the Following Section B and Section C.*

#### KEY INTEGRATION ACTIVITIES:

##### **RIVER CORRIDOR:**

**Safety and Health:** BHI actively supported the DOE ISMS Workshop held in Pasco, Washington on December 5-6. 31 BHI personnel registered for the workshop, and a poster display was developed. BHI gave five presentations, and five individuals served as Breakout Session Coordinators/Support Personnel. BHI's President participated in the Environmental Management panel discussion.

**Environmental Technologies:** A herbicide spray schedule was completed for the Hanford waste sites. ER worked with FH and CHG to integrate spraying activities and maximize effectiveness of equipment and personnel resources across the Hanford Site.

A CERCLA training module was developed and presented to contractors and DOE personnel at the DOE's Paducah Site in Kentucky. The training module, requested by the Paducah ER Program, focused on the ER lessons learned and streamlining successes achieved at the Hanford Site during the past six years.

**Technology Applications:** BHI participated jointly with RL and FH in a presentation at the Technology/Information Exchange Conference in Augusta, Georgia on November 14. The presentation addressed the calculation of benefits derived from deployment of new and innovative technologies.

##### **CENTRAL PLATEAU:**

ER continues to work closely with the River Protection Project (RPP) on vadose zone project plans and issues. RPP project manager presents related GW/VZ status to ER management at monthly ER project reviews.

**Green**

#### UPCOMING PLANNED KEY EVENTS:

Tri-Party Agreement Milestone M-13-25, Submit Uranium Rich Process Waste Group (200-PW-2) Work Plan, due 12/31/00.

Tri-Party Agreement Milestone M-13-00K, Submit 1200 NFL RI/FS (RFI/CMS) Work Plan, due 12/31/00.

Tri-Party Agreement Milestone M-24-47, Install 4 Additional Wells at SST WMA T, due 12/31/00.

Tri-Party Agreement Milestone M-24-48, Install 4 Additional Wells at SST WMA TX-TY, due 12/31/00.

Tri-Party Agreement Milestone M-24-00L, Install RCRA Groundwater Monitoring Wells Up to 50 in CY 2000, due 12/31/00.

**Green**

# Environmental Management Performance Report

January 2001

## Section B - River Corridor Information

- Remedial Action and Waste Disposal Project
- Decommissioning Projects (Interim Safe Storage and 233-S)
- Program Management and Support

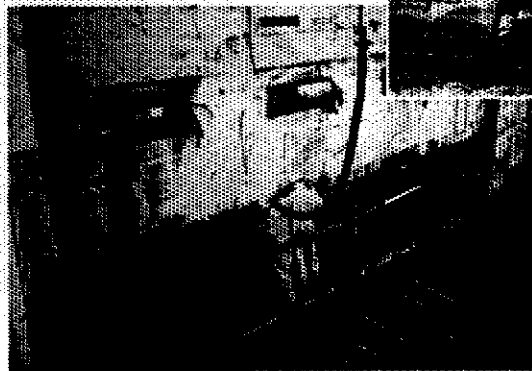


F Reactor

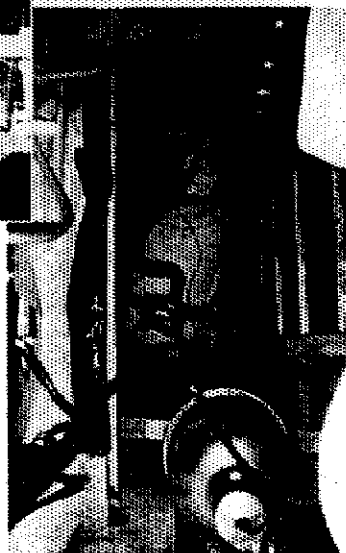


Pipe removal activities  
in the 100 F Area

ERDF Cell #4



DR Reactor



233-S

***Focused on Progress...***

***Focused on Outcomes!***

Financial/Performance Measures data as of monthend November.  
All other data as of December 21 (unless otherwise noted).



Department of Energy  
Richland Operations Office



Bechtel Hanford, Inc.  
Environmental Restoration Contractor

E0101002.1



# **Remedial Action and Waste Disposal Project (RAWD)**

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
JANUARY 2001**

## **SECTION B – RESTORING THE RIVER CORRIDOR**

Financial / Performance Measures data as of month-end November.

All other data as of December 21, 2000 (unless otherwise noted).

### **Remedial Action & Waste Disposal Project (RAWD):**

#### **ACCOMPLISHMENTS: RAWD**

**ERDF Transportation and Operations (ERDF):** The first of several shipments of ion exchange modules was received from K Basins on November 28 and disposed in ERDF. It was unloaded onto the floor of Cell #4 using a crane. Considerable cost savings will be realized compared to previous disposal methods.

During November, shipments totaling 32,195 metric tons (35,489 tons) of contaminated waste were transported to the ERDF. 66,580 metric tons (73,392 tons) of waste have been received in FY01. To date, 2,373,342 metric tons (2,616,175 tons) of material have been received and placed in the disposal facility.

**100B/C Area Remediation:** The subcontract for the 100 Area B/C pipeline remediation was awarded on November 28. Mobilization activities have begun.

**100 D Area Remediation:** The regulators agreed to proceed with the remaining 100 D Area backfill and closeout activities. The subcontractor is scheduled to return in late December to complete the backfill of the remaining sites.

**100F Area Remediation:** During November, removal of the 1.1-meter (42-inch) diameter reinforced concrete pipeline was completed between the reactor building and the retention basin.

**100H Area Remediation:** Remedialization activities were completed at the 100H Operable Unit on November 29 due to additional plumes encountered during confirmation sampling. Further excavation is required to remove 6,804 metric tons (7,500 tons) of additional waste at the 100-H-24 substation (PCBs), the 116-H-7 retention basin (PCBs), and 100-H-21 pipelines (lead).

The first draft Cleanup Verification Package (CVP) for the 100H Operable Unit was delivered to the regulators for review. This draft is the first CVP that incorporates a streamlined approach for regulator approval. If accepted, significant time and cost savings could be realized.

The test pit and sampling in the 116-H-7 retention basin was completed. The sampling is being done to develop an elevation profile of hexavalent chromium and nickel-63 contamination from the bottom of the retention basin to ground water.

BHI began working with Pacific Northwest National Laboratory (PNNL) to develop a leachate study plan for hexavalent chromium contamination in the 100H Operable Unit. This study is similar to the leachate study completed at the 100D Operable Unit that increased the remedial action goal for hexavalent chromium, at 100D Area, from 2.2 mg/kg to 6.0 mg/kg.

**100N Area Remediation:** Removal of the cover panels from the 116-N-3 Crib progressed during November in the 100 N Area, even though significantly higher radiation levels caused changes in remediation methodology. Demolition of the highly contaminated crib cover panels and concrete girder supports is being performed while buried under dirt, along with additional dust suppression, due to high contamination levels. Higher than expected contamination levels have resulted in revisions to the methods of demolition and removal of the crib components in order to achieve as low as reasonably achievable (ALARA) goals. Removal of the main trough system will commence following demolition of the cover panels in December.

Green

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

#### ACCOMPLISHMENTS continued: RAWD

Final approval of the 116-N-1 Auditable Safety Analysis/Final Hazard Classification (ASA/FHC) document is expected in December. Efforts continued in updating the Engineering Evaluation/Cost Analysis (EE/CA) for the 100-N Area Ancillary Facilities Integration Plan.

**100/300 Area Assessments:** The data quality objective (DQO) report and draft sample analysis plan (SAP) for the 300 Area Kd leachability study were completed in November. The draft SAP was completed one month ahead of schedule. Significant time and cost savings have resulted by combining the 100 Area Burial Ground and the 300 Area Design data quality objectives (DQO's).

**300 Area Remediation:** Bids were received and evaluated for the 300 Area South Process Pond security fence. The contract was awarded, and Notice To Proceed was issued on November 29. Work will begin in December and will be completed within 45 days.

Backfill, regrading, and revegetation of the 300-FF-1 operable unit will be deferred to FY02 due to the required Kd leachability study. Results of the Kd study is expected to provide a better understanding of uranium mobility in 300 Area soils and has a potential to affect the cleanup standard for the 300-FF-1 operable unit.

**300/600 Area Remediation:** On November 30, the procurement package for the remediation of the J.A. Jones and 600-23 waste sites was issued for bid proposals. A site walkdown and an amendment with clarifications were also completed. Contract awarded December 11 and contractors have begun mobilizing.

Green

#### SAFETY/ISMS/CONDUCT OF OPERATIONS: RAW

See Executive Summary.

#### BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: RAW

None identified at this time.

#### LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS RAWD

None identified at this time.

#### MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): RAWD

- **DOE Secretarial:**

None identified at this time.

- **DOE EM Performance Agreement:**

None identified at this time.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
JANUARY 2001**

**MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: RAWD**

• **TPA Milestones:**

Milestone	Description	Due Date	(F)/(A) Date
<b>M-16-26B</b>	Complete Remediation, Backfill and Revegetation of 51 Liquid Waste Sites and Process Effluent Pipelines in the 100-BC-1, 100-BC-2, 100-OR-1, 100-DR-2, and 100-HR-1 Operable Units as defined in the Remedial Design Report/Remedial Action Work Plan for the 100Area	2/28/01	2/25/05 (F)*
<b>M-16-26C</b>	Complete Remediation and Backfill of 10 Liquid Waste Sites and Process Effluent Pipelines in the 100-HR-1 Operable Unit as defined in Remedial Design Report/Remedial Action Work Plan for the 100Area	5/31/01	9/28/01 (F)**
<b>M-16-07B</b>	Complete Remediation and Backfill of 22 Liquid Waste Sites and Process Effluent Pipelines in the 100-DR-1 and 100-DR-2 Operable Units as defined in Remedial Design Report/Remedial Action Work Plan for the 100 Area	7/31/01	2/14/01 (F)
<b>M-16-03E</b>	Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (excluding the 6184 Burial Ground), to include Excavation, Verification, and Backfilling	9/30/01	9/30/02 (F)***
<b>M-16-00F</b>	Establish Date for Completion of all 100Area Remedial Actions	12/31/01	12/31/01 (F)

Green

\*Unrecoverable due to... Bid proposals were received on September 2, for 100 B/C, ... and contract was awarded on November 28. A Tri-Party Agreement (TPA) change request is being prepared establishing two new interim milestones that will identify the start and completion dates of the 100 B/C pipeline remediation workscope. Regulators have reviewed the draft change request and comments are being incorporated.

