

# Environmental Management Performance Report

## August 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



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Department of Energy**  
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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.

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.

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



**Fluor Hanford**  
A Fluor Global Services Company

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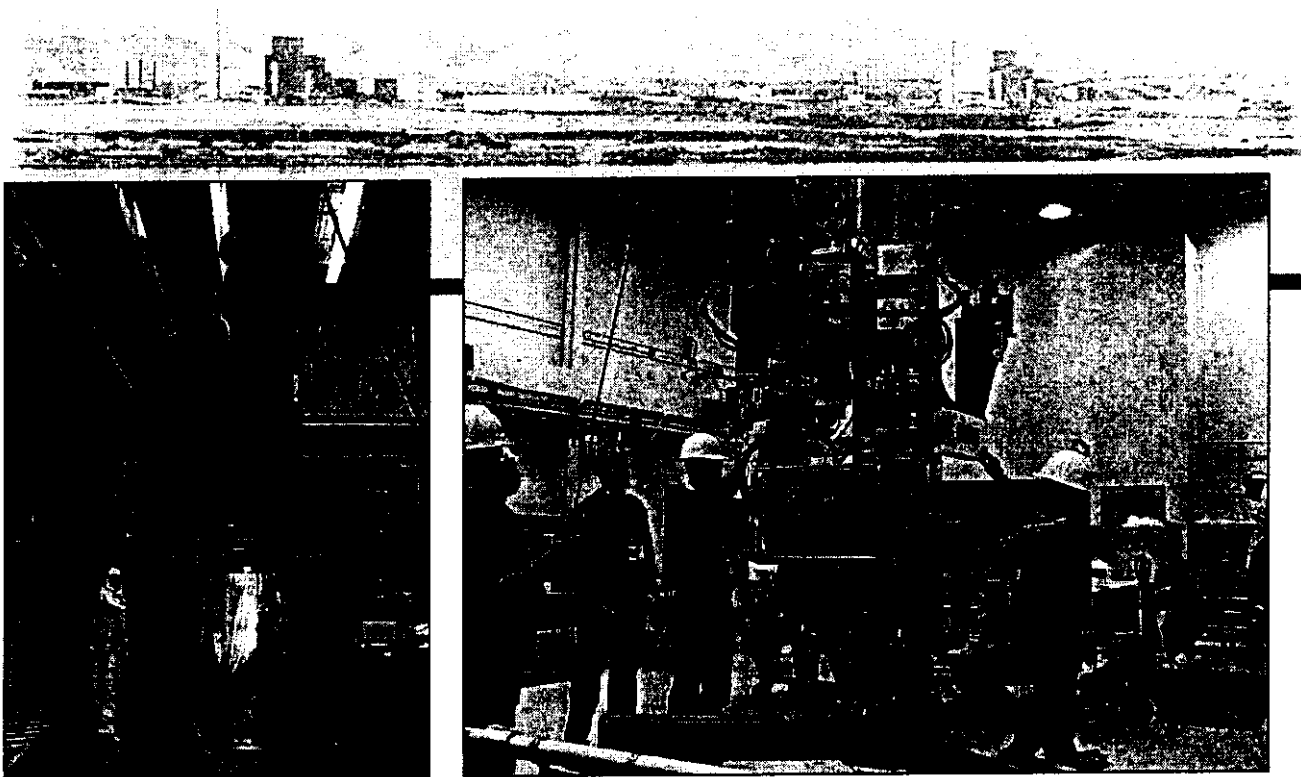
## INTRODUCTION

The purpose of this report is to provide the Department of Energy Richland Operations Office (RL) a monthly *summary* of the Central Plateau Contractor's Environmental Management (EM) performance by Fluor Hanford (FH) and its subcontractors.

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 contractor 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 June 30, 2001. All other information is updated **as** of July 25, 2001 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***

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## INTRODUCTION

This section of the report is intended to provide Management with an executive-level summary of the most noteworthy performance information to date. All cost, schedule, milestone commitments, performance measures, and safety data is current as of June 30, 2001. Accomplishments, Issues and Integration items are current as of July 25, 2001 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, funds management and milestone performance. Overviews of safety ensue. The next segment of the Executive Summary, entitled Breakthroughs and Opportunities for Improvement represents potential significant improvements over the established baseline. The Critical Issues section is designed to identify the high-level challenges to achieving cleanup progress.

The next section includes FY 2001 EM Management Commitment Milestones and Critical Few Performance Incentives.

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 TPA/EA milestone tables found in the applicable Project Sections.

## NOTABLE ACCOMPLISHMENTS

**Land Disposal Restriction (LDR) Report** — The CY 2000 LDR report was approved by RL and transmitted to the regulators on June 28, 2001. This transmittal met the requirements of Tri-Party Agreement milestone M-26-01K.

**HEPA Filters Replaced** — Ninety-six contaminated HEPA filters, vintage 1978, were successfully replaced and tested at the 222-S Laboratory over the fourth of July weekend. Disruption of analytical work was avoided, and no injuries or skin contaminations occurred. A high level of teamwork and planning was involved in order to complete this work safely under high temperature conditions.

**Stabilization of Nuclear Material** — Repackaging of the 31 plutonium/aluminum (Pu/Al) Alloys Group 1 was completed on June 19, 2001 thereby completing the residues packaging portion of milestone TRP-01-501, "Complete Plutonium Alloy Stabilization or Shipment." Thermal stabilization and packaging of Pu alloys was initiated. A total of forty-seven (47) liters of solution were processed through the magnesium hydroxide [Mg(OH)<sub>2</sub>] hot plates during the month of June, bringing the FYTD total to 562 liters.

**B Cell Mixed Waste Cleanout Completed** — All twenty-one 3-82B Grout Containers have been loaded out and shipped to the Central Waste Complex, completing the work scope of M-89-02, "Complete Removal of 324 Building Radiochemical Engineering Cells (REC) 6-Cell Mixed Waste (MW) and Equipment."

**Accelerated Deactivation Project Efforts Continue** — The project has completed all nine shipments (135 metric tons) of contaminated fuel to the Low-Level Burial Ground (LLBG). Additionally, both water towers scheduled for demolition are now on the ground; and, the first entry into 224-T's E Cell was successful, finding no airborne and minimal contamination.

**Equipment Disposition Project Activities Continue** — The first of four tall well cars (once used to transfer fuel from the reactors to the processing plants) was shipped from Hanford to Memphis, TN, on July 16, 2001. This seventy-five tons of scrap is being recycled, which avoids burying the car at Hanford as mixed waste.

**Fuel Movement Activities Continue** — Sixteen Multi-Canister Overpacks (MCOs) (332 canisters - 4608 fuel assemblies) have been removed from K West (KW) Basin for a total of 74.85 Metric Tons of Heavy Metal (MTHM) shipped. The sixteenth MCO was shipped to the Cold Vacuum Drying (CVD) Facility on July 9, 2001. After being processed at the CVD Facility, it was then shipped to the CSB on July 12, 2001.

**The 300 Area Powerhouse Bunker Tank Removal project completed** — This project provides for the removal of the 300 Area powerhouse concrete bunker tank. This 450,000 gallon tank is 54 years old and until 1998, was used to store diesel fuel for the powerhouse supplying steam to the entire 300 Area. Over its life span, the tank had leaked and consequently, removal was required by the Washington State Department of Ecology (WSDOE) to eliminate a source of fuel contamination to the 300 Area. The removal of the concrete bunker tank was completed on July 17, 2001.

## PERFORMANCE DATA AND ANALYSIS

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

### FY 2001 Schedule and Cost Performance

**Schedule Performance** — There is a FY 2001 year-to-date 48 percent (\$19.8 million) unfavorable schedule variance that is within the established 10 percent threshold. Advanced Reactors Transition is the only project outside the threshold. Detailed variance analysis explanations can be found in the Project Sections.

**Cost Performance** — FY 2001 year-to-date cost performance reflects a 04 percent (\$1.7 million) favorable cost variance that is within the established 10 percent threshold. Projects outside the threshold are Advanced Reactors Transition, Mission Support, and National Programs. Detailed variance analysis explanations can be found in the Project sections.

**Estimate at Completion (EAC)** — Because the EACs portrayed on the following table represent current estimates for authorized work, they may differ from the Performance Execution Module (PEM) column. Additionally, approved changes to the baseline are reflected in EACs but may not yet be included in the PEM database due to timing issues.

# BASELINE PERFORMANCE STATUS

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

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

DATA THROUGH JUNE 2001

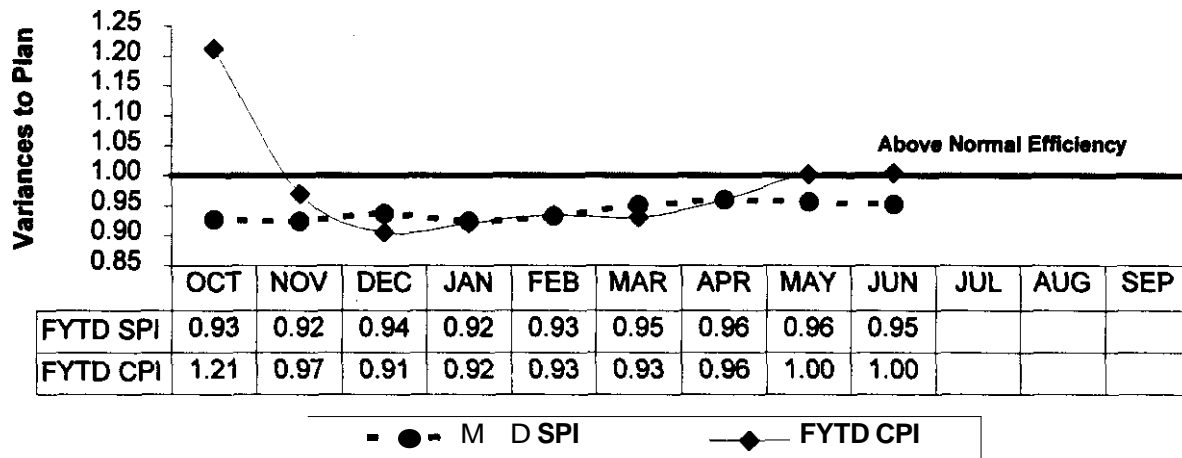
		Current Fiscal Year Performance (\$ x Million)					PEM	EAC
		FYTD			Schedule Variance	Cost Variance		
		BCWS	BCWP	ACWP				
<b>The Plateau</b>								
1.2	<b>Waste Management</b> TP02,WM03-05	77.0	76.5	74.8	(0.5)	1.7	106.4	103.0
1.2.4	<b>Analytical Svcs (222-S,HASP,WSCF)</b> WM06	23.4	23.1	22.0	(0.3)	1.1	31.8	31.5
1.4.5	<b>Nuclear Materials Stabilization</b> TP05	82.1	77.8	80.0	(4.3)	(2.2)	113.4	114.6
Subtotal The Plateau		182.6	177.4	176.8	(5.0)	0.6	251.6	249.1
<b>The River</b>								
1.4	<b>River Corridor</b> TP01,TP04,TP08,TP10,TP12,TP14	37.9	34.7	32.9	(3.2)	1.7	51.2	50.6
1.3	<b>Spent Nuclear Fuel</b> WM01	129.6	122.4	121.8	(7.2)	0.6	189.3	186.4
1.1.2	<b>Advanced Reactors (EM)</b>	1.3	1.2	2.5	(0.1)	(1.3)	1.9	1.9
	<b>Technology Development</b> (EM-10)	18.2	16.9	16.3	(1.4)	0.6	24.4	21.5
Subtotal The River		167.1	176.1	173.6	(11.9)	1.6	266.8	260.4
<b>The Future</b>								
1.9	<b>HAMMER</b> HM01	4.5	4.3	3.9	(0.2)	0.4	6.4	6.3
Subtotal The Future		4.6	4.3	3.9	(0.2)	0.4	6.4	6.3
<b>Multiple Outcomes</b>								
1.5	<b>Landlord</b> TP13	16.1	14.7	14.0	(1.3)	0.8	23.2	23.5
1.8	<b>Mission Support</b> OT01	17.4	16.1	18.6	(1.4)	(2.5)	23.8	22.8
1.11.6 WM07	<b>National Programs</b> OT02, WM07	3.6	3.6	2.7	0.0	0.8	5.5	5.0
<b>Subtotal Multiple Outcomes</b>		37.1	34.4	35.3	(2.7)	(0.9)	52.5	51.3
<b>Total PHMC Projects</b>		411.1	391.3	389.6	(19.8)	1.7	577.3	567.1

**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. Advanced Reactors ACWP includes \$1.7M of cost which is in WBS 2.1.1.1.4.1 and is not ART cost; see section E 3 for details. Technology Development does not include ORP/RPP TTPs currently reported in the RL Dataset in PEM.