\*\*Elevated chromium levels were detected during closeout verification sampling. A TPA change package will be prepared after impacts have been evaluated. Regulators concur with path forward.

\*\*\*Per regulator request, a Kd study to determine if uranium leachability is required prior to 300-FF-1 backfill. A TPA change package will be prepared in March timeframe.

• **DNFSB Commitment:**  
None identified at this time.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

### PERFORMANCE OBJECTIVES: RAWD

PI	% FY01 Fee Pool Less 10% for Comprehensive	PI Allocation of Fee	Task	Status
RAWD	70%	80%	9/30/01	On schedule.
		10%	• Backfill 16 Sites by 9/30/01	On schedule.
		10%	• 50,000 Additional Tons by 9/30/01 (*Stretch)	Approximately 30% of Stretch undertaken as of 11/30/00.
			CV <5.0%; SV <7.5% for grouped PBS ER01, ER03, ERM	

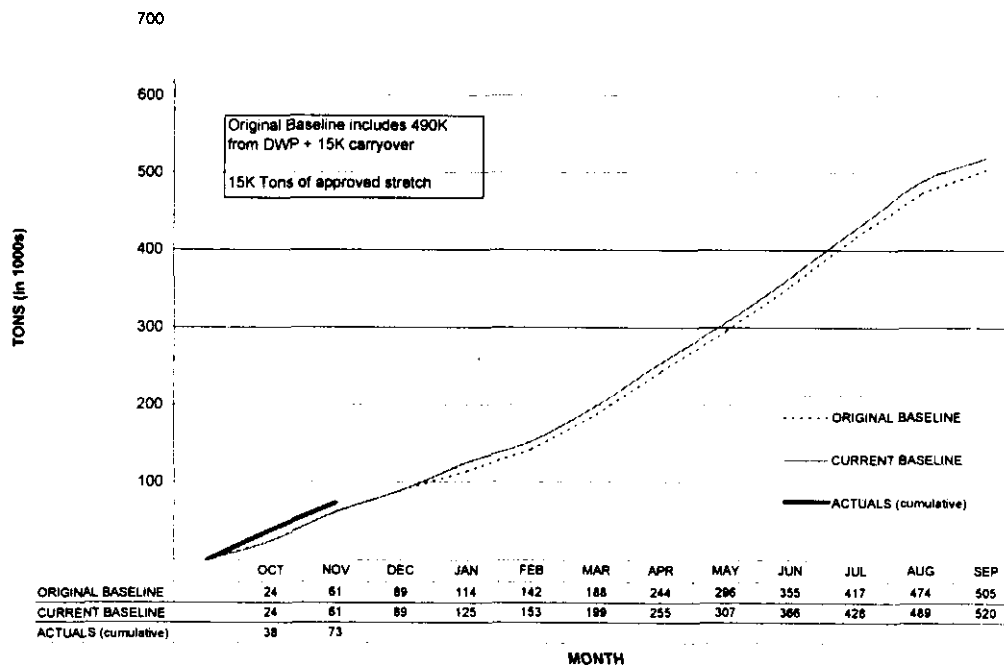
Green

### PERFORMANCE MEASURES/METRICS: RAWD - (River and Plateau)

	DWP FY01	FY01 Mgmt Commitments	Current Baseline (Incl. Baseline Changes)	Forecast For FY01	Completed YTD
<b>Waste Sites Excavated</b>	12	12	16	16	3

Green

Remedial Action and Waste Disposal Project  
Cumulative Tons to ERDF



# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

### STRETCH AND SUPERSTRETCH GOALS RAWD

FY01 RAWD "Stretch" Goals	Estimated Tons (K)	Approved Tons (K)
<b>Remediate Additional 50K Tons of Contaminated Soil by 9/30/01</b> <b>(1) Additional Contamination Soil at 100-F Pipelines</b> <b>(2) Additional Contamination Material at 100-H Sites</b>	50K	7.5K 8.0K
<b>S/Total Remedial Action Stretch Goals:</b>	<b>50K</b>	<b>15.5K</b>

Green

### PROJECT STATUS (COST/SCHEDULE/MAJOR EASE/UNE CHANGE): RAWD

• **Schedule:**

Remedial Action & Waste Disposal Project	BCWS \$K	BCWP \$K	Variance \$K
<b>EROI 100 Area Remedial Actions</b>	3,949	3,671	(278)
<b>ER03 300 Area Remedial Actions</b>	487	338	(149)
<b>ER04 ER Waste Disposal</b>	2,607	2,867	260
<b>TOTAL Remedial Actions</b>	<b>7,043</b>	<b>6,876</b>	<b>(167)</b>

Green

**PBS - RO - 100 Area Remedial Action**

Schedule Variance = (\$278K); (7.0%) [Last Month: \$64K; 3.3%]

**Cause:** Slower progress than originally planned at the 100-N site due to site contamination, limited demolition, and being different than planned.

**Resolution:** A baseline change order (P) is being prepared to address the changes causing the delay of the 100-N-3 Crib demolition.

**Cause:** Increase in waste quantities due to additional work at the 100 F area remediation site.

**Resolution:** A BCP is being prepared to reflect actual work sequencing and production.

**PBS-ER03 - 300 Area Remedial Action**

Schedule Variance = (\$149K); (30.6%) [Last Month: (\$46K); (23.5%)]

**Cause:** Closeout of the Package (CVP) scope is not been fully defined by the regulators.

**Resolution:** Working with regulators to determine CVP scope resolution.

**Total Restoration Waste**  
Variance = \$260K; 10.0% [Last Month: \$218K; 17.4%]

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

### PROJECT STATUS (COST/SCHEDULE/MAJOR BASELINE CHANGE continued): RAWD

**Cause:** Reflects increased unit price reductions due to waste disposal volumes from 100Area remediation sites.

**Resolution:** None.

• **cost**

Remedial Action & Waste Disposal Project	BCWP \$K	ACWP \$K	Variance \$K
<b>EROI 100Area Remedial Actions</b>	3,671	3,472	199
<b>ER03300Area Remedial Actions</b>	338	254	84
<b>ER04 ER Waste Disposal</b>	2,867	2,466	401
<b>TOTAL Remedial Actions</b>	<b>6,876</b>	<b>6,192</b>	<b>684</b>

Green

**PBS-ER01 - 100 Area Remedial Action**

**Cost Variance = \$199K; 5.4% [Last Month: \$296K; 14.8%]**

**Cause:** Less labor and supervision were required than anticipated at the 100 Area waste site by shirting personnel between various sites and avoiding duplication.

**Resolution:** Reflected in EAC. Underrun will be used to perform additional remediation work.

**Cause:** Closeout Verification Packages (CVPs) are requiring less labor than anticipated to prepare due to the use of a "streamlined" format and the consolidation of waste sites. Labor costs have increased for the lead brick survey and have slightly offset CVP savings.

**Resolution:** Reflected in EAC. Underrun will be used to perform additional remediation work.

**Cause:** Increased mst at 100-NR for additional project support requirements arising from higher radiation levels and complexities in performing the work scope.

**Resolution:** Reflected in EAC; a BCP is being prepared to address mst impacts resulting from changes to the plan.

**PBS-ER03 - 300Area Remedial Action**

**Cost Variance = \$84K; 24.9% [Last Month: \$38K; 25.3%]**

**Cause:** Coordinating design efforts with 100Area Burial Ground has resulted in data quality objective (DQO) costing less.

**Resolution:** Reflected in EAC. Underrun will be used to perform additional remediation work.

**PBS-ER04 - Environmental Restoration Waste Disposal**

**Cost Variance = \$401K; 14.0% [Last Month: \$234K; 15.9%]**

**Cause:** Increase in remediation quantities has resulted in lower unit costs (economies of scale).

**Resolution:** Reflected in EAC. Underrun will be used to perform additional remediation work.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

#### REGULATORY ISSUES *RAWD*

**Tri-Party Agreement Milestone M-16-26B:** M-16-26B, "Complete Remediation, Backfill, and Revegetation of 51 Liquid Waste Sites and Process Effluent Pipelines in the 100B/C, DR, and HR Operable Units" due February 28, 2001, will be missed due to lack of funding in FY99 and MOO for 100 B/C pipeline remediation activities.

Green

**Status:** Bid proposals were received on September 29 for the 100B/C pipeline remediation, and contract was awarded on November 28. A TPA change request is being prepared establishing two new interim milestones that will identify the start and completion dates of the 100 B/C pipeline remediation workscope.

**Tri-Party Agreement Milestone M-16-26C:** M-16-26C, "Complete Remediation and Backfill of 10 Liquid Waste Sites and Process Effluent Pipelines in the 100-HR-1 Operable Unit": due May 31, 2001, will be missed due to unanticipated elevated arsenic levels found early in FY00 (resolved) and chromium sample analysis results above the remedial action goals encountered during confirmation sampling/verification activities.

Green

**Status:** When the impact of the elevated chromium results is evaluated, a TPA change package will be prepared.

**Tri-Party Agreement Milestone M-16-03E:** M-16-03E, "Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (excluding the 6184 Burial Ground), to Include Excavation, Verification, and Backfilling", due 9/30/2001 will be missed due to the Environmental Protection Agency (EPA) requirement of performing a Kd study on uranium leachability. The regrades will not be completed until study results confirm that no further excavations will be required.

Green

**Status:** EPA requires a Kd study to address uranium mobility in the 300 Area. This study will consist of obtaining uranium-contaminated samples and performing leach rates with follow-on absorption tests resulting in a Kd value. A data quality objective (DQO) was completed, and a baseline change proposal prepared to secure funding for the study. A TPA change package will be prepared in March timeframe.

#### EXTERNAL ISSUES (I.e. HAB, Congress, etc.): *RAWD*

None identified at this time.

#### DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): *RAWD*

None identified at this time.

#### INTEGRATION ACTIVITIES *RAWD*

None identified at this time.



# **Decommissioning Projects (D&D)**

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
JANUARY 2001**

## **SECTION B – RESTORING THE RIVER CORRIDOR**

Financial / Performance Measures data as of month-end November  
All other data as of December 21, 2000 (unless otherwise noted)

### **Decommissioning Projects (D&D)**

#### **ACCOMPLISHMENTS D&D**

**Reactor Interim Safe Storage (ISS):** Reactor ISS continued to progress at both F and DR Reactors. Preparations to begin pourbacks at both reactors in December are in progress. ISS design and removal of hazardous material continued at D and H Reactors. Significant activities are identified below for each reactor.