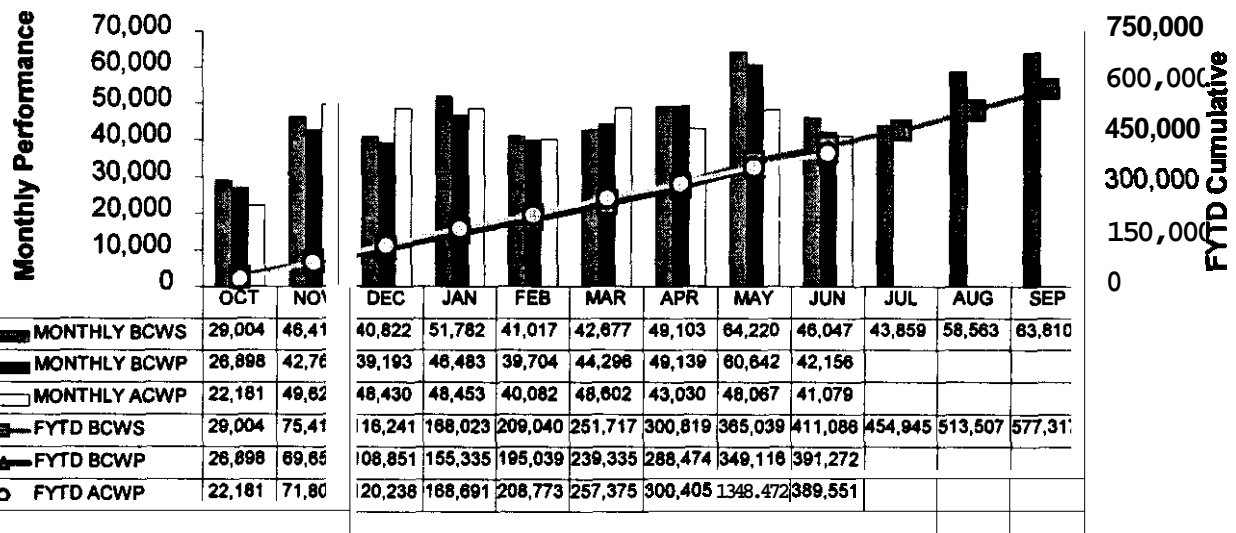
The following charts provide an overall graphical view of cost and schedule performance.

## FY 2001 SCHEDULE / COST PERFORMANCE

### CosffSchedulePerformanceIndices (FYTD)



### Performance Analysis FYTD and Monthly (\$000s)



## FUNDS MANAGEMENT

### FUNDS VS. SPENDING FORECAST (\$000)

#### (FLUOR HANFORD, INC. ONLY)

This chart reflects FH Project structure, which divides PBS WM05 between projects. This breakout is necessary to provide FH project managers with information specific to their areas of responsibility and accountability and to facilitate effective management of the funds within their control (obligated to the PHMC). Consequently, these figures will differ from those shown elsewhere in this report (as generated in the PEM system).

For purposes of funds management, the "Other" category includes all funding sources not suitable for redistribution within the Project Completion and Post 2006 control points.

Data Through June 2001

	Project Completion Control Point			Post 2006 Control Point			Line Items and Other		
	Funds	FYSF	Variance	Funds	FYSF	Variance	Funds	FYSF	Variance
<b>The Plateau</b>									
1.2 Waste Management TP02,WM05-05				98,580	95,453	3,127			
1.2.4 Analytical Svcs (222-S,HASP,WSCF) WM05				30,768	30,419	347			
1.4.5 Nuclear Materials Stabilization TP05 Line Item	05.1112	94,197	1,815				12,125	12,125	
<b>Subtotal The Plateau Operating</b>	<b>95,812</b>	<b>\$ 94,197</b>	<b>\$ 1,816</b>	<b>\$ 129,348</b>	<b>\$ 126,872</b>	<b>\$ 3,474</b>			
<b>Subtotal The Plateau Line Item</b>							<b>\$ 12,125</b>	<b>\$ 12,125</b>	
<b>The River</b>									
1.4 River Corridor TP01,TP04,TP08,TP10,TP12,TP14,WM05 Line Item	48,964	47,405	1,559	5,637	5,342	295			
1.3 Spent Nuclear Fuel WM01 Line Item	198,4112	1711,025	19,637						
1.1.2 Advanced Reactors (EM)				3,483	3,180	303			
<b>Subtotal The River Operating</b>	<b>248,428</b>	<b>\$ 224,230</b>	<b>\$ 21,196</b>	<b>\$ 9,120</b>	<b>\$ 8,122</b>	<b>\$ 998</b>			
<b>Subtotal The River Line Item</b>									
<b>The Future</b>									
1.9 HAMMER HM01				6,284	6,041	243			
<b>Subtotal The Future</b>				<b>\$ 6,284</b>	<b>\$ 6,041</b>	<b>243</b>			
<b>Multiple Outcomes</b>									
1.5 Landford TP13				22,437	20,965	1,472			
1.8 Mission Support OT01				15,780	15,883	(103)			
<b>Subtotal Multiple Outcomes Operating</b>				<b>\$ 38,217</b>	<b>\$ 36,928</b>	<b>\$ 1,289</b>			
<b>Subtotal Multiple Outcomes Line Item</b>									
<b>Total PHMC Proj Operating</b>	<b>341,238</b>	<b>\$ 318,427</b>	<b>\$ 22,811</b>	<b>\$ 182,967</b>	<b>\$ 177,363</b>	<b>\$ 5,604</b>			
<b>Total PHMC Line Items/Other</b>							<b>\$ 12,125</b>	<b>\$ 12,125</b>	

Note: SNF and NMS Funds include Pr

int's FY01 Supplemental Funding as approved 7-26-01.

[Status as of 7-27-01]

Note: "Funds" is expected funds

## 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 41 milestones were completed on or ahead of schedule, six milestones were **completed** late, and **seven** milestones are **overdue**. The seven overdue milestones are associated with five projects: Nuclear Material Stabilization (Section C 1), River Corridor (Section C 2), Spent Nuclear Fuel (Section D), Science and Technology Activities (Section E), and HAMMER (Section G).

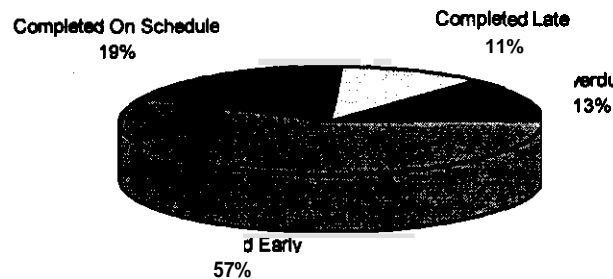
In addition to the **FY2001** milestones described above, there is one overdue milestone [Waste Management (Section B: 1)] from FY1999. Further details regarding this milestone may be found in the referenced Project Section.

FY 2001 information is depicted graphically on the following page. For additional details related to the data and prior year milestones, refer to the relevant project section titled "Milestone Exception Report." 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.

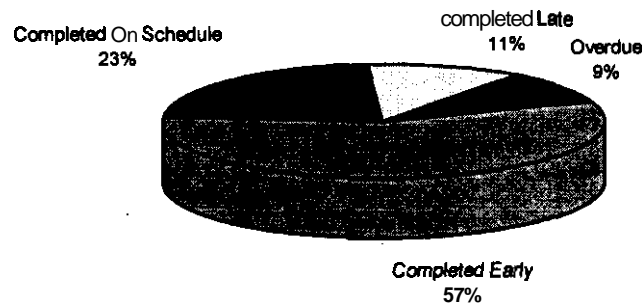
## TOTAL ALL HANFORD PROJECTS MILESTONE ACHIEVEMENT

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	6	0	1	1	0	3	0	11
DOE-HQ	0	0	0	2	0	2	0	4
RL	25	10	5	4	2	25	1	72
<b>Total Project</b>	<b>31</b>	<b>10</b>	<b>6</b>	<b>7</b>	<b>2</b>	<b>30</b>	<b>1</b>	<b>87</b>

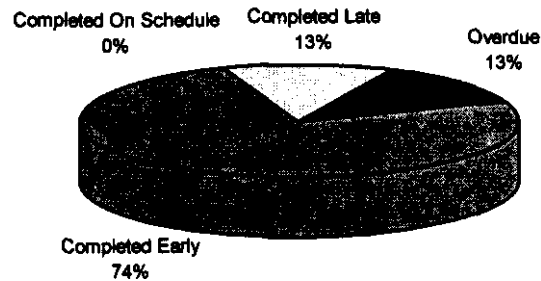
### Total Project (FYTD)



### RL

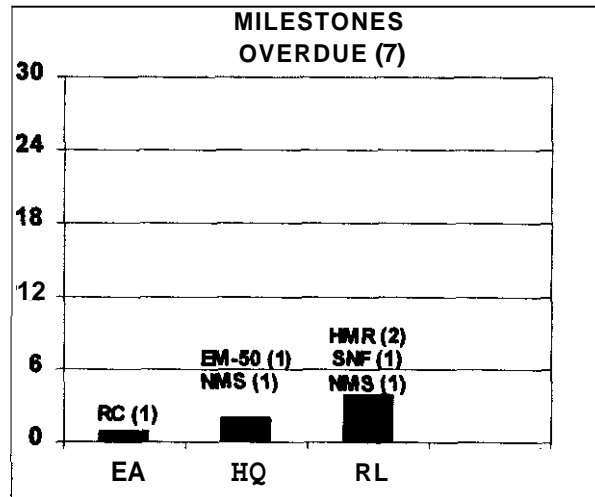
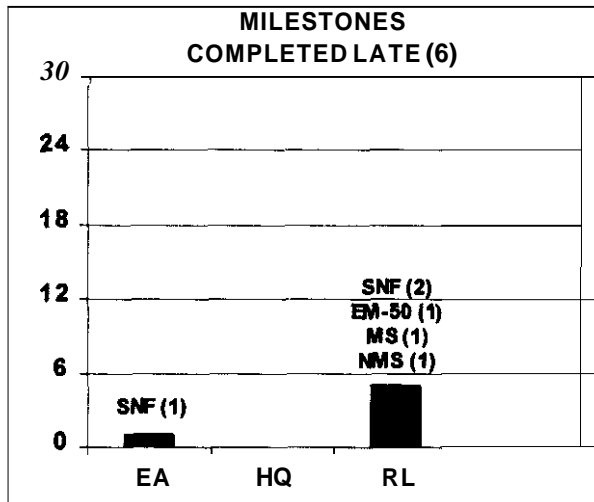


### Enforceable Agreement

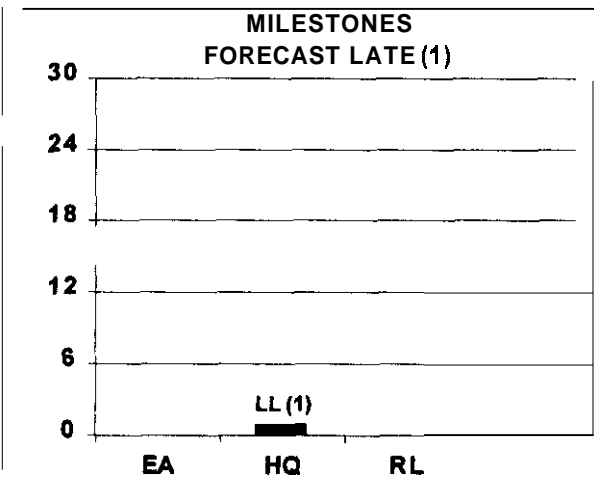


## MILESTONE EXCEPTIONS

### FISCAL YEAR TO DATE



### REMAINING SCHEDULED



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

- Completed Late
- Overdue
- Forecast Late
- Detailed information can be found in the individual project sections



## SAFETY OVERVIEW

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

### Significant Safety and Health Events

#### PHMC Level

**Occupational Safety & Health Administration (OSHA) Recordable Case Rate:** The FH OSHA Recordable Case Rate remains stable at 1.5 cases per 200,000 hours. All FH Team projects have commenced injury reduction efforts to address lacerations and ergonomic injuries.