##### **F Reactor ISS:**

- The Readiness Assessment to initiate dean fill removal from the fuel storage basin was completed on November 16. Actual field work in the basin was then initiated on November 28.
- The memorandum of understanding (MOU) between Fluor Hanford (FH) and Bechtel Hanford, Inc. (BHI) was approved on November 16 regarding security requirements in the event fuel is discovered in the fuel storage basin. If fuel is found, it will be transported to K Basins.
- Completed backfill of the valve pit and d i d feeds areas.
- Completed well drilling in the transfer pit. Pump piping for the dewatering system was installed and tested.
- The contract for BROKK™ equipment was awarded on November 17. The equipment is expected to arrive in late February.

##### **DR Reactor:**

- Preparations are underway for remobilization of the pourback subcontractor.
- Completed final site grading around the reactor.

##### **D Reactor:**

- Began tile and transite removal in the valve pit and supply fan room.
- Began thermal systems insulation abatement in the valve pit and supply fan room.
- Began hazardous material removal in the south reactor area, gas recirculation tunnels, and exhaust plenum area.

##### **D & H Reactor:**

- Incorporated Washington State Department of Ecology's (Ecology) additional/final comments to the Removal Action Work Plan. Final review is underway.
- The Interim Closure Data Quality Objective Scoping Summary Report was signed on November 15.

**Green**

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

#### ACCOMPLISHMENTS continued: D&D

**233-S Plutonium Concentration Facility Decommissioning Project:** Removal of seven vessels within the facility is being accelerated from the outyears into FY01 and FY02. The total 15 vessels are now being scheduled for removal by June 2002 in lieu of the Detailed Work Plan (DWP) to remove 8 by this date. FY01 work will increase from 3 to 7 vessels. The project is being rebaselined to accommodate the new FY01-FY02 activities. A portion of the accelerated scope is an initiative challenge to be paid for through efficiencies accomplished when performing other ER work. Accelerating vessel removal will allow for completion of 233-5 decommissioning approximately one year early and provide a significant dollar savings (the new completion date will be in late FY04).

During November, other 233-S activities included the following:

- Installation of additional Alpha Sentry continuous air monitoring (CAM) cabling,
- Removal of L-18 vessel electrical conduit from the viewing room second, third, and fourth floors and dismantlement of a fourth floor electrical feed boxes.
- Completion of all L-18 vessel low-point checks. Collected approximately two liters of clear liquid and a small amount of red sludge from the low points.
- Completion of east weather enclosure set-up for waste removal.
- Shipment of 29 cubic meters (1,024 cubic feet) of low level waste to ERDF.

Green

#### SAFETY/ISMS/CONDUCT OF OPERATIONS D&D

See Executive Summary.

#### BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: D&D

None identified at this time.

#### LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS D&D

None identified at this time.

#### MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): D&D

- **DOE Secretarial:**  
None identified at this time.
- **DOE EM Performance Agreement:**  
None identified at this time.
- **TPA Milestones:**

Milestone	Description	Due Date	(F)/(A) Date
<b>M-93-12</b>	Issue 105-DR Disposition Competitive Procurement Package for Ascertaining the Most Effective and Efficient Approach to FEIS ROD Selected Alternative Implementation (...)	2/28/02	*

Green

\*Regulators have agreed to renegotiate this milestone since DR Reactor ISS is scheduled for completion in FY02. Initial discussions are underway.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
JANUARY 2001**

**MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: D&D**

- **DNFSB Commitment:**  
*None identified at this time.*

**PERFORMANCE OBJECTIVES: D&D**

PI	% FY01 Fee Pool Less 10% for Comprehensive	PI Allocation of Fee	Task	Status
<b>233-S</b>	<i>13% plus FY02 equivalent portion</i>	76%	• <i>8 vessels by 6/30/02</i>	<i>Critical path activity on schedule.</i>
		24%	• <i>7 vessels by 6/30/02 (*Stretch)</i>  <i>CV &lt;5.0%; SV &lt;7.5% for PBS ER-06</i>	<i>BCP-21023 approved commencing Stretch.</i>
<b>ISS</b>	<i>11%</i>	35%	• <i>D Reactor Major Tasks by 9/30/01</i>	<i>Critical path activity on schedule; received authorization funding in December.</i>
		15%	• <i>DR Reactor Major Tasks by 9/30/01</i>	
		35%	• <i>F Reactor Major Tasks by 9/30/01</i>	
		15%	• <i>H Reactor Major Tasks by 9/30/01</i>  <i>CV &lt;5.0%; SV &lt;7.5% for PBS ER-06</i>	

**Green**

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

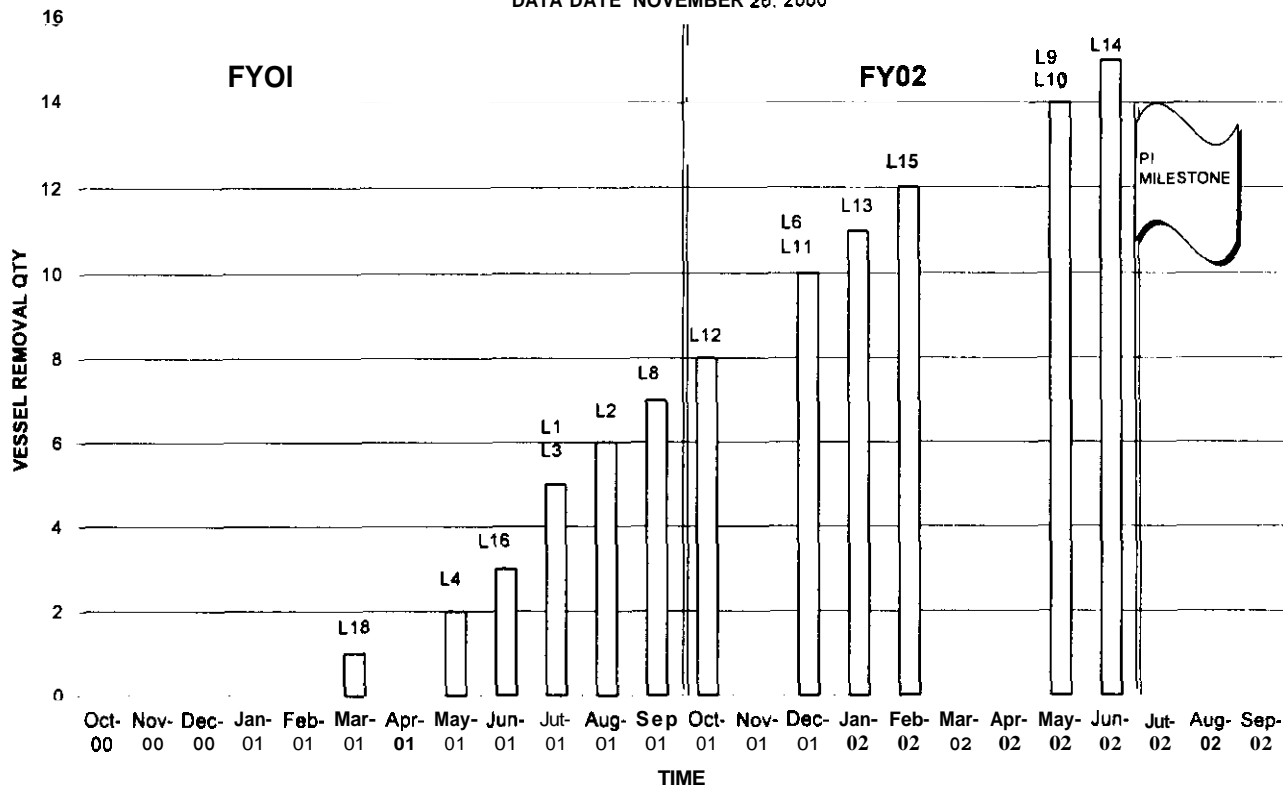
## ENVIRONMENTAL RESTORATION

JANUARY 2001

### PERFORMANCE MEASURES/METRICS: D&D

#### ACCELERATED VESSEL REMOVAL SCHEDULE

DATA DATE NOVEMBER 26, 2000



### STRETCH AND SUPERSTRETCH GOALS: *n/a*

FY01 D&D "Stretch" Goals	Estimated PI Dollars (K)	Approved BCPs (K)
Remove 4 Vessels by 9/30/01 and 8 Minimum of 8 Vessels by 6/30/02 (Regular Fee)		
Remove 7 Additional Vessels by 6/30/02 for a total of 15 Vessels (Stretch Only)	\$1,100.0K	\$1,072.0K
<b>S/Total D&amp;D Stretch Goals:</b>	<b>\$1,100.0K</b>	<b>\$1,072.0K</b>

Green

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT ENVIRONMENTAL RESTORATION

JANUARY 2001

**PROJECT STATUS (COST/SCHEDULE/MAJOR BASELINE CHANGE: RAWD)**

**8 Schedule:**

Decommissioning Projects	BCWS	BCWP	Variance
	\$K	\$K	\$K
<b>ER06 Decontamination &amp; Decommissioning</b>	2,667	2,267	(400)

Green

**Cost:**

Decommissioning Projects	BCWP	ACWP	Variance
	\$K	\$K	\$K
<b>ER06 Decontamination &amp; Decommissioning</b>	2,267	2,236	31
<b>TOTAL D&amp;D</b>	<b>2,267</b>	<b>2,236</b>	<b>31</b>

Green

**PBS-ER06 - Decontamination and Decommissioning**

Cost Variance = **\$31K; 1.4%** [Last Month: \$81K; 7.0%]

*Cause:* As a result of Craft input, duration, resources and equipment planned to prepare and demolish DR Reactor stairwells was reduced.

**Resolution:** Trend prepared to reduce EAC; will incorporate into Lesson Learned for future reactor stairwell demolition, Underruns will be used to perform additional remediation work.

*Cause:* Underrun in Project Support and Rad Monitoring. Engineering focus was on replanning efforts for fuel storage basin (FSB) waste removal and dewatering activities.

**Resolution:** Reflected in EAC. Underrun will be used to perform additional remediation work.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

<b>PROJECT STATUS (COSTISCHEDULEIMAJOR BASELINE CHANGE continued: RAWD</b>	
Cause: Crew and equipment assigned to area waiting approval to begin clean fill removal from FSB.	
Resolution: Will trend additional equipment standby costs.	
<b>REGULATORY ISSUES: D&amp;D</b>	
<p><b>D and H Reactor Impacts of TPA Milestones:</b> The acceleration of the reactor ISS projects is no longer consistent with the current M-93 milestones, especially the competitive procurement and renegotiating milestone (M-93-12) for DR Reactor.</p> <p><b>Status:</b> Initial discussions with the regulators have started which may lead to resolution in the near future. This will need to be discussed as part of RL's 100 Area acceleration vision.</p> <p><b>233-S Process Hood:</b> To support FY01 decommissioning activities in the 233-S Process Hood, non-destructive assay (NDA) support (provided by FH-PFP) was planned on a full-time basis. To-date, the support has been less than required. Although NDA support has not yet become a critical path item, it has the potential to impact the rate of equipment removal from the process cell.</p> <p><b>Status:</b> Continue to work with the NDA provider to insure adequate support exists on a continuing basis.</p>	<div>Green</div> <div>Green</div>
<b>EXTERNAL ISSUES (i.e. HAB, Congress, etc.): D&amp;D</b>	
None identified at this time.	
<b>DOE-RL &amp; HQ ISSUES/REQUESTS (not covered elsewhere): D&amp;D</b>	
None identified at this time.	
<b>INTEGRATION ACTIVITIES D&amp;D</b>	
None identified at this time.	

# **Program Management and Support (PM&S)**



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
JANUARY 2001**

## SECTION B – RESTORING THE RIVER CORRIDOR

Financial / Performance Measures data as of month-end November.

All other data as of December 21, 2000 (unless otherwise noted).

### Program Management & Support (PM&S)

#### ACCOMPLISHMENTS: PM&S

##### **COMPLIANCE, QUALITY, SAFETY, AND HEALTH:**

*An evaluation for the use of the storage units (Conex boxes) was initiated. The evaluation was completed for the 100 Areas. The 200 Areas will be completed before the end of December.*

*A report was completed that identified the ER process of reuse, recycle, and release of DOE real and personal property.*

##### **PROGRAM AND PROJECT SUPPORT:**

**External Affairs:** *On November 8, a second workshop addressing "Hanford 2012: Accelerating Cleanup and Shrinking the Site" was conducted for the Hanford Advisory Board (HAB) Committee members in order to provide a better understanding of the drivers, assumptions, and key policy issues underlying RL's new management direction for site cleanup.*

##### **ENGINEERING AND TECHNOLOGY:**

**Design Engineering:** *The first phase was completed for the waste minimization/pollution prevention value study. Waste streams having potential for waste minimization were identified for further screening and evaluation.*

**Environmental Technologies:** *A waste management/transportation workflow process with time and resource requirements was developed as part of the ERC effort to improve the efficiency for designing, packaging, and shipping of waste. This process improvement, using the Six Sigma productivity improvement methodology, will increase the overall ability of the ERC to manage a higher volume of waste while continuing to meet regulatory deadlines and project schedules.*

##### **PLANNING AND CONTROLS:**

*Work progressed in developing the ER Project Baseline Update (multi-year work plan). This update, originally planned for completion on December 15, is now planned to be complete by January 10, to incorporate DOE adjustments. The Baseline Update will form the basis for the FY02 Budget Update, the annual update of the DOE, Headquarters (HQ) Baseline Integrated Planning, Accountability, and Budgeting System (IPABS) database, and the initial FY03 Budget submittal.*

Green

#### **SAFETY/ISMS/CONDUCT OF OPERATIONS PM&S**

*See Executive Summary.*

#### **BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: PM&S**

*None identified at this time.*

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

### LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS *PM&S*

*None identified at this time.*

### MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): *PM&S*

- DOE Secretarial:**

*None identified at this time.*

- DOE EM Performance Agreement:**

*None identified at this time.*

- TPA Milestones:**

*None identified at this time.*

- DNFSB Commitment:**

*None identified at this time.*

### PERFORMANCE OBJECTIVES: *PM&S*

**Comprehensive Measures—Approximately 10% Available Fee Pool Total Positive Value  
Total Negative Value cannot exceed earnings under the Comprehensive P I**

Comprehensive Measure	Fee Allocation	Task	Status
<b>Safety</b>	<i>Negative Fee up to 50% of fee available for comprehensive P I</i>	<ul style="list-style-type: none"> <li><i>The Contractor shall protect worker safety and health, public safety and health, and the environment.</i></li> </ul>	<i>No concerns identified during November.</i>
<b>Operational Excellence</b>	<i>Positive Fee up to 55% of fee available for comprehensive P I</i>	<ul style="list-style-type: none"> <li><i>Migrate systems to facilitate PBS restructuring in FY02 - 75%</i></li> <li><i>Rebaseline completed per Baseline Updating Guidance (BUG) - 20%</i></li> <li><i>Integrate technology into Projects - 10%</i></li> <li><i>Achieve pollution prevention/waste minimization - 10%</i></li> </ul>	<i>All activities on schedule for completion per DOE revised schedule.</i>
<b>Effective Leadership</b>	<i>Positive Fee up to 45% and Negative Fee up to 50% of fee available for comprehensive P I</i>	<ul style="list-style-type: none"> <li><i>Management Effectiveness</i></li> <li><i>Customer Satisfaction</i></li> <li><i>Effective Financial Management</i></li> </ul>	<i>No concerns identified during November.</i>

**Green**

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

### PERFORMANCE MEASURES / METRICS: *PM&S*

*\*A technology deployment plan will be developed in January 2001 as identified in the DWP.*

Technology Deployment	PBS	Planned Date	(F)/(A) Date
<b>*N/A</b>	N/A	N/A	N/A

### STRETCH AND SUPERSTRETCH GOALS: *PM&S*

*None identified at this time.*

### PROJECT STATUS (COST / SCHEDULE / MAJOR BASELINE CHANGE: *RAWD*)

- Schedule:**

Program Management & Support	BCWS \$K	BCWP \$K	Variance \$K
<i>ERIO ERC Program Management &amp; Support</i>	4,538	4,447	(91)
<i>ERIO RL Program Management &amp; Support</i>	913	309	(604)
<b>TOTAL PM&amp;S</b>	<b>5,451</b>	<b>4,756</b>	<b>(695)</b>

**Green**

**PBS-ER10 - Program Management and Support**

Schedule Variance = **(\$695K); (12.7%)** [Last Month: (\$413K); (14.9%)]

**Cause:** Assessments and surveillances are behind schedule due to staff supporting 10 CFR (Code of Federal Regulation) 830.120 review.

**Resolution:** The number of assessments is being evaluated in an effort to reduce the number required.

- Cost:**

Program Management & Support	BCWP \$K	AWP \$K	Variance \$K
<i>ERIO ERC Program Management &amp; Support</i>	4,447	4,217	230
<i>ERIO RL Program Management &amp; Support</i>	309	309	0
<b>TOTAL PM&amp;S</b>	<b>4,756</b>	<b>4,526</b>	<b>230</b>

**Green**

**PBS-ER10 - Program Management and Support**

Cost Variance = **\$230K; 4.8%** [Last Month: \$271K; 11.5%]

**Cause:** Late billing on site-wide assessments.

**Resolution:** RL is discussing billing/timing with other site contractors/government agencies.

### REGULATORY ISSUES *PM&S*

*None identified at this time,*

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

<b>EXTERNAL ISSUES (i.e. HAB, Congress, etc.): PM&amp;S</b>	
<i>None identified at this time.</i>	
<b>DOE-RL &amp; HQ ISSUES / REQUESTS (not covered elsewhere): PM&amp;S</b>	
<i>None identified at this time.</i>	
<b>INTEGRATION ACTIVITIES: PM&amp;S</b>	
<p><b>Safety and Health:</b> BHI actively supported the DOE ISMS Workshop held in Pasco, Washington on December 5-6. 31 BHI personnel registered for the workshop, and a poster display was developed. BHI gave five presentations, and five individuals served as Breakout Session Coordinators/Support Personnel. BHI's President participated in the Environmental Management panel discussion.</p> <p><b>Environmental Technologies:</b> A herbicide spray schedule was completed for the Hanford waste sites. ER worked with FH, and CHG to integrate spraying activities and maximize effectiveness of equipment and personnel resources across the Hanford Site.</p> <p>A CERCLA training module was developed and presented to contractors and DOE personnel at the DOE's Paduwh Site in Kentucky. The training module, requested by the Paduwh ER Program, focused on the ER lessons learned and streamlining successes achieved at the Hanford Site during the past six years.</p> <p><b>Technology Applications:</b> BHI participated jointly with RL and FH in a presentation at the Technology Information Exchange Conference in Augusta, Georgia on November 14. The presentation addressed the calculation of benefits derived from deployment of new and innovative technologies.</p>	<div style="border: 2px solid black; padding: 5px; width: 60px; margin: 0 auto;">Green</div>

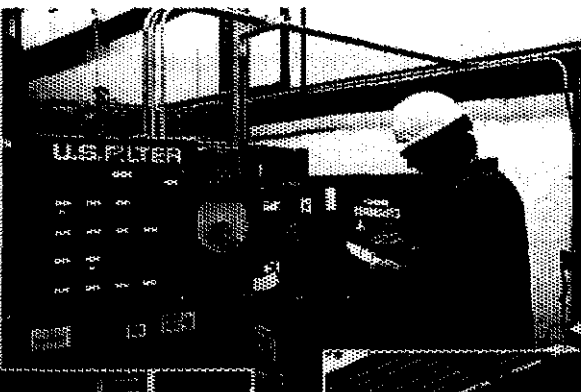
# Environmental Management Performance Report

January 2001

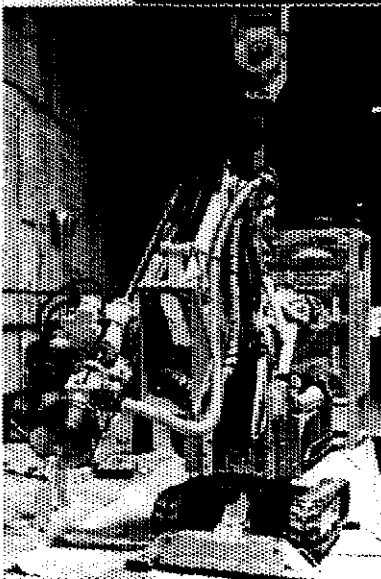
## Section C - Central Plateau Information

- Groundwater/Vadose Zone Integration Project
- Surveillance/Maintenance & Transition Projects

The new 186-N water plant in the 100 N Area



REDOX Facility



The Brokk™ in the 221-U Canyon



Abatement activities on the B Reactor roof

Unloading purgewater truck at the 600 Area



***Focused on Progress ...  
Focused on Outcomes!***

Financial/Performance Measures data as of month-end November  
All other data as of December 21 (unless otherwise noted)



Department of Energy  
Richland Operations Office



Bechtel Hanford, Inc.  
Environmental Restoration Contractor

E0101002.2

# **Groundwater/Vadose Zone Integration Project (GW/VZ)**

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
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## SECTION C – TRANSITIONING THE CENTRAL PLATEAU

Financial / Performance Measures data as of month-end November.  
All other data as of December 21, 2000 (unless otherwise noted).