**Lost Away Workday Case Rate:** No new lost away workday cases have occurred since February 27, 2001. The current safe work hour count for the FH Team is 3,620,844. However, a November 2000 subcontractor case was reclassified from lost restricted to lost away due to surgery performed on June 4, 2001. As a result, the Lost Away Workday Case Rate for FY 2001-todate is now 0.05 cases per 200,000 hours.

**US. Department of Energy (DOE) Safety Cost Index:** The FH DOE Safety Cost Index is stable at the revised baseline average of 3.6 cents per hour, following the current average and control limits. The baseline was adjusted due to additional days gained on cases during the baseline time interval.

The Waste Management (WM) Project has surpassed 25 million work hours without a lost away workday case. The WM OSHA Recordable Case Rate has remained stable at 1.8 cases per 200,000 hours for more than a year, but this rate is above the company goal of 0.9 and needs improvement. WM personnel are addressing the injury reduction issue in its Employee Zero Accident Councils. There has been a significant decrease in the DOE Safety Cost Index, with the last seven months below average.

The Nudelar Material Stabilization Project should reach 2 million safe work hours by the end of July or early August. The OSHA Recordable Case Rate is stable at the revised baseline average of 2.4 cases per 200,000 hours worked. The project recently completed a safety perception survey as part of its VPP baselining activities and is currently communicating results back to the employees and developing a strategic plan for improved performance.

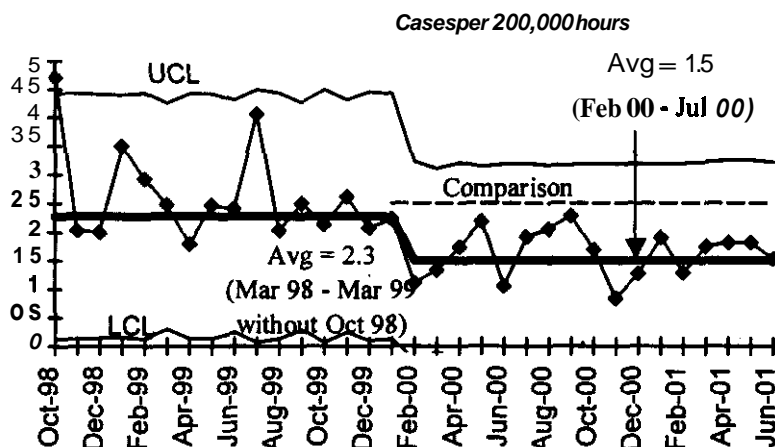
The River Corridor Project (RCP) has exceeded 1.7 million hours since the last lost away workday case. The OSHA Recordable Case Rate is showing signs of potential improvement with no new cases occurring in the past three months. RCP implemented an ergonomic injury reduction plan to address the increase in recordable injuries. The Safety Cost Index is stable at a good value, 3.7 cents per hour. On June 21, 2001, RCP submitted its VPP application to RL and the application was forwarded to DOE-HQ for review.

The Spent Nudelar Fuel Project reached 3 million safe work hours at the end of June 2001. The OSHA Recordable Case Rate is approaching the Fluor Corporate goal of 0.9. Due to a statistically significant reduction over the past eight months, the chart has been rebaselined to an average rate of 1.0 cases per 200,000 hours worked.

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

## Total OSHA Recordable Case Rate

Green



FY 2000 = 1.9

FY 2001 to date = 1.5

Contractor Comparison

Average = 2.5 (CY00)

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.

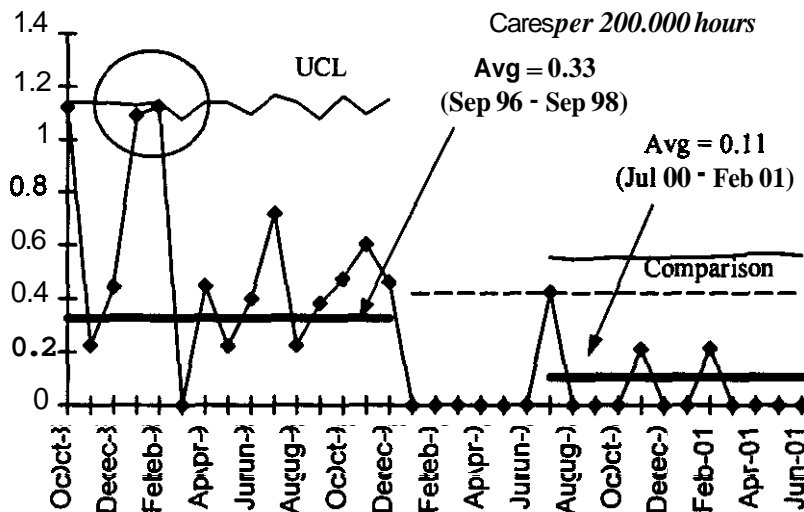
FH implemented a program to target an OSHA Recordable Case Rate of 0.9. The Fluor Global Services goal is 1.0.

This goal 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.

The Department of Energy complex-wide rates for DOE contractors are used as comparisons on these charts.

## OSHA Lost Away Workday Case Rate

Green



FY 2000 = 0.16

FY 2001 to date = 0.05

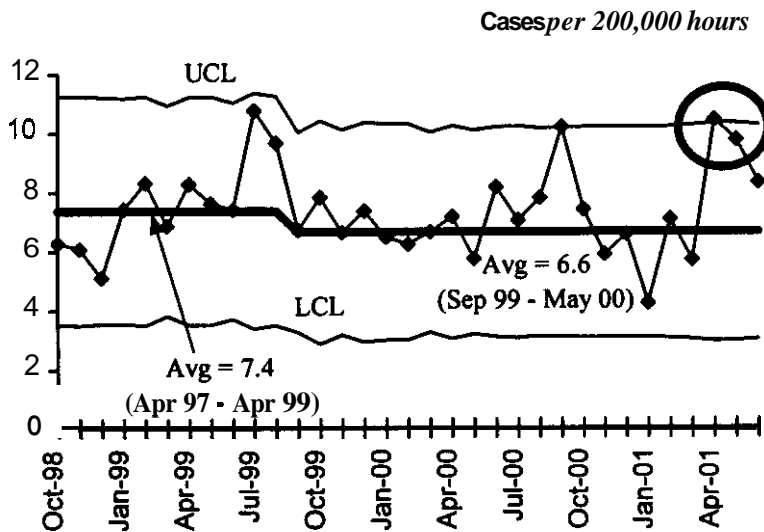
Contractor Comparison Average = 0.42 (CY00)

The Lost/Restricted Workday Case Rate chart has been replaced with this Lost Away Workday Case Rate Chart. This action aligns the executive summary with the individual project Charts.

FH has achieved a very low rate on this indicator, with a significant decrease over the past 2 years.

## FIRSTAID CASE RATE

Green

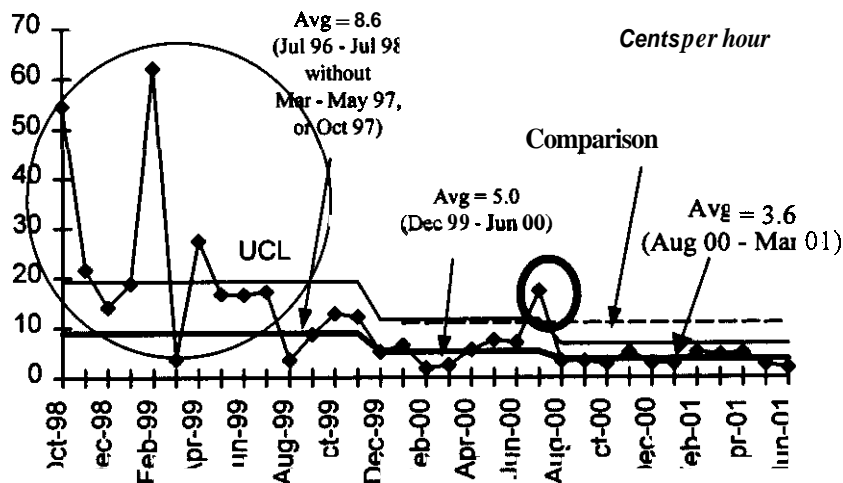


First Aid Rate undergoes Seasonal cycles. Increases occur in warmer weather due to insect and animal encounters, and due to wind related minor injuries. Such an increase has occurred this Spring. Hanford is especially susceptible to wind borne debris injuries due to the site wildfire last summer. First Aid case rate has remained relatively stable, a good indicator that injuries are not being under-reported.

Fiscal year calculations are not included as DOE does not publish a comparison rate, and comparisons of partial fiscal year data to prior years would not be appropriate due to the cyclical trend in the data.

## DOE SAFETY COST INDEX

Green



FY 2000 = 6.9

FY 2001 to date = 3.5

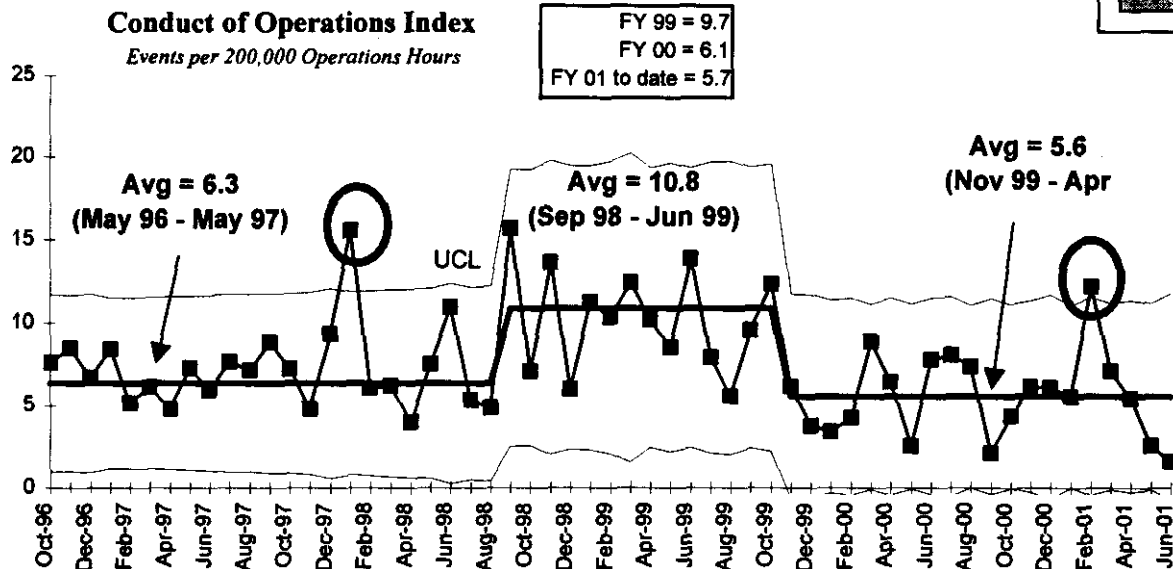
Contractor Comparison Average = 10.8 (CY00)

The data are stable within the current average and control limits. There has been a long term improving trend on this chart. The current performance is well below DOE average, and the historical 8.0 goal for this indicator.

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

## CONDUCT OF OPERATIONS / ISMS STATUS

Green



## ISMS STATUS

Green

The draft **Waste Management** VPP application is available for review and comment by all Project employees. Efforts continue to educate and involve WM employees in the VPP effort through use of the WM VPP TidBits information bulletin and a VPP "Longest Drive" golf competition, which includes answering questions about the VPP tenets. In addition, the VPP Steering Committee is developing informational posters to be provided to projects and facilities.

The **River Corridor Project** ISMS "Sustain and Maintain" process is in place. RCP is supporting the update of the FH annual ISMS training module through the ISMS Center of Expertise. The Voluntary Protection Program application was submitted to the DOE-RL Manager on June 21, 2001, and forwarded to DOE-HQ. The application will be reviewed by DOE-HQ personnel and a DOE-HQ on-site field review scheduled for later in the year.

**Spent Nuclear Fuel** Project personnel continue to demonstrate a commitment to ISM in "Doing Work Safely." Several examples of this include:

- Implemented a priority **system** to accomplish work that focuses on **corrective** maintenance necessary to continue facility operation and preventive maintenance to support the facility authorization basis. Currently, Engineering, Planning, **Work Control** and Maintenance organizations are working to the same goals established by Facility Managers.
- Completed **the** second maintenance **outage** cycle by maintenance and operations personnel.
- Conducted a "Time Out for Safety" following the completion of the second maintenance outage.
- Achieved over 3 million safe work hours.

## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

**Project W-460** — Construction of this project will be completed by October 1, 2001 (eighteen months ahead of schedule).

**International Atomic Energy Agency (IAEA)** — The new Epithermal Neutron Multiplicity Counter (ENMC) received from Los Alamos National Laboratory (LANL) and tested at PFP has proven to be a faster and more accurate way to measure material. If PFP and Protection Technology Hanford can qualify *the* counter, additional items may undergo nondestructive assay per day than is currently possible with existing calorimetry. This approach may also prevent a backlog of items needing measurement.

**New hot plate design** — A procurement contract was placed with Bellhaven to provide an improved hot plate for use in the 230-C-2 glovebox. A new design, to improve the reliability of the hot plate and drying of the precipitate, has been developed and a prototype is in fabrication for testing at PFP. The prototype is scheduled to be available the last week of July 2001.

**Technical Review of 327 Hot Cell Removal** — RCP and Technology Management collaboratively prepared the *327 Building Stabilization Science and Technology Plan*, which provides a schedule for identifying and demonstrating technologies supporting monolithic hot cell removal.

**Value Engineering for Configuration Management** — As previously reported, the RCP procedures, "Configuration Baseline Management," and "Engineering Document Change Control," were approved June 1, 2001. The two procedures authorize the use of alternate configuration management methods. Use of the alternate methods has the potential to dramatically change the way in which facility modifications are documented within the RCP. The procedures allow for a streamlined configuration management process that should have the greatest benefits during demolition and equipment removal activities.

**Permit By Rule Treatment at 300 Area TEDF** — FH is investigating the potential to treat limited categories of liquid non-radioactive hazardous wastes using the existing capabilities of *the* 300 Area TEDF by applying a permit exclusion available within the waste regulations. Treatment of hazardous wastes at TEDF could provide a low-cost option for disposal of *some* wastes currently sent off-site. The regulatory analysis is complete, and for the next two months the benefits and site needs for waste treatment will be compared against the costs and risks of implementing the treatment. A decision on whether to proceed will be made in September 2001.

**SNF Accelerated Closure Team (ACT)** — BCRs were submitted for DOE approval on two of the ACT initiatives: Accelerated Sludge Capture and Removal Strategy and Transition Deactivation Budget Reallocation.

**MCO Production Rate Improvements** — All equipment required to support and operate the manual process tables has been installed and tested. The new equipment is expected to be fully operational by August 1, 2001 and a reduction of up to 30 percent in the average processing time is expected. When this improvement is realized, MCO production capacity from K West Basin will be sufficient to meet all production requirements.

### Opportunities for Improvement

Nothing new to report at this time.

## ISSUES

**T Plant Canyon Cleanout** — T Plant Canyon cleanout has been delayed by the discovery, during planned cell visual inspections, of an unanticipated tank containing liquid and salt cake in Cell 11-L. Need for continuation of restrictions on canyon activities will be reassessed by Facility Management and addressed with RL(ABD). Sampling and characterization of tank contents will continue, as will independent effort to document inventory of remaining cells not inspected. This item will be updated when Cell 11-L's contents and remaining cells' inventory are completed.

**Exposed TRU Drum Retrieval** — The frequency of occurrence of unvented drums containing in excess of 15 grams plutonium is higher than assumed in the Low Level Burial Ground Justification for Continued Operation (JCO). Retrieval operations were suspended when two unvented drums above the RL-imposed limit for Trench 29 were discovered during retrieval operations in Trench 1 on May 31, 2001. A new JCO is being prepared to support completion of exposed drum retrieval in trenches 1, 20, 24, and 29. Subcontractor remobilization and resumption of retrieval is tentatively planned for early August based on RL progress in evaluating the JCO.

**Demolition of the 303-K facility** — EHI verbally informed RCP that it may not be able to support the demolition schedule for the 303-K facility. The delay will result in RCP missing the RCRA Part E permit condition of decon closure certificated submittal due September 30, 2001. BHI has provided a schedule and estimate that completes 303-K demolition by September 20, 2001, which will meet the Performance Incentive, but will require an extension to the RCRA Part E permit closure. Ecology is receptive to an extension and the process to extend the permit closure to December 31, 2001 has been initiated.

**PFP Non-destructive Assay (NDA) Program Suspension** — The Nondestructive assay (NDA) calculation of plutonium concentrations in packaged waste has recently come under question. FH, Bechtel Hanford, and RL continue to address this issue. At this time approximately two hundred forty (240) items have been reanalyzed and recalculated. An additional four hundred items are expected to undergo a second nondestructive assay by September 14, 2001. Characterization activities at RCPs 224-T and 231-Z facilities are impeded by the suspension of the NDA program at the Plutonium Finishing Plant (PFP). The PFP program has been suspended due to problems associated with specific plutonium value calculations resulting from NDA measurements. These delays impact Master Documented Safety Analysis development, Fire Hazards Analysis, and Emergency Planning Hazard Analysis. These activities tie into the Safety Analysis Report compliance issues per the 830 Rule. In addition, there is a potential cost impact if an outside organization is used. Replacement of PFP NDA program with PNNL NDA personnel is being investigated. Initial investigation suggests that PNNL can support NDA at 224-T by mid-August, and 231-2 NDA activities in fiscal year 2002.

## EM CORPORATE PERFORMANCE MEASURES

	FYTD Planned	FYTD Actual	FY 2001 Commitment
<b>Facilities Deactivated/Decommissioned</b>			
Facilities deactivated	19	19	7
Facilities decommissioned	8	9	12
<b>Transuranic (TRU) Waste</b>			
Stored - total inventory (m <sup>3</sup> )	16,683	16,507	n/a
Disposed (m <sup>3</sup> shipped to DOE site)	34	35	42
<b>High Level Waste</b>			
Treated (m <sup>3</sup> )	3,028	3,179	n/a
Stored - total inventory (m <sup>3</sup> )	7,835	7,227	n/a
Treated (m <sup>3</sup> )	400	440	568
Disposed (m <sup>3</sup> )	407	159	478
<b>Low Level Waste</b>			
Stored - total inventory (m <sup>3</sup> )	299	299	n/a
Disposed (on-site/commercial) (m <sup>3</sup> )	5,208	5,885	6734
<b>Material Stabilized</b>			
Plutonium Oxide (cans)	350	242	500
Plutonium Solution (L)	1614	494	n/a
Plutonium Residue (kg)	465	330	321
<b>SNF Moved to Dry Storage</b>			
Heavy Metal (MT)	79	79	53
<b>Technology Deployments</b>	7	7	18
<b>Pollution Prevention</b>			
HAZ (MT)	39	11	n/a
SAN (MT)	1,692	179	n/a
LLW (m <sup>3</sup> )	418	142	n/a
MLLW (m <sup>3</sup> )	131	83	n/a
<b>Cleanup/Stabilized Waste Avoided</b>			
FY2001 planned baseline amount (m <sup>3</sup> )	1,926	2,881	n/a

For deviations +/- 10%, see the following projects sections: MUW and LLW Disposed (Waste Management Project); Materials Stabilized - Plutonium Oxide, Solution, and Residue (Nuclear Materials Stabilization Project). For Pollution Prevention, less waste is being generated than planned. Waste avoided has been more than planned. NOTE: The TD Commitment is shared with BHL.

## EM MANAGEMENT COMMITMENT MILESTONES

DATA THROUGH JUNE 2001

Milestone	Due Date	Forecast Date	Actual Date	Completion
Transfer K-Basin Facility to River Corridor Contractor	6/30/01	On hold		
Remove spent fuel by July 31, 2004	8/31/01	8/31/01		
Accelerate 300 Area cleanup	4/30/01	3/29/01	3/29/01	
Support River Corridor Project contract transition	7/31/01	7/31/01	7/17/01	
Disposition surplus buildings and rolling stock	11/30/00	12/7/00	12/7/00	
Treat and Dispose MLLW	9/30/01	5/30/01		
Certify TRU waste and ship to WIPP	6/29/01	6/11/01	6/11/01	

## CRITICAL FEW PERFORMANCE INCENTIVES

The following table portrays the multi-year incentives. Specific current performance data can be found in the individual Project Sections.

### PERFORMANCE MEASURES

Data Through  
June 2001

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



## 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 interdiscipline and inter-project groups and demonstrate that Hanford Site contractors are working together to accomplish the EM Clean up mission.

- Analytical Services is supporting CHG high-level waste tank vapor and feed to the Waste Treatment Plant characterization (no change from *last month*).
- PFP is working with General Electric (GE) Vallecitos on a plan to transport a fuel pin to Hanford. This will assist GE Vallecitos with the final step in their nuclear material deinventory.
- PFP coordination with Lawrence Livermore National Laboratory (LLNL) to ship requested oxide material (81 kg) to that facility continues. A final determination of the material LLNL is requesting is still being negotiated. The shipper/receiver plan was submitted to LLNL for review. A meeting between DOE, LLNL and PFP to finalize transportation, container, and shipping agreements is expected to be held in mid-August.
- Activities continued for potential receipt of SNF that may be discovered by Bechtel Hanford Inc. during upcoming 105F and 105H reactor basins deactivation at K Basins (no change in *status from last month*).
- The Sludge Handling Project and T Plant Operations continued preparations for K Basin sludge storage at T Plant (no change from *last month*).

## 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

**TRU Waste Retrieval** - Retrieval of **exposed** drums will resume upon revision of the Low-Level Burial Grounds (LLBG) Justification for Continued Operations (JCO) (forecast for early August). Planning for buried drum retrieval continues.

**TRU Waste Shipment** - The next shipment to WIPP is scheduled for August 23, 2001. The shipment is contingent upon adequate availability of TRUPACT shipping containers due to competing priorities at Idaho National Engineering and Environmental Laboratory (INEEL) and Rocky Flats.

**LDR Report** - Support resolution of Ecology comments on the LDR report, which are due in August. Ecology will be conducting a site-wide LDR audit as part of their report review.

**TRU Recertification Audit** - Respond as required to the DOE Carlsbad review of the corrective action plans prepared in response to the Recertification Audit.

**Liquid Waste Processing** - Continue groundwater processing at the 200 Area Effluent Treatment Facility.

**MLLW Treatment** - ATG continues preparations for a thermal treatment trial burn in September. Limited additional non-thermal and thermal treatment continue.

**Accelerate Readiness to Receive Spent Nuclear Fuel K Basin Sludge** - By September 30, 2001: 1) Clear four T Plant canyon cells; 2) Complete the removal of four pieces of major equipment, and 3) Complete contractor Operational Readiness Review.

**Support to RCP** - Continue shipment and placement of D-Cell Hittman liners from the 324 facility in the Low Level Burial Grounds. Support the removal of a **Cm/Am** source from the 327 facility.

**WESF Operations** - Complete Hot Cells A through E lay-up in September 2001.

**NMS Project Support** - Continue to receive waste in support of Hanford ash processing through November 2001.

### Nuclear Materials Stabilization

**Oxides/Metals** - Complete stabilization and repackaging Pu metals and oxides in 3013 outer cans by August 31, 2001.

**Disposition of Nuclear Material** - Complete Project W-460 construction activities by October 1, 2001. Complete hot startup of the 2736-ZB Stabilization and Packaging System (W-460) by November 12, 2001.