### Groundwater/Vadose Zone Integration Project(GW/VZ):

#### ACCOMPLISHMENTS: GW/VZ

##### **GW/VZ INTEGRATION PROJECT:**

**System Assessment Capability:** History matching was completed on release models and ecological risk assessment model for the SAC Rev. 0. This effort demonstrated that the results predicted by SAC Rev. 0 are consistent with predictions made with past assessments, which indicates the models are ready for use in the initial assessment.

**Science and Technology:** The 200 Area tank farm SX-108 contaminated samples were delivered to principal investigators, and experiments were initiated. These sample experiments will be used to address contaminant migration issues for input to the River Protection Program (RPP) SX Field Investigation Report.

##### **GROUNDWATER MANAGEMENT:**

**In Situ Redox Manipulation Project:** Ten In Situ Redox Manipulation (ISRM) Project wells were chemically injected in FY00 as planned. Withdrawal was also completed from nine wells. Withdrawal from the remaining well is scheduled for completion in December.

**Long-Term Groundwater Monitoring:** A field survey was completed for wells located within 30.5 meters (100 feet) of waste sites (meeting criteria in Section 3.2 in the purge water strategy). It is estimated that an additional 280 wells will require containment based on these criteria. The draft of the revised implementation list was provided to RL on November 21 for review. The revised implementation list is on hold pending renegotiation of the purge water strategy document. All purge water will continue to be collected until that time.

**RCRA Well Installation:** A total of 10 wells are to be installed by December 31 to meet Tri-Party Agreement Milestone M24-00L. Through November, 5 are complete and sample ready, 4 wells are installed, and 1 well is being drilled. The milestone is on schedule for completion by December 31.

**Tritium Investigation:** The soil gas/groundwater sample and analysis plan was revised regarding the tritium investigation of the 618-11 Burial Ground. Results were also received from the groundwater grab samples and are being evaluated.

**Purgewater Strategy:** Work is progressing in addressing purgewater strategy compliance requirements for the Hanford Site. A letter requesting Site contractors' suggestions for improving the current purgewater strategy documentation was issued on November 20. A kickoff meeting is being organized with the regulators to discuss the waste management impacts of implementing the Purgewater and Investigation Derived Waste (IDW) Strategies. This meeting is being planned for early January 2001. The three agencies need to agree on modifying the two strategies to enhance clarity and legal defensibility, and to maintain the efficiencies they provide to waste management activities.

Green

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
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**ACCOMPLISHMENTS continued: GW/VZ**

**Summary of Five Pump and Treat System:** All groundwater pump and treat systems operated above the planned 90% availability levels in November. Since system inception, the five pump and treat systems have processed over 4.5 billion liters of groundwater, removing approximately 4,812 kilograms of carbon tetrachloride, 208 kilograms of chromium, and 0.92 curies of strontium. Approximately 210 million liters of groundwater have been processed in FY01, removing approximately 230 kilograms of carbon tetrachloride, 14 kilograms of chromium, and 0.038 curies of strontium.

**100-HR-3 Pump and Treat System:** Approximately 21.3 million liters of groundwater were processed in November removing approximately 2.8 kilograms of chromium. 49.1 million liters have been processed in FY01, with 7.3 kilograms of chromium removed. Approximately 992 million liters of groundwater have been processed from inception to date, with 98.9 kilograms of chromium removed.

**100-KR-4 Pump and Treat System:** Approximately 24.8 million liters of groundwater were processed in November removing approximately 3.0 kilograms of chromium. 58.6 million liters have been processed in FY01, with 7.1 kilograms of chromium removed. Approximately 868 million liters of groundwater have been processed from inception to date, with 109.2 kilograms of chromium removed.

**100-NU-1 Pump and Treat System:** Approximately 8.7 million liters of groundwater were processed in November, removing approximately 0.015 curies of strontium. 19.5 million liters have been processed in FY01, with 0.037 curies of strontium removed. Approximately 562 million liters have been processed from inception to date, with 0.920 curies of strontium removed.

**ZOO-UP-1 Pump and Treat System:** Approximately 1 million liters of groundwater were processed in November with approximately 16.3 million liters processed in FY01. From inception to date, approximately 453 million liters have been transported to the Effluent Treatment Facility (ETF) for processing. 343.0 million liters were previously processed prior to utilizing the ETF.

**200-ZP-1 Pump and Treat System:** Approximately 30.1 million liters of groundwater were processed during November removing 99.1 kilograms of carbon tetrachloride. 66.5 million liters have been processed in FY01, with 230.4 kilograms of carbon tetrachloride removed. From inception to date, approximately 1.3 billion liters have been processed, with 4,812 kilograms of carbon tetrachloride removed.

**200-ZP-2 Vapor Extraction System:** The 200-ZP-2 soil vapor extraction system was placed off-line in FY00, in order to monitor and evaluate any rebounding of contaminant to static conditions. The resulting data will be used to evaluate the effectiveness of remediation on contaminants within the vadose zone. The passive vapor extraction system (installed in selected vadose zone wells) is performing as designed. Monthly sampling will continue. A meeting was held on November 7 with the regulators, RL and contractors to discuss a path forward on Dense Non-Aqueous Phase Liquid (DNAPL) investigation. It was agreed that the Partitioning Interwell Tracer Test (PITT) was too expensive for a speculative location of the test. The PITT test will be put on hold while further conventional characterization is performed.

**200 AREA ASSESSMENTS:**

A Tri-Party Agreement change package was approved by the regulators on November 6 that replaced the 200-PW-4 operable unit work plan with the 200-PW-1 operable unit work plan, which has higher risk sites for carbon tetrachloride contamination.

Green



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
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<b>SAFETY / ISMS / CONDUCT OF OPERATIONS:</b> <i>GW/VZ</i>
<i>See Executive Summary.</i>
<b>BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT:</b> <i>GW/VZ</i>
<i>None identified at this time.</i>
<b>LONG-TERM 16 MONTHS PLUS) IMPORTANT ITEMS</b> <i>GW/VZ</i>
<i>None identified at this time.</i>
<b>MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS):</b> <i>GW/VZ</i>
<ul style="list-style-type: none"><li>• <b>DOE Secretarial:</b> <i>None identified at this time.</i></li></ul>
<ul style="list-style-type: none"><li>• <b>DOE EM Performance Agreement:</b> <i>None identified at this time.</i></li></ul>

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
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**MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: GW/VZ**

• **TPA Milestones:**

Milestone	Description	Due Date	(F)/(A) Date
<b>M-13-00K</b>	Submit One (1) 200 NPL RI/FS (RFI/CMS) Work Plan	12/31/00	12/21/00 (F)
<b>M-13-25</b>	Submit Uranium Rich Process Waste Group (200-PW-2) Work Plan	12/31/00	12/21/00 (F)
<b>M-2446</b>	Install Two(2) Additional Wells at SST WMA S-SX	12/31/00	9/14/00 (A)
<b>M-24-47</b>	Install Four (4) Additional Wells at SST WMA T	12/31/00	12/29/00 (F)
<b>M-24-48</b>	Install Four (4) Additional Wells at SST WMA TX-TY	12/31/00	12/29/00 (F)
<b>M-24-00L</b>	Install RCRA Groundwater Monitoring Wells at the Rate of up to 50 in Calendar Year 2000 if Required	12/31/00	12/29/00 (F)
<b>M-16-27A</b>	Complete 100-HR-3 Phase I, ISRM Barrier Emplacement	12/31/00	11/01/00 (A)
<b>M-24-49</b>	Install Four (4) Additional Wells at SST WMA S-SX	4/30/01	2/13/01 (F)
<b>M-24-50</b>	Install One (1) Additional Well at SST WMA TX-TY	4/30/01	1/05/01 (F)
<b>M-13-26</b>	Submit Plutonium/Organic-Rich (200-PW-1) Work Plan	6/30/01	6/30/01 (F)
<b>M-15-38A</b>	Submit Draft A Gable Mountain Pond/ B Pond and Ditch Cooling Water Group Feasibility Study and 216-B-3 Pond System RCRA TSD Unit Closure Plan and Submit Draft A Gable Mountain Pond/ B Pond and Ditch Cooling Waste Group Proposed Plan/	11/30/01	11/30/01 (F)
<b>M-13-00L</b>	Submit 3200 NPL RI/FS (RFC/CMS) Work Plans	12/31/01	12/31/01 (F)*
<b>M-16-27B</b>	1, 100 HR-3 Phase II, ISRM Barrier Emplacement (Plan 1, Well Installatic and	12/31/01	12/31/01 (F)
<b>M-24-00M</b>	Install RCRA Groundwater Monitoring Wells at Rate of up to 50 in Calendar Year 2001 if Required	12/31/01	12/31/01 (F)

Green

\*M-13 series milestones will require renegotiations and were discussed with the regulators at the last TPA Quarterly Review on December 19. The number of work plans currently identified for submittal cannot be accomplished due to streamlined approach to 200 Area assessment.