**River Corridor Project**

**Uranium Disposition** - Approximately 5 metric tons of miscellaneous uranium scrap materials will be transferred to the Low-Level Burial Ground by September 30, 2001. In addition, the final disposition of thorium materials located within the 303-K Facility will be completed by September 30, 2001.

**327 Authorization Basis** - Implement technical update of 327 Authorization Basis by the end of FY 2001. This was slipped from May 2001 due to resource limitations created by the new requirements of the 10CFR830 Nuclear Safety Rule.

**300 Area Skyline Initiative** - Demolish 303-K and complete disposition of the water towers by September 30, 2001.

**Spent Nuclear Fuels**

**MCO shipments** - Continue MCO shipments through FY 2001.

**Process modifications** - Complete standard startup review for process modifications in KW Basin in July 2001.

**Canister cleaning operations** - Initiate KW Basin spent nuclear fuel canister cleaning operations in August 2001.

**Shippingport SNF** - Complete Standard Startup Review for Shippingport SNF receipt and storage at CSB and receive all Shippingport Canisters by September 2001. Initiate Shippingport fuel shipments to the CSB in November 2001.

**Start of Construction** - Approve Start of Construction for the K East and K West Basin facility modifications for Accelerated Fuel Transfer Strategy by September 2001.

**Revised transition plan** - Issue revised transition plan for the Sludge Handling Project by September 2001.

**Landlord**

**Project L-310** - Complete Construction of Project L-310, "Distribution Water Line," by August 31, 2001.

**Project L-298** - Complete Project L-298, "Road Resurfacing," by September 28, 2001.

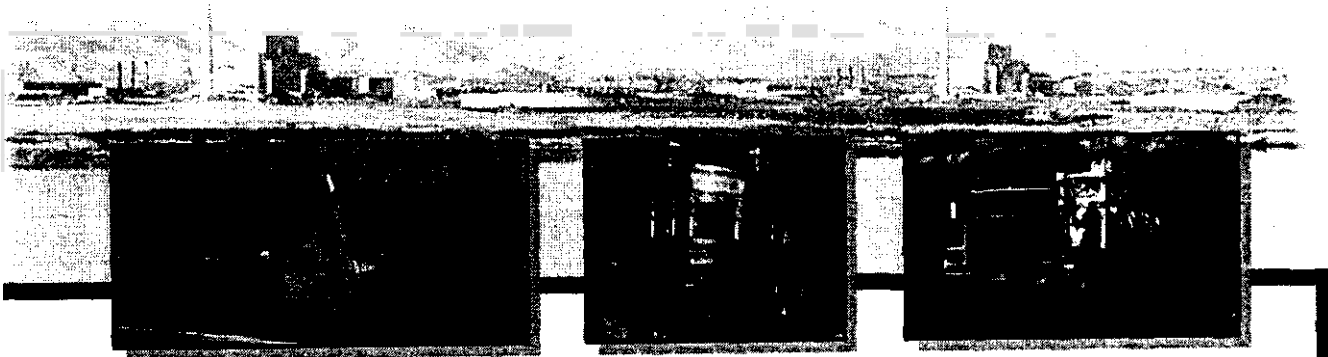
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# The Plateau

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.

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# **Section B:I**

## ***Waste Management***

### **PROJECT MANAGERS**

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

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

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## SUMMARY

Waste Management (WM) 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 WM Project, which has the majority of the work scope and funding.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, RL) shows three milestones completed early and one remaining milestone on schedule.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of June 30, 2001. Other data is updated as noted.

## NOTABLE ACCOMPLISHMENTS

**Accelerate Readiness to Receive Spent Nuclear Fuel (SNF) K Basin Sludge** - Canyon activity was suspended and an Unresolved Safety Question (USQ) was declared as a result of an unanticipated tank containing liquid and salt cake in Cell 11L. Improved estimates of volume and nature of tank contents resulted in reassessment by the Plant Review Committee (PRC) and determination that no USQ exists. Fuel removal readiness activities are back on schedule.

**Transuranic (TRU) Waste Program Production** - Fiscal Year to Date (FYTD) production through July 23, 2001: 764 Nondestructive Examination (NDE), 769 Nondestructive Assay (NDA), 294 Headspace Gas Analysis, 74 Glove box Repackaging, 13 Visual Examinations (VE), 5 shipments made to the Waste Isolation Pilot Plant (WIPP), and 64.4 m<sup>3</sup> certified.

A team of Management, Operations, Radiological Control and Engineering completed a program to reduce the time it takes to exit a TRU drum from the WRAP processing facility. The process involved the installation of ventilation devices on the TRU glovebox exit ports, improved work practices and implementing an aggressive air monitoring program to assure that the exits are done safely. The result has been an increase in drum exits from one every two and one half days to two per day.

**TRU Program Re-certification/Plutonium Finishing Plant (PFP) Audit:** The TRU Program re-certification and PFP audit was completed June 15, 2001. Deficiency Evaluation Group meetings were completed and corrective actions assigned to address the 3 Corrective Action Reports from the audit. Carlsbad DOE is reviewing corrective action plans at this time.

**Liquid Waste Processing** - From October 1, 2000 through July 23, 2001, 22.0 million gallons of wastewater were processed through the 200 Area Effluent Treatment Facility supporting the Environmental Restoration Contractor 200-UP-1 Groundwater. The Liquid Effluent Retention Facility has received over 120,000 gallons of wastewater through the Effluent Treatment Facility Load-In Facility via tankers.

**Support to River Corridor Project (RCP)** - Transport and storage of RH-TRU Hittman liners from the 324 B-Cell clean out was completed on July 18, 2001.

**Waste Encapsulation and Storage Facility (WESF) Operations** - The WESF roof repair was completed on July 6, 2001. WESF received the capsule welding equipment from 324 Facility on June 28, 2001. Twenty-seven (27) specific items used to fabricate Type-W capsules are now stored at WESF and are available if welding on capsules should ever be required.

**Land Disposal Restriction (LDR) Report** - The CY 2000 LDR report was approved by RL and transmitted to the regulators on June 28, 2001. This transmittal met the requirements of Tri-Party Agreement milestone M-26-01K.

## SAFETY

During June, there were no Lost Away or OSHA recordable cases. The Waste Management Project has achieved 2.5 million hours without a lost away workday. WESF reached a milestone of 500,000 hours worked since the last Lost Workday Case.

### Lost Away Workday Case Rate

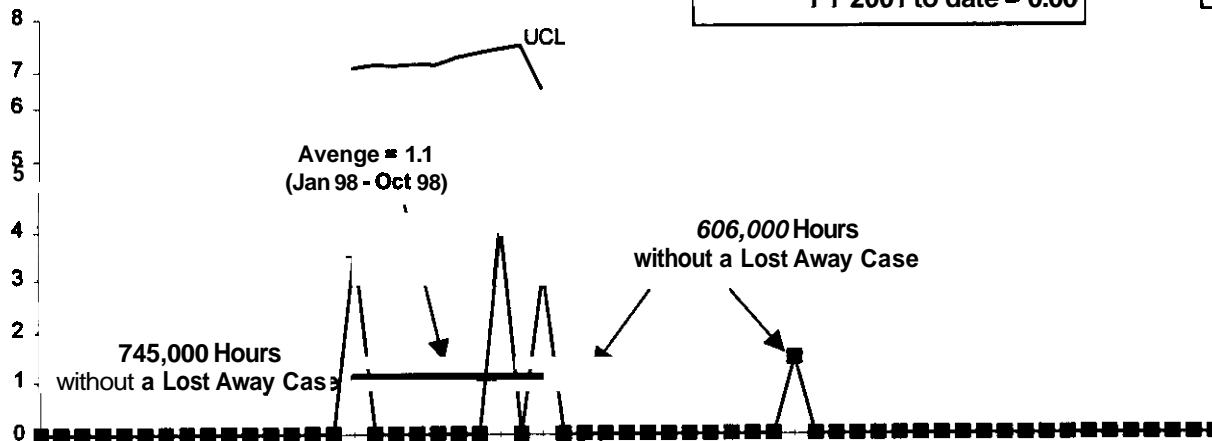
Cases per 200,000 hours

Project Safe Hours = 2,518,344

FY 2000 = 0.13

FY 2001 to date = 0.00

Green

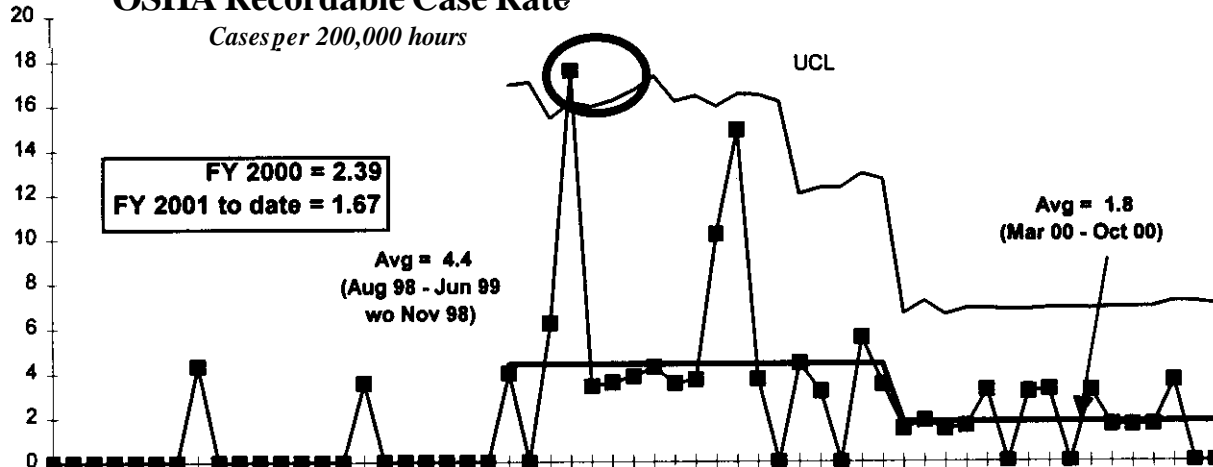


### OSHA Recordable Case Rate

Cases per 200,000 hours

FY 2000 = 2.39  
FY 2001 to date = 1.67

Green

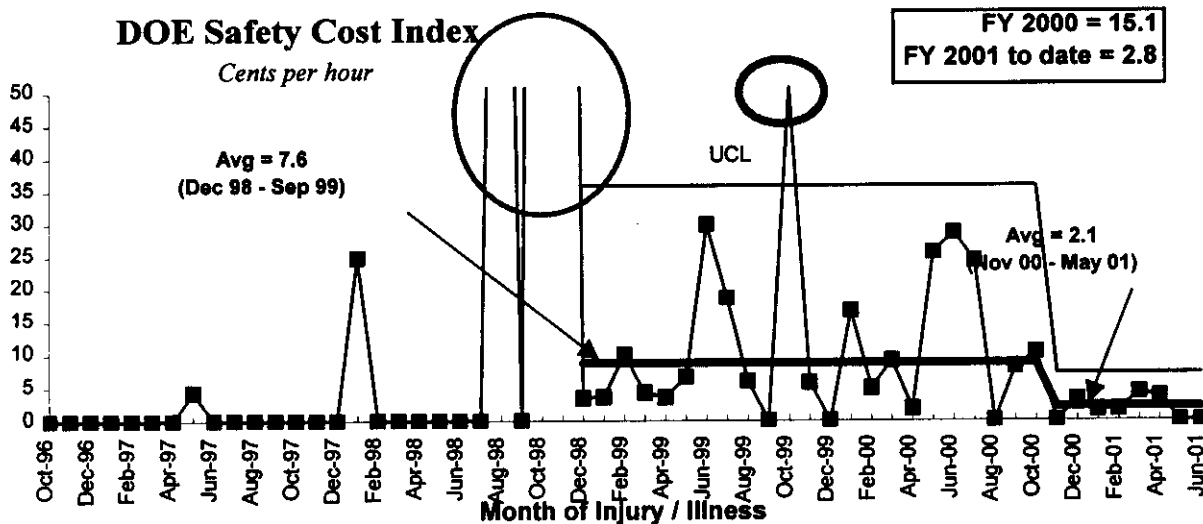


### DOE Safety Cost Index

Cents per hour

FY 2000 = 15.1  
FY 2001 to date = 2.8

Green



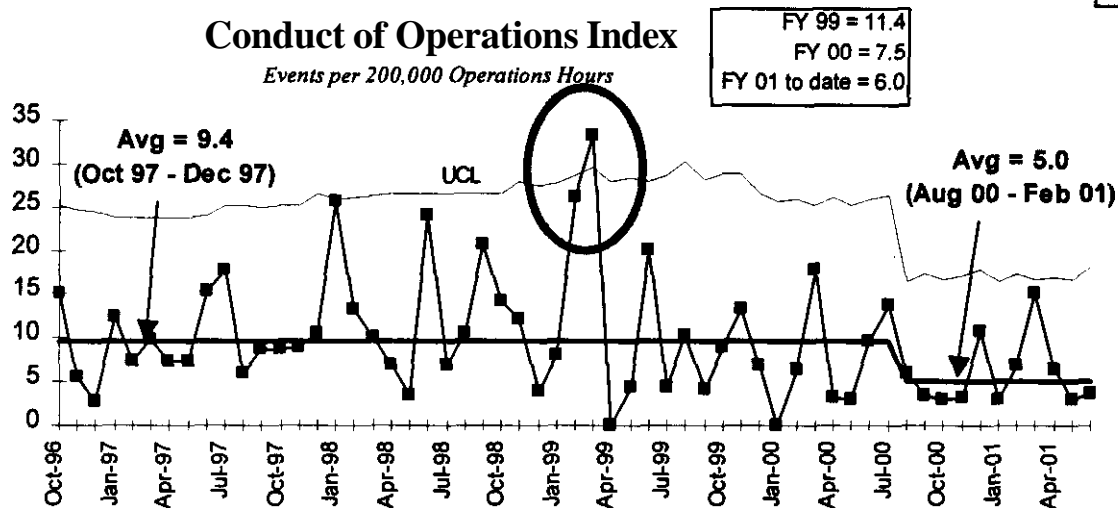
## ISMS STATUS

Green

- The draft WM VPP application is available for review and comment by all Project employees. Efforts continue to educate and involve WM employees in the VPP effort through use of the WM VPP TidBits information bulletin and a VPP "Longest Drive" golf competition, which includes answering questions about the VPP tenets. In addition, the VPP Steering Committee is developing informational posters to be provided to projects and facilities.

## CONDUCT OF OPERATIONS

Green



## BREAKTHROUGHS/ OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

Nothing to report at this time.

### Opportunities for Improvement

Nothing to report at this time.

## UPCOMING ACTIVITIES

**MLLW Treatment - ATG** continues preparations for a thermal treatment trial burn in September. Limited additional non-thermal and thermal treatment continue.

**Accelerate Readiness to Receive Spent Nuclear Fuel K Basin Sludge - By September 30, 2001:**  
1) Clear 4 T Plant canyon cells; 3) Complete the removal of 4 pieces of major equipment, and 3) Complete contractor Operational Readiness Review.

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**WESF Operations** - Complete Hot Cells A through E lay-up in September 2001.





**LDR Report** - Support resolution of Ecology comments on the LDR report, which are due in August. Ecology will be conducting a site-wide LDR audit as part of their report review.

## MILESTONE ACHIEVEMENT

Green

MILESTONE TYPE								TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	3	0	0	0	0	1	0	4
DOE-HQ	0	0	0	0	0	0	0	0
FO	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	0	0	0
<b>Total Project</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</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		
Number	Milestone Title	Status
M-91-13 (A1C-01-001)	Initiate Disposal of CH-LLWM	Due 06/30/01 - Completed 9/15/1999 
M-91-18 (WMP-01-001) EM Management Commitment	Transmit T Plant Sludge Storage Conceptual Design to Ecology	Due 06/29/01 - Completed 6/11/01 
M-26-01K	Annual Hanford LDR Report	Due 06/30/01 - Completed 6/28/01 
M-26-05H (WMH-00-006)	Prep Biennial Tritium Treatment Technology Evaluation report	Due 08/31/2001 - On schedule. 

## 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

FY 1999 Overdue - 1

TRP-98-709 1.42	RL	Complete Hot Cell Deactivation WESF Facility (A-E)	03/31/99	09/30/01
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Cause: This milestone is not complete due to not being supported at the current funding level.

Impact: No overall Impact is **expected**.

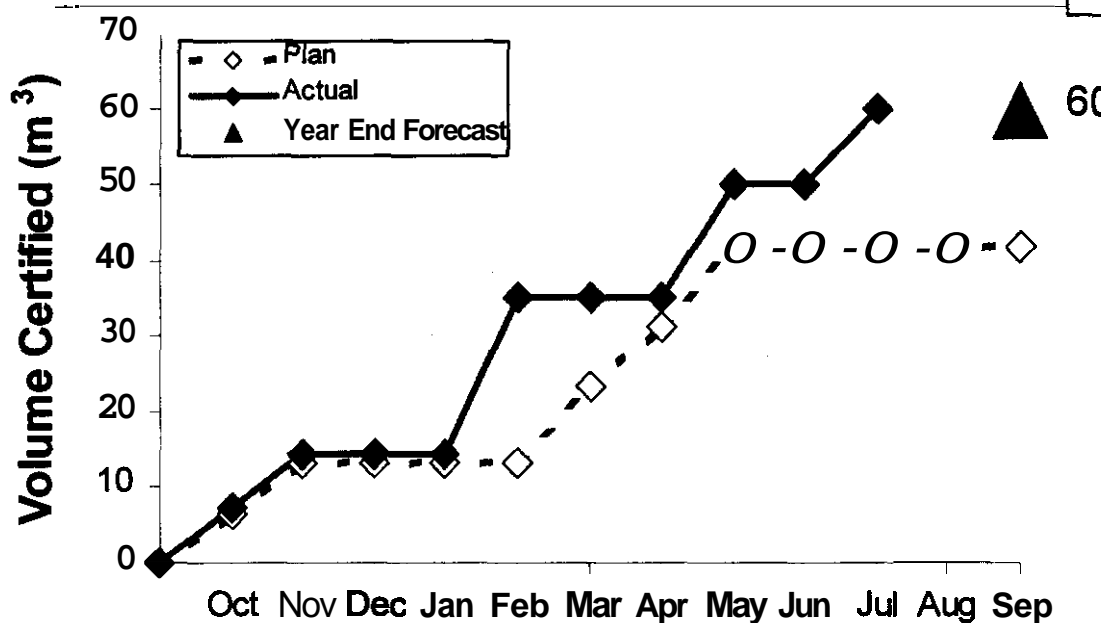
Corrective Action: Funding for this work scope [Return-on-Investment (ROI)] has been identified and a new forecasted completion date of September 30, 2001 established.

FY 2001 Tri-Party Agreement / EA Milestones		
Number	Milestone Title	status
	Nothing to report at this time.	
DNFSB Commitments		
	Nothing to report at this time.	

## PERFORMANCE OBJECTIVES

## CERTIFY TRU WASTE

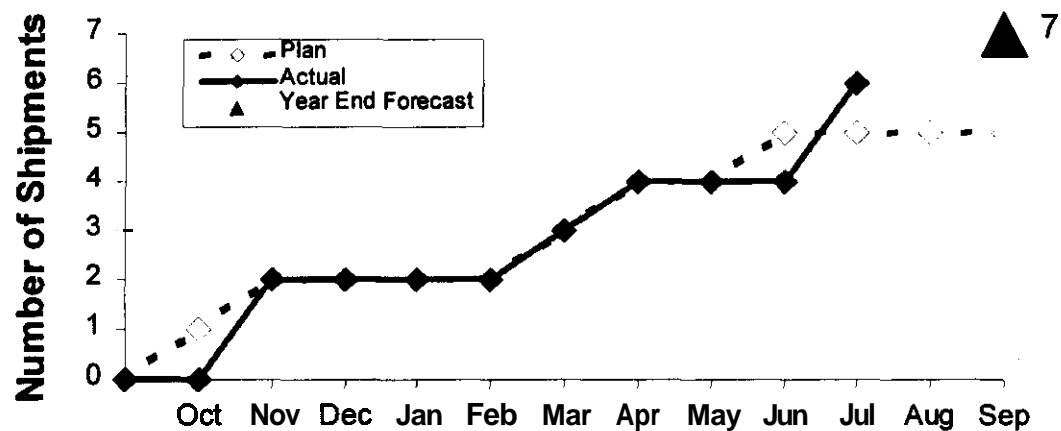
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Ahead of schedule.

## SHIP TRU WASTE

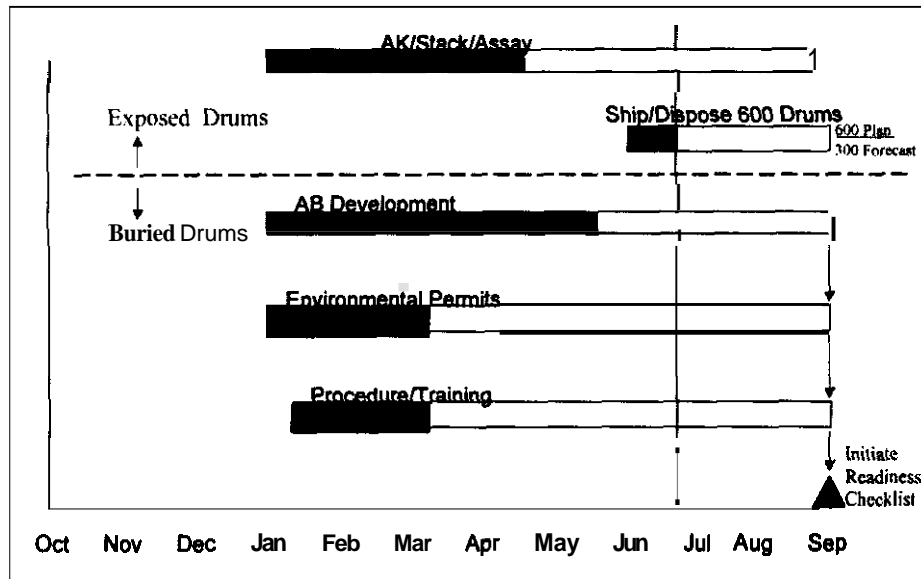
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On schedule.

## RETRIEVE TRU WASTE

Yellow

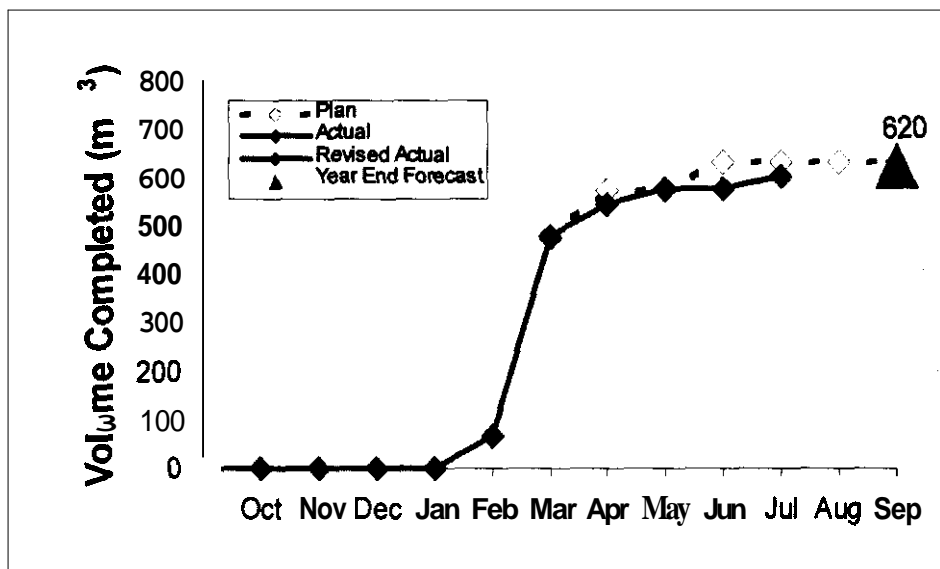


Behind schedule.