• **DNFSB Commitment:**

None identified at this time.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

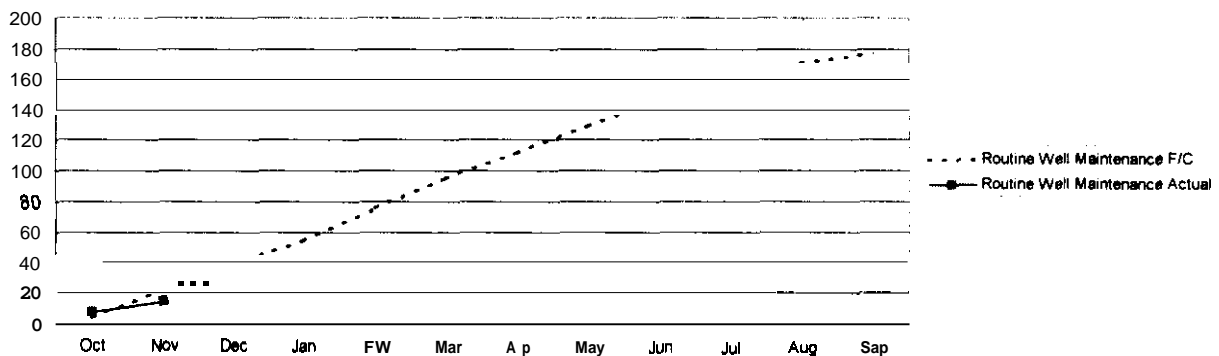
#### PERFORMANCE OBJECTIVES: GW/VZ

PI	% FY01 Fee Pool Less 10% for Comprehensive	PI Allocation of Fee	Task	Status
<b>GW - ISRM Barrier</b>	3%	3%	<ul style="list-style-type: none"> <li>Drill 24 wells and inject sodium dithionite by 9/30/01</li> </ul> <p>CV &lt;5.0%; SV &lt;7.5% for BHI portion of ER-08</p>	Critical path activities on schedule. Schedule variance impacted by tritium investigation will be incorporated into baseline via BCP-21003.
<b>GW - 618-11 Tritium Plume</b>	3%	3%	<ul style="list-style-type: none"> <li>Drill wells to establish 20,000 pCi/L Contour, Collect Groundwater Samples by 9/30/01 (*Stretch)</li> </ul> <p>CV &lt;5.0%; SV &lt;7.5% for BHI portion of ER-08</p>	Work has commenced via approved trend.

Green

#### PERFORMANCE MEASURES/METRICS: GW/VZ

**FY01 Routine Well Maintenance Completion**



		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Routine Well Maintenance	F/C	1	5	22	39	55	76	95	112	129	146	159	177

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

### STRETCH AND SUPERSTRETCH GOALS: GW/VZ

FY01 GW/VZ "Stretch" Goals	Estimated PI Dollars (K)	Approved BCPs (K)
<i>Tritium Plum at 618-11 Burial Ground – Collect GW Samples by 9/30/01</i>	\$500.0K	
<i>S/Total GW – Vadose Zone Stretch Goals:</i>	<b>\$500.0K</b>	<b>\$0K</b>

Green

### PROJECT STATUS (COST/SCHEDULE/MAJOR BASELINE CHANGE): GW/VZ

• **Schedule:**

GW/VZ Integration Project	BCWS \$K	BCWP \$K	Variance \$K
<b>ER02 200 Area Remedial Actions</b>	377	256	(121)
<b>ER08 Groundwater Management</b>	4,649	3,787	(862)
<b>VZ01 Groundwater/Vadose Zone</b>	2,407	1,862	(545)
<b>TOTAL Gmundwater</b>	<b>7,433</b>	<b>5,905</b>	<b>(1,528)</b>

Green

**PBS-ER02 – 200 Area Remedial Action (Assessment)**

Schedule Variance = **(\$121K); (32.1%)** [Last Month: (\$69K); (38.3%)]

**Cause:** Work on the Gable Mountain/B Pond Feasibility Study is behind schedule due to lack of resource availability.

**Resolution:** Interviews for open requisitions are taking place; schedule is expected to be recovered.

**PBS-ER08 – Gmundwater Management**

Schedule Variance = **(\$862K); (18.5%)** [Last Month: (\$505K); (21.0%)]

**Cause:** RCRA well drilling schedule impact caused by the ERC priority for tritium drilling at Me 618-11 waste site (one drilling crew released two weeks to support this exercise) and rad contaminated soil encountered during C3-122 well drilling.

**Resolution:** Well drilling on C3-122 was resumed on November 30, with an alternate drilling rig. Decon of the original rig was started the week of December 7.

**PBS-VZ01 – Groundwater/Vadose Zone**

Schedule Variance = **(\$545K); (22.6%)** [Last Month: (\$384K); (26.3%)]

**Cause:** Expert Panel has requested a revision to planned meetings.

**Resolution:** BCP submitted to modify schedule; no cost impact.

**Cause:** Data gathering for SAC took longer than planned due to additional inventory requirements.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

### PROJECT STATUS (COST / SCHEDULE / MAJOR BASELINE CHANGE continued): GW/VZ

**Resolution:** No overall impact to SAC schedule; work to complete in December.

**Cause:** Distribution of contaminated samples for S& T behind schedule due to receipt of samples from SX-108 later than planned and unresolved ES&H issues. Contracts were delayed for other national laboratory involvement in Field Investigation at Representative Sites, Vadose Zone Transport Field Study, and Transport Modeling tasks because of Continuing Resolution.

**Resolution:** SX-108 samples distributed; contracts with the other national laboratories now in place; offline schedules prepared for tasks to ensure completion of milestones for input to RPP SSX Field Investigation Report.

■ **Cost:**

GW/VZ Integration Project	BCWP \$K	ACWP \$K	Variance \$K
<b>EROZ 200 Area Remedial Actions</b>	<b>256</b>	<b>213</b>	<b>43</b>
<b>ER08 Groundwater Management</b>	<b>3,787</b>	<b>3,697</b>	<b>90</b>
<b>VZ01 Groundwater/Vadose Zone</b>	<b>1,862</b>	<b>1,788</b>	<b>74</b>
<b>TOTAL Groundwater</b>	<b>5,905</b>	<b>5,698</b>	<b>207</b>

**Green**

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
JANUARY 2001**

**REGULATORY ISSUES GW/VZ**

**Monitoring Wells:** Tritium investigation is being conducted near the 618-11 Burial Ground.

Green

**Status:** The groundwater grab results from the boreholes drilled for the 618-11 soil gas investigation have been evaluated. The groundwater grabs from boreholes C3264 and C3265 were to assess tritium levels in the groundwater and assist in the determination of a correlation between groundwater concentrations and the measured helium ratios.

As previously reported, borehole C3264 (about midway along the northern boundary of the 618-11 Burial Ground) was completed to groundwater, and a groundwater grab sample was collected on October 9. The initial results from the C3264 groundwater grab indicated tritium levels less than 30,000 pCi/liter. A split sample taken by the Department of Health gives the result of about 6,000 pCi/liter. The detection limits were much lower at a laboratory used by the Department of Health.

Borehole C3265 (in the Energy Northwest parking lot, east of the 618-11 Burial Ground) was completed to groundwater, and a groundwater grab sample was collected on October 13. The results of this sample are 1.5 million pCi/liter. This borehole is about 80 meters downgradient from well 699-13-3A. The split sample taken by the Department of Health corroborates this result.

Currently, a BCP is being prepared to rescope the FY01 effort to address the groundwater plume and minimize soil gas work.

**200-ZP-2:** Need for enhanced characterization, enhance removal efficiency, and Dense Non-Aqueous Phase Liquid (DNAPL) investigation.

Green

**Status:** A preliminary cost estimate and proposal submitted by a potential contractor have been reviewed by a subpanel of the GW/VZ Integration Project's Expert Panel. A meeting was held on November 7 with the regulators, DOE, and contractors to discuss a path forward on DNAPL investigation. It was agreed that the Partitioning Interwell Tracer Test (PITT) was too expensive for a speculative location of the test. The test will be put on hold for the time being. The installation of a groundwater well close to the Plutonium Finishing Plant, as well as the deepening of two groundwater wells near the Z-9 crib, are scheduled to be completed this fiscal year to obtain characterization information. A meeting will be held in late December with the regulators, DOE, and contractors to plan characterization efforts. Given that the PITT is on hold, the soil vapor extraction system will start operations April 1, 2001.

**Purgewater Secondary Waste Management:** There is a discrepancy in the interpretation of the Purgewater Strategy applicability. Direction was given by RL to become compliant with all land disposal restriction (LDR) requirements.

Green

**Status:** An interim phase was initiated, and a screening was completed for the potential listed waste codes to be applied. Activities on Site will be conducted as planned, with a conservative application of the listed waste codes to the secondary wastes. A long-term resolution has also been accepted by RL, to conduct a Listed Waste Applicability Assessment to minimize the listed waste codes to be applied on this waste stream. A letter coordinating the Site contractors' suggestions for improving the Purgewater Strategy was issued November 20 per DOE request. A kickoff meeting is being organized with the regulators to discuss the waste management impacts of implementing the Purgewater and Investigative Derived Waste (IDW) Strategies. This meeting is being planned for early January 2001. The three agencies need to agree on modifying the two strategies to enhance clarity and legal defensibility, and to maintain the efficiencies they provide to waste management activities.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

#### REGULATORY ISSUES continued: GW/VZ

**M-13-00x** and **M-20-xx** Series: RL management, working closely with the Environmental Protection Agency (EPA), Ecology, and the Hanford Advisory Board (HAB), has developed a more streamlined approach for the remediation of the 200 Area non-tank farm related operable units on the Hanford Site. The existing baseline for soil characterization in the 200 Area Remedial Action Project shows a completion of the characterization of 23 operable units by the year 2008. The new streamlined approach calls for completion of the characterization of 12 representative analogous waste site operable units by 2008.



**Status:** RL will work with the regulators to establish revised interim M-13 and M-20 milestones based on the improved approach to 200 Area assessment which supports the Hanford site outcomes. It is anticipated that M-13-00x major milestone adjustments can be addressed with the regulators once the revised FY02 DOE budget is approved in the Spring of FY01.

#### EXTERNAL ISSUES (i.e. HAB, Congress, etc.): GW/VZ

None identified at this time.

#### DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): G W I

None identified at this time.

#### INTEGRATION ACTIVITIES: GW/VZ

ER continues to work closely with the River Protection Project (RPP) on vadose zone project plans and issues. RPP project manager presents related GW/VZ status to ER management at monthly ER project reviews.



# **Surveillance/ Maintenance and Transition Projects (SM&T)**



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
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## SECTION C – TRANSITIONING THE CENTRAL PLATEAU

Financial / Performance Measures data as of month-end November.

All other data as of December 21, 2000 (unless otherwise noted).