- RL approval of JCO (submitted July 13<sup>th</sup>) needed to resume exposed drum retrieval.
- Budgeted resources needed on board to achieve buried drum retrieval startup by the second quarter of FY 2002.

## TREAT AND DISPOSE MLLW

Green

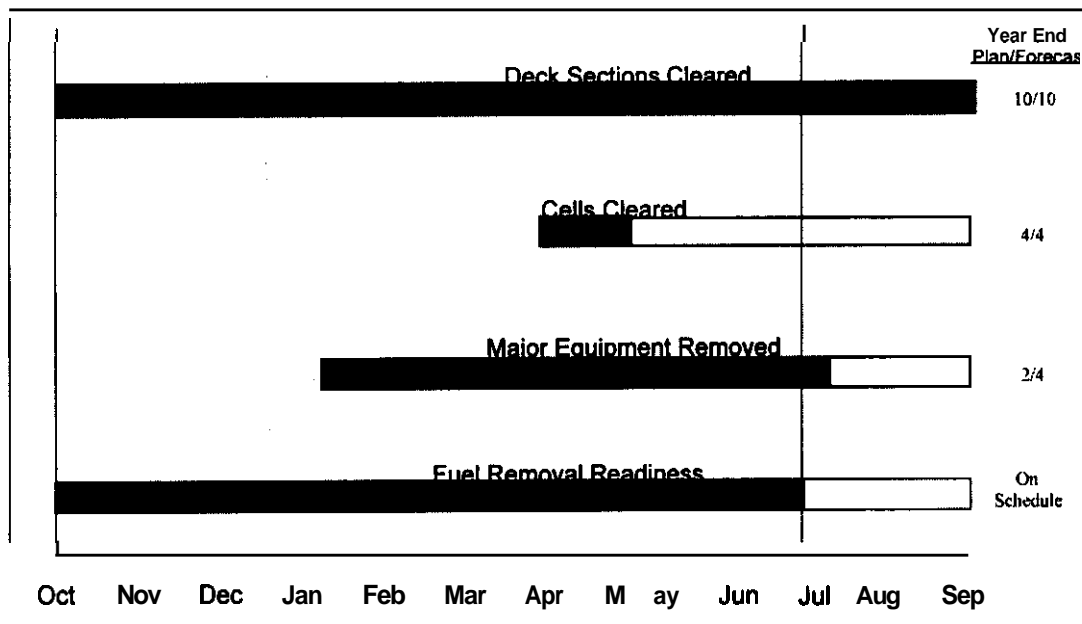


Behind schedule. Recovery in July and August.



## ACCELERATE READINESS TO RECEIVE K -BASIN SLUDGE

Green



- Clear 10 deck sections –complete
- Clear 4 cells – Behind schedule due to unexpected tank contents, but still recoverable
- Remove 4 pieces of major equipment – Ahead of schedule; PUREX tower size reduction in process (3<sup>rd</sup> major piece)
- Fuel removal readiness – Back on schedule, but no float

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

Green

		FYTD									
BY—		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC	
PBS WM03	Solid Waste Storage 6	\$ 21,452	\$ 21,204	\$ 17,254	\$ (248)	-1%	\$ 3,950	19%	\$ 23.523	\$ 25.135	
WBS 1.2.1	Disposal										
PBSWMM	Solid Waste Treatment	\$ 28,161	\$ 28,027	\$ 32,456	\$ (134)	0%	\$ (4,423)	-16%	\$ 39,963	\$ 43.031	
WBS 1.2.2											
PBS WM05	Liquid Effluents -	\$ 19,717	\$ 19,642	\$ 17,823	\$ (75)	0%	\$ 2,019	10%	\$ 26,540	\$ 24.765	
WBS 1.2.3	200/300 Area										
PBS TP02 WBS	WESF	\$ 7,636	\$ 7,839	\$ 7,436	\$ 3	0%	\$ 202	3%	\$ 10.363	\$ 10.105	
14.2											
Total		\$ 76,966	\$ 76,512	\$ 74,789	\$ (454)	-1%	\$ 1,743	2%	\$ 106,394	\$ 103.026	

Note: Above data includes 310/340 Facility Liquid Effluents as part of PBS WM-05.

## FY TO DATE SCHEDULE / COST PERFORMANCE

There is no significant schedule variance. The favorable cost variance is primarily due to vacancies and staff on leave in the Liquid Effluents Facilities.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

### Schedule Variance Analysis: (-\$0.5M)

#### Solid Waste Storage & Disposal — 1.2.1/ WM03

**Description/Cause:** The unfavorable schedule variance of \$0.2M (1 percent) was within the established threshold.

**Impact:** No Impact.

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

#### Solid Waste Treatment — 1.2.2/ WM04

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

**Impact:** No Impact.

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

#### Liquid Effluents — 1.2.3.1/ WM05

**Description/Cause:** The unfavorable schedule variance of \$0.08M (0.4 percent) was within the established threshold.

**Impact:** No Impact.

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

#### WESF — 1.4.2/ TP-02

**Description/Cause:** There is no schedule variance at WESF.

**Impact:** No Impact.

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

### Cost Variance Analysis: (+\$1.7M)

#### Solid Waste Storage and Disposal — 1.2.1/WM03

**Description and Cause:** The favorable \$4M cost variance within WM03 is due to the FY 2000 fee accrual reversal, labor underruns due to involuntary reductions of Force and restricted hiring, indirect variance distribution, and savings generated from the WM Program Management Account transfer from indirect to direct.

**Impact:** None.

**Corrective Action:** FY00 unearned fee has been used to fund the ATG settlement. A favorable yearend variance is forecasted.

#### Solid Waste Treatment — 1.2.2/WM04

**Description and Cause:** The unfavorable \$4.4M cost variance within WM04 is due to a contract modification that required payment to ATG upon shipment of waste, rather than the previous agreement of payment on return of waste. The prepayment caused a large variance. Also contributing to the variance is the settlement of claims by ATG.

**Impact:** None.

**Corrective Action:** A baseline change request was submitted to RL in June, documenting the added scope. The pre-payment variance will be eliminated as waste is returned from ATG.

#### Liquid Effluents — 1.2.3/WM05

**Description and Cause:** The favorable \$2.0M cost variance within WM05 is primarily due to labor underruns, reduced sample analysis and a reduced need for crane and rigging.

**Impab:** None.

**Corrective Action:** Liquid Effluents is forecasting a favorable cost variance.

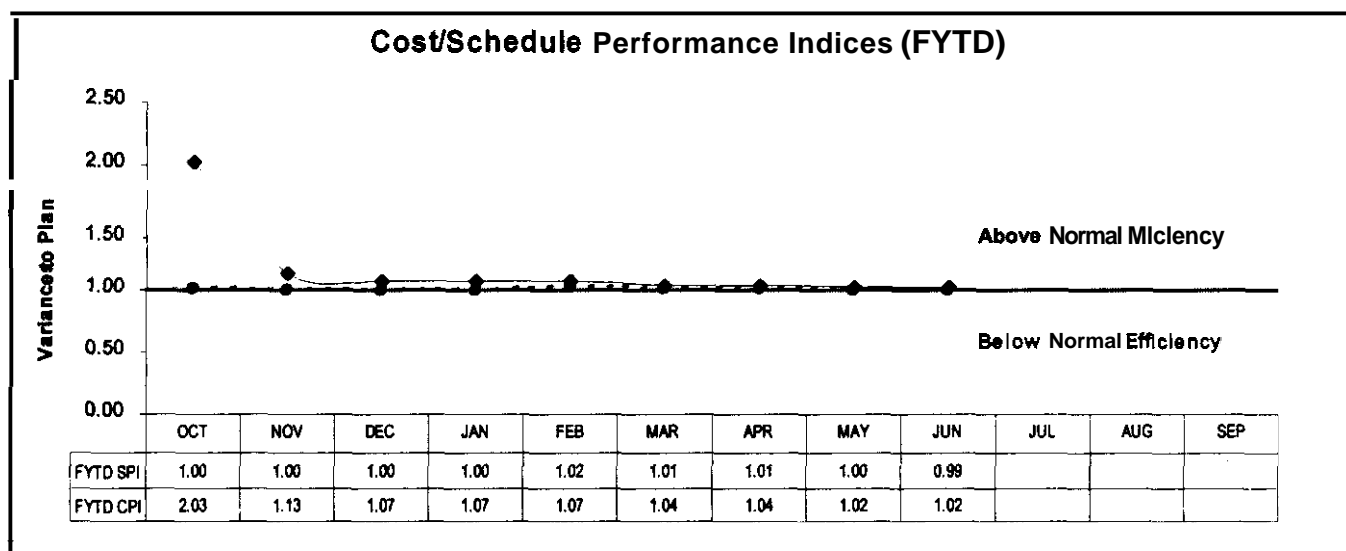
#### WESF — 1.4.2/TP02

**Description and Cause:** The favorable \$0.3M cost variance within TP02 was within the established threshold.

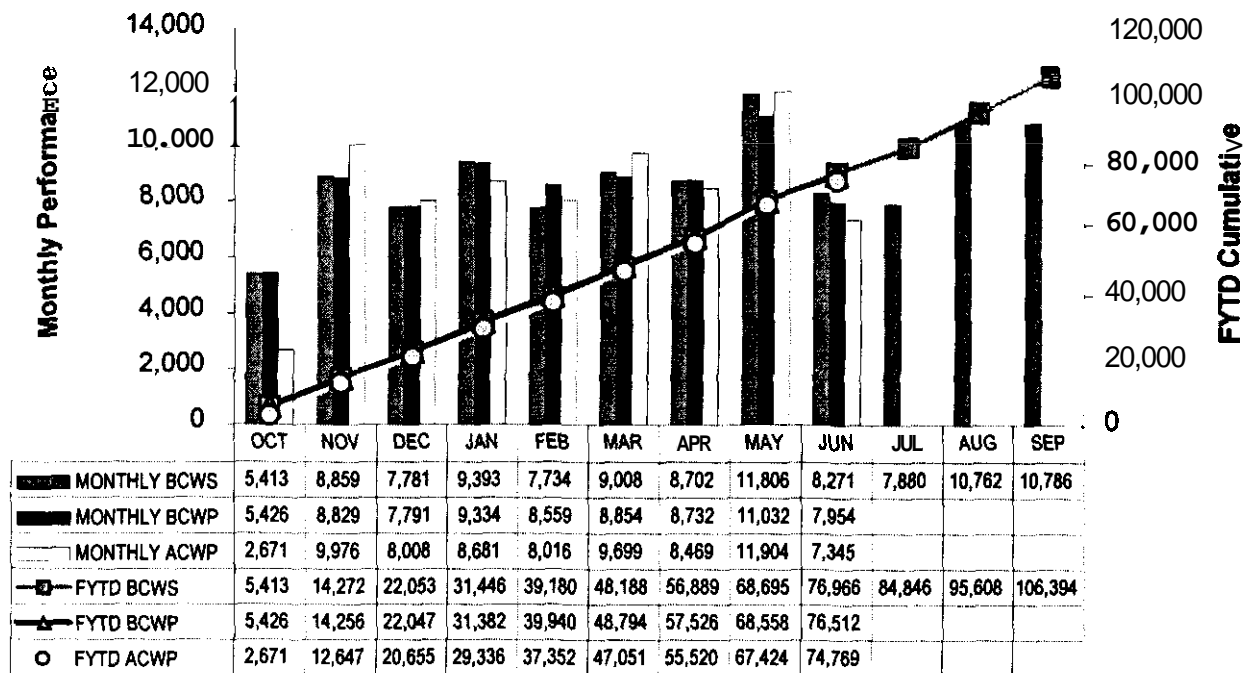
**Impab:** None.

**Corrective Action:** None.

## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)



### Performance Analysis FYTD and Monthly (\$000s)



Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) - Project Execution Module (PEM).  
Note: Above data includes RL contract for Steam.