### Surveillance/Maintenance & Transition Projects (SM&T):

#### ACCOMPISHMENTS: SM&T

**Surveillance and Maintenance:** *S&M activities that were performed in November to ensure inactive facility integrity and safety included the following:*

- Completion of major mof repairs at B Ueactor. Repairs included sealing damaged sections of the roof, caulking joint cracks on the concrete panels, and isolating the supply ventilation ducting leading into the building. Roof repairs are in support of an upgrade effort at B Ueactor.
- Completion of sealing the ductwork at B Ueactor.
- Receipt of approval for Tri-Party Agreement change request for M-093-06-01, "Submit B Reactor S&M Plan for EPA Approval" from RL and EPA on November 16. This change request revises the completion date for the B Ueactor S&M Plan from June 30, 2001 to a "to be determined-date."
- Removal of the 18-meter (60-foot) sample line from the PUREX stack. The sample line shutdown will result in lower maintenance costs at PUREX.
- Completion of roof repairs (six sections) on U Plant (221-U Building). Three additional sections have been identified for repair/replacement. A baseline change proposal (BCP) will be prepared for the additional repair work next spring or early summer.
- Completion of surveillance for the fission product trap area in N Ueactor. Preliminary results confirmed evaporation was the cause for liquid level reduction and also validated the correct operation of the bubble system.
- Began work on interim stabilization of the 218W-2A waste burial site. The burial ground is an industrial waste burial site containing 19 trenches of miscellaneous radioactive solid waste from facilities located in the 200 West Area. Types of waste include tanks, concrete block, facility wastes, and process equipment

Green

#### SAFETY/ISMS/CONDUCT OF OPERATIONS SM&T

*See Executive Summary.*

#### BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: SM&T

*None identified at this time.*

#### LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS SM&T

*None identified at this time.*

#### MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): SM&T

• **DOE Secretarial:**  
*None identified at this time.*

• **LWE EM Performance Agreement:**  
*None identified at this time.*

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

JANUARY 2001

### MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: SM&T

- **TPA Milestones:**  
None identified at this time.

- **DNFSB Commitment:**  
None identified at this time.

### PERFORMANCE OBJECTIVES: SM&T

None identified at this time

### PERFORMANCE MEASURES/METRICS: SM&T

None planned in FY01.

### STRETCH AND SUPERSTRETCH GOALS: SM&T

None identified at this time.

### PROJECT STATUS (COST / SCHEDULE / MAJOR BASELINE CHANGE): SM&T

- **Schedule:**

Surveillance / Maintenance & Transition Project	BCWS \$K	BCWP \$K	Variance \$K
<b>ER05 Surveillance &amp; Maintenance</b>	2,289	2,138	(151)
<b>ER07 Long-Term Surveillance &amp; Maintenance</b>	2	2	0
<b>TOTAL SM&amp;T</b>	<b>2,291</b>	<b>2,140</b>	<b>(151)</b>

Green

#### PBS-ER05 - Surveillance and Maintenance

Schedule Variance = (\$151K); (6.6%) [Last Month: (\$134K); (12.0%)]

**Cause:** The time required to review/evaluate new sampling and video equipment specified in the HEXONE Tank Project data quality objective (DQO) has taken longer than originally planned.

**Resolution:** Sampling and videotaping of the tanks interior contents have been rescheduled to occur at the same time compressing the existing schedule. **Recovery** is anticipated in January.

#### PBS-ER07 - Long-Term Surveillance and Maintenance (BCWS \$59K for FY01)

Schedule Variance = N/A

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### JANUARY 2001

**PROJECT STATUS (COST / SCHEDULE / MAJOR BASELINE CHANGE continued): SM&T**

■ **Cost:**

Surveillance/Maintenance & Transition Project	BCWPS \$K	ACWP \$K	Variance \$K
<b>ER05 Surveillance &amp; Maintenance</b>	2,138	2,002	136
<b>ER07 Long-Term Surveillance &amp; Maintenance</b>	2	0	2
<b>TOTAL SM&amp;T</b>	<b>2,140</b>	<b>2,002</b>	<b>138</b>

**Green**

**EXTERNAL ISSUES (i.e. HAB, Congress, etc.): SM&T**

*None identified at this time.*

**DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): SM&T**

*None identified at this time.*

**INTEGRATION ACTIVITIES: SM&T**

*None identified at this time.*



# Pacific Northwest National Laboratory Environmental Management Performance Report

**January 2001**

**PREPARED FOR THE U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE  
OFFICE OF ENVIRONMENTAL MANAGEMENT**

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**Pacific Northwest National Laboratory  
Operated for the U.S. Department of Energy  
by Battelle Memorial Institute**

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***Introduction***

This document provides the Department of Energy Richland Operations Office (DOE-RL) with a report of the Pacific Northwest National Laboratory (PNNL) performance by Battelle Memorial Institute and its subcontractors.

In Section **A**, the Executive Summary, text and graphics report the safety metrics status for all PNNL activities. Senior management's overall performance assessment of all Environmental Management activities conducted at PNNL is presented in a stoplight chart.

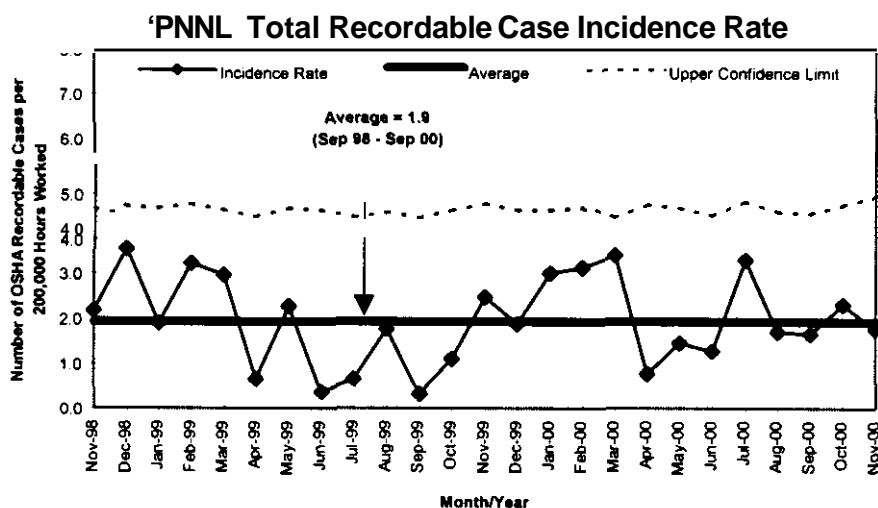
Section B, Project Performance Summary, provides a brief summary of the month's performance for the **PNNL** lead activity, PNNL Waste Management (PBS RL-STOI). More detailed information can be found within PNNL-7911-110a, PNNL's Project Status Report for November 2000. Summary analyses pertaining to PNNL's support to other Project Baseline Summaries (PBSs) are addressed in the contractor's report having lead responsibility for that scope.

Unless otherwise noted, information in this report is current as of November **26**, 2000

This section provides an executive-level summary of performance information and is intended to bring to management's attention that information considered to be most noteworthy. The section begins with overview of safety, a summary of FY 2001 performance, a summary of Fiscal Year (FY) 2001 Voluntary Protection Program (VPP) activities, followed by a stoplight chart on overall performance.

## Safety Overview

The focus of this section is on documenting trends in work-related injury and illness rates. These are the **same** performance indicators as appear in the FY2001 Battelle Performance Evaluation and Fee Agreement, which is part of the Pacific Northwest National Laboratory operations Contract. The monthly rates for Recordable and Lost Workday cases are presented graphically in this section and are monitored for statistically significant changes. Current efforts to improve performance **are** being made through the continued implementation of the Integrated Safety Management System (ISMS), and the development and implementation of the Voluntary Protection Program (VPP).



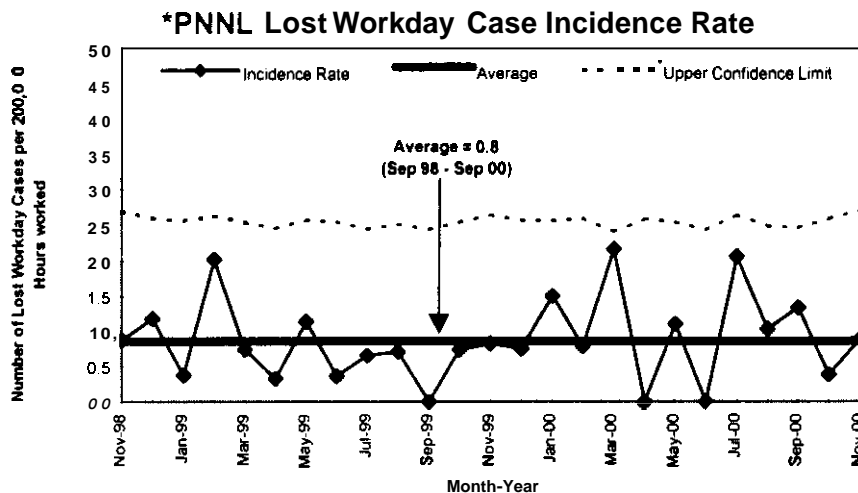
**FY 01 Rate Overview:**  
 Cumulative To Date = 2.1  
 Lab Specified Level  $\leq 2.2$

This indicator has been generally stable over the long term. The data for FY01 continue to randomly fluctuate within the anticipated control limits.

\*Includes all Pacific Northwest National Laboratory Operations.



**PNNL Environmental Management Performance Report – January 2001**  
**Section A - Executive Summary**



**FY 01 Rate Overview:**  
 Cumulative To Date = 0.6  
 Lab Specified Level ≤ 1.1

This indicator has been generally stable over the long term. The data for FY01 continue to randomly fluctuate within the anticipated control limits

\*Includes all Pacific Northwest National Laboratory Operations.

## Cost/Schedule Performance Stoplight

The following rating reflects overall cost and schedule performance for activities conducted by PNNL. *(Narrative not required when rating is green.)*

Green: Satisfactory  
 Yellow: Significant improvement required  
 Red: Unsatisfactory

This section provides cost and schedule performance, any significant issues, and upcoming baseline change requests for the period covered. In FY 2001, Battelle Memorial Institute has lead responsibility over PBS RL-STOI. PNNL Waste Management WBS 1.7.1.

## **Mission**

WBS 1.7.1 provides PNNL with waste management services and compliant operations in support of science and technology development for the multiprogram needs of the U.S. Department of Energy (DOE) Complex. These services include:

- essential surveillance and maintenance of DOE laboratory facilities assigned to PNNL for safe containment of radioactive and hazardous materials
- infrastructure required to manage wastes and effluents currently generated at the PNNL
- operational compliance services to meet regulatory requirements and operating permits including environment, safety, and health regulations
- management of legacy wastes and contamination remaining from past PNNL research operations.

## **Activity Summary**

The following summarizes the activities associated with PNNL Waste Management services and operations conducted during November 2000.

- Scheduled Radiochemical Processing Laboratory (RPL) radiological surveys and nuclear control inspections were performed. All scheduled inspections were completed on the following facilities: 2718-E, 3745-B, 3731, 3731-A, 303-5, 3762, and 3764. No issues of significance were noted in any of the facilities.
- Scheduled routine waste management activities were performed during the period. All air and water samples required during the month of November were collected, and confirmed that all routine effluent discharges from Pacific Northwest operations reported to date are below historical release levels and compliant with existing state and federal permits.
- Fifty-four National Environmental Protection Act (NEPA) reviews were completed on experimental projects within the Laboratory to ensure that the associated project scope will not have potential to create environmental risks.
- All legacy waste associated with the High-Dose Waste Disposal Task was transferred from the RPL Shielded Analytical Lab (SAL) to the High Level Radiochemistry Facility (HLRF). The load-out procedure and associated training plan were completed. A significant amount of cleanup occurred within the RPL Room 604 glovebox including cleanup of equipment and most of the debris on the floor of the glovebox.

**PNNL Environmental Management Performance Report – January 2001**  
**Section B - Project Performance Summary**

## Performance Data and Analysis

As of November 26, 2000 the cumulative costs are \$1.7 million with a negative cost variance of \$0.06M and a cumulative schedule variance of negative \$0.3M. The cost variance is within the 10% reporting threshold. A brief explanation for the variances will be described following the tables and chart.

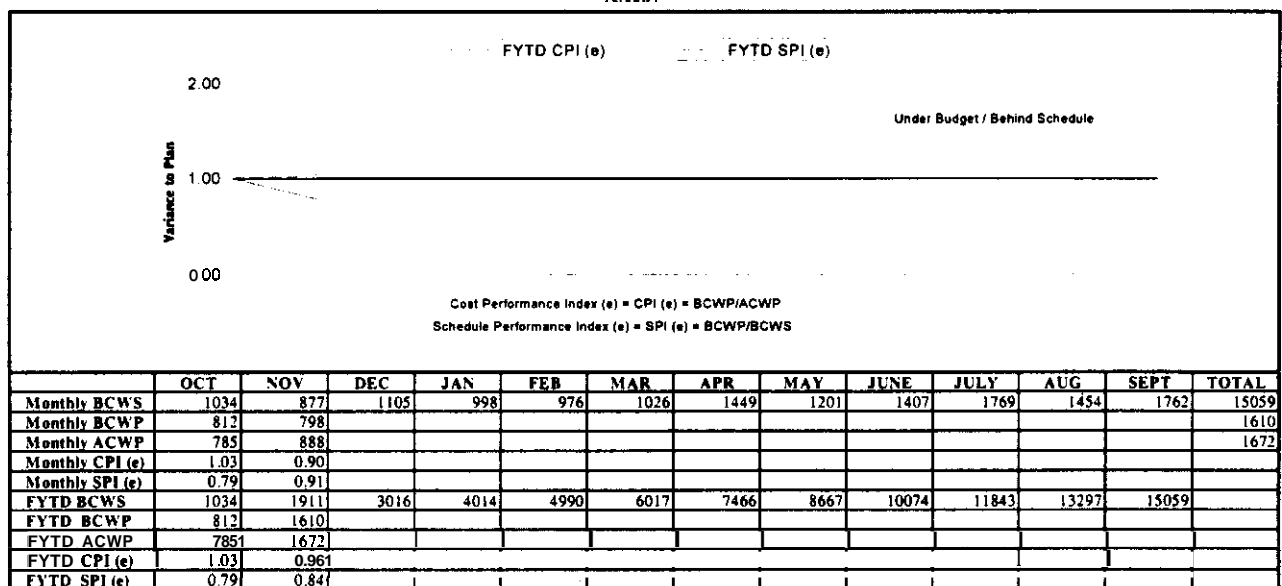
	BCWP	ACWP	Variance
<b>PNNL Waste Management</b>	\$1.6	\$1.7	(\$0.1)
	BCWP	BCWS	Variance
<b>PNNL Waste Management</b>	\$1.6	\$1.9	(\$0.3)

1.7.1	RL-ST01	\$1,911	\$1,610	\$1,672*	(\$62)	-4	(\$301)	-16
<b>Total</b>		\$1,911	\$1,610	\$1,672*	(\$62)	-4	(\$301)	-16

\* Numbers reflect PNNL system: per DISCAS actuals, including \$ expended by Fluor for S&M of 242B/BL, are only \$1,656.2K

### Cost / Schedule Performance Indices

FY 2001 Cum to Date Status  
11/26/00



***PNNL Environmental Management Performance Report – January 2001***  
***Section B - Project Performance Summary***

The negative cost variance of \$0.06M primarily results from completing FY 2000 scope offset by delayed billings. In addition, FY 2001 rates have been finalized and are higher than anticipated during the planning process. The impacts of the **cost** increase will be incorporated in the same baseline change request that is including carryover activities.

The schedule variance for November, of negative \$0.3M, is above the 10% threshold. The primary activities making up the negative schedule variance are as follows:

- Delays have been encountered within the Program awaiting resolution of FY 2001 funding allocations. Resolution on funding was received following the November Site Management Board meeting. Some activities needed **to** be deleted **or** deferred and revisions **to** scheduled activities associated with funding allocations will be included in upcoming baseline change request.
- Delays have been encountered with procurement of High Dose Solid Waste shielded drums. As a result of this delay the drum shipping dates for the **73** cans of transuranic (TRU)/low-level waste (LLW) is expected to occur within the first quarter of FY 2001. Concerted efforts are being made to streamline the fabrication process and set priorities for which type of drums need to be available first.
- Delays have been encountered in design and engineering efforts for the heating, ventilation, and air conditioning (HVAC) controls upgrade/replacement within the Radiochemical Processing Laboratory (RPL). Resources are reviewing proposal for combined HVAC controls and switchgear replacement within the facility.
- The integrity assessment of the radioactive liquid waste tank (RLWT)-piping is currently on hold with no defined completion date. The integrity assessment and associated waste processing continues to be delayed because the 204-AR Facility (receiver facility) is not ready, and Pacific Northwest does not want **to** add any liquids to the tank to make it a radiologically controlled tank until the receiver facility is ready.



## GLOSSARY

**Actual cost of work performed (ACWP):** The actual cost incurred and applied or distributed for the work performed within a given time period. It includes all labor categories, material, any other direct costs, subcontract work, and function overhead.

**Approved baseline:** The budget authorized to perform the workscope that has been agreed upon by the customer and the contractor(s). It is portrayed in the Multi-Year Work Plan with all approved changes. This baseline may or may not be fully funded, and could be more or less than the compliance baseline.

**Budget at completion (BAC):** The sum of budgets established to complete a program and/or project or any component of a program and/or project.

**Budgeted cost of work performed (BCWP):** The value for completed work measured in terms of the planned budget for that work. It is synonymous with earned value.

**Budgeted cost of work scheduled (BCWS):** The time-phased budgeted value of work scheduled to be accomplished over a given time period. The BCWS for a total cost account through its entire period of performance is equal to the BAC for the cost account.

**Carryover Workslope:** The estimated dollar amount of the workslope that was not completed during the fiscal year and which will be carried over and completed in the next fiscal year.

**Compliance baseline:** The budget that is required to perform the workslope necessary to be in compliance with State and Federal regulations, enforceable agreement milestones, and DNFSB milestones. The level of activity required to be in compliance assumes sufficient funding. **Note:** Because approved baselines are considered to be compliant, this column will likely be eliminated.

**Contract Inherited:** The assumed budget for the planned scope of work at the time a new contract is signed by the company responsible for performing the work.

**Cost variance (CV):** The difference between BCWP and ACWP ( $CV = BCWP - ACWP$ ). At any time, it shows whether the work actually performed has cost more or less than the amount budgeted for the same work.

**Cost Performance Indicator (CPI):** The CPI is the ratio of BCWP to ACWP, or  $(BCWP/ACWP)$ .

**Earned value (EV):** The periodic, consistent, and objective measurement of work performed in terms of the budget planned for that work. The EV is synonymous with the BCWP and it is compared to the BCWS to obtain schedule performance and to the ACWP to obtain cost performance.

## **GLOSSARY (CONTINUED)**

**Estimate at completion (EAC):** Cost allocated to the work breakdown structure element to date, plus the estimate of costs for authorized work remaining. Authorized work remaining includes any undistributed budget.

**Fiscal Year Spending Forecast (FYS):** The estimated total that will be spent from October through September (current Fiscal Year).

**Funding carryover and new Budget Authorization (BA):** This funding represents both the funding allocated to perform workscope planned in the prior fiscal year, not completed, and approved to be performed in the current fiscal year, as well as new BA to perform the approved baseline workscope.

**Funding target:** The level of funding that is anticipated (as a result of the Integrated Priority List process) in a given Fiscal Year based on an assumed funding level for the Site.

**Multi-Year Work Plan – 10/1/XX:** The Project's approved cost/schedule/technical baseline at the beginning of the fiscal year.

**Project Execution Module (PEM):** The Project Execution Module (PEM) of the Integrated Planning, Accountability, and Budgeting System-Information System (IPABS-IS) replaces the Progress Tracking System (PTS) as EM Headquarters' centralized system for reporting financial, milestone, performance, and other execution-year information for PBSs, sub-PBSs, TTPs, and line item construction projects. In addition, this module collects mid-year and year-end actual performance information against the agreed upon management commitments for the current execution year.

**Schedule Performance Indicator (SPI):** The SPI is the ratio of BCWP to BCWS, or (BCWP/BCWS).

**Schedule variance (SV):** The difference between BCWP and BCWS ( $SV = BCWP - BCWS$ ). At any time, or for a given period of time, it represents the difference between the planned dollar value of work actually accomplished and the value of the work scheduled to be accomplished.

**Work breakdown structure (WBS):** A product-oriented family tree division of real estate, hardware, software, services, and data products that organize, define, and display all of the work to be performed in accomplishing the program and/or project objectives.