### FUNDS MANAGEMENT — FY 2001 TO DATE FUNDS VS SPENDING FORECAST (\$000)

Green

	Funds	FYSF	Variance
<b>1.2 Waste Management</b>			
<b>TP02, WM03-WM05</b>			
Post 2006 - Operating	\$ 98,580	\$ 95,453	3,127
<b>Total</b>	\$ 98,580	\$ 95,453	\$ 3,127

## ISSUES

### Regulatory / Technical / External / DOE Issues / DOE Requests

#### Technical Issues

**T Plant Canyon Cleanout** — T Plant Canyon cleanout has been delayed by the discovery, during planned cell visual inspections, of an unanticipated tank containing liquid and Salt cake in Cell 11L.

**Impact:** Canyon activity was suspended and an Unresolved Safety Question (USQ) was declared as a result of the tank discovery. Due to the unknown nature of the tank contents, there is the potential for a nonconformance to the limits of the Criticality Prevention Specification, CPS-D-149-00001 Rev. B-0 and for failure to meet the assumptions of the supporting Criticality Safety Analysis Report, CSAR 86-007.

**Corrective Action:** Improved estimates of volume and nature of tank contents resulted in reassessment by PRC and determination that no USQ exists. Need for continuation of restrictions on canyon activities will be reassessed by Facility Management and addressed with RL(ABD). Sampling and characterization of tank contents will continue, as will independent effort to document inventory of remaining cells not inspected. This item will be updated when Cell 11-L's contents and remaining cells' inventory are completed.

**Exposed TRU Drum Retrieval** — The frequency of Occurrence of unvented drums containing in excess of 15 grams plutonium is higher than assumed in the Low Level Burial Ground Justification for Continued Operation (JCO). Retrieval operations were suspended when two unvented drums above the RL-imposed limit for Trench 29 were discovered during retrieval operations in Trench 1 on May 31, 2001.

**Impact:** Limited drum movement has resumed in trench 29, while trench 20 remains in stand-by, and trenches 1 and 24 remain in restricted status.

**Corrective Action:** A new JCO was prepared and submitted to RL on July 13, 2001 to allow resumption of exposed drum retrieval in Trenches 1, 20, 24, and 29. Subcontractor remobilization and resumption of retrieval is tentatively planned for early August based on RL progress in evaluating the JCO.

#### DOE Issues

**Accelerate Readiness to receive Spent Nuclear Fuel (SNF) Sludge at T Plant** — FH's schedule for readiness to remove Shippingport fuel from T Plant has been impacted due to a delay in issuance of the Safety Evaluation Report (SER) governing these activities (completed June 18, 2001).

**Impact:** Initiation of critical portions of the FH Management Self-Assessment (MSA) was delayed from May 22 until June 18, 2001. Subsequent readiness activities (MSA, Contractor ORR and RL ORR) must all be compressed to support timely fuel removal.

**Corrective Action:** The MSA is complete and FH has declared its readiness to begin the contractor ORR as scheduled on July 30, 2001. Continued RL support through the ORR process will be needed to support timely fuel movement startup on November 12, 2001.

### Regulatory Issues, External Issues and DOE Requests

None identified at this time.

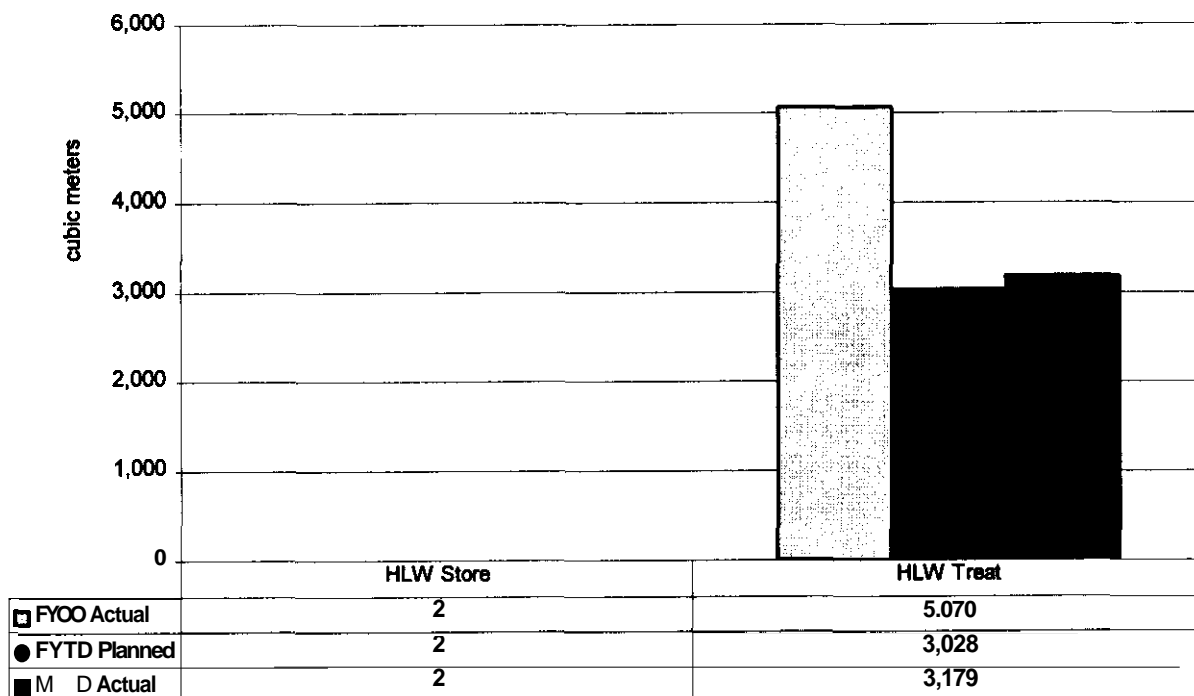
## BASLINE CHANGE REQUESTS CURRENTLY IN PROCESS

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
VWM-2001-027	6/12/2001	A/G Settlement	\$3,608			6/21/2001	6/25/2001	TBD	
VWM-2001-028	6/13/2001	T Plant Fans/Pre-Filters	\$1,066			6/21/2001	6/25/2001	NA	Approved
AWANCE WORK AUTHORIZATIONS									

## KEY INTEGRATION ACTIVITIES

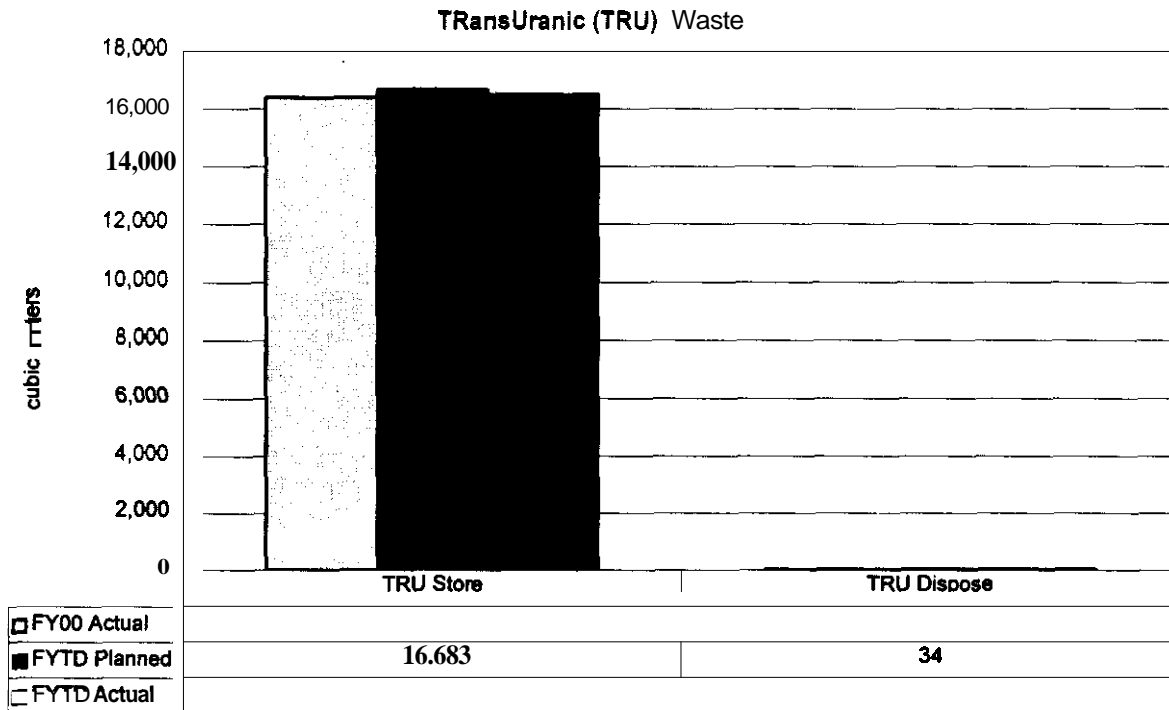
- SNF Project Support — Prepare T Plant to receive SNF K-Basin sludge.
- Liquid Effluents — Continue support of UP-1 Groundwater treatment at the 200 Area Effluent Treatment Facility.
- RCP Support — Continue support to RCP for the removal of waste from the 324 and 327 buildings as well as removal of uranium elements from the 300 area.
- NMS Project Support — Continue support to the NMS Project for the removal of waste from the PFP.

## High Level Waste (HLW): Storage and Treatment



Treatment: No campaign to process HLW at the 242A Evaporator was planned or performed during the 3rd quarter of FY01.

# TRANSURANIC(TRU) WASTE: STORAGE, TREATMENT AND DISPOSAL

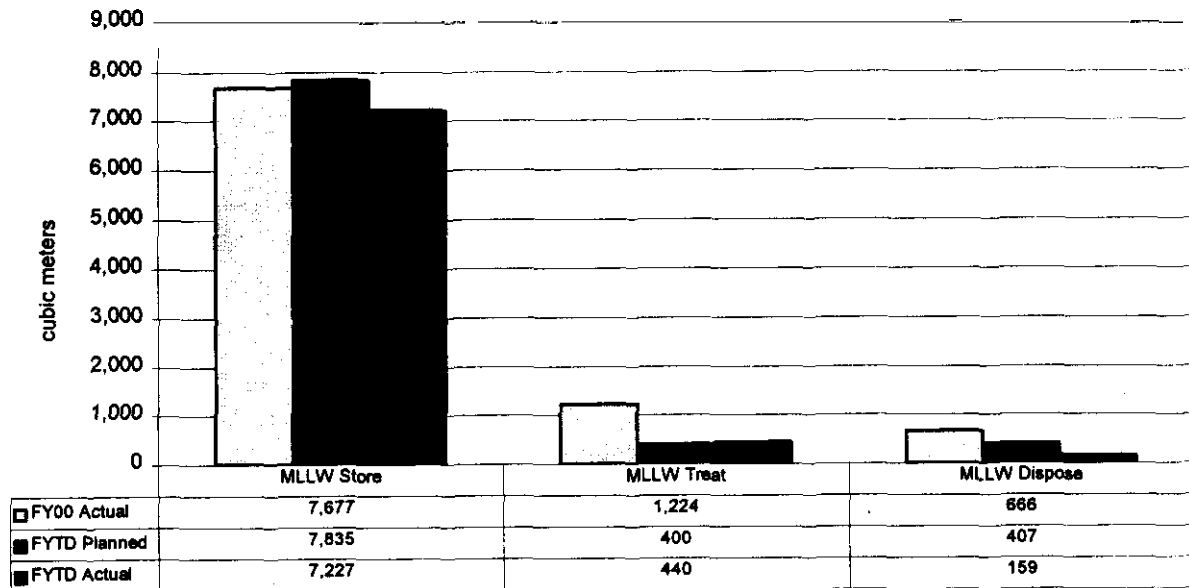


**Storage:** Storage continues to be provided for existing and newly generated TRU waste.

**Disposal:** TRU shipments to Waste Isolation Pilot Plant (WIPP) is on schedule.



## MIXED LOW LEVEL WASTE: STORAGE, TREATMENT, AND DISPOSAL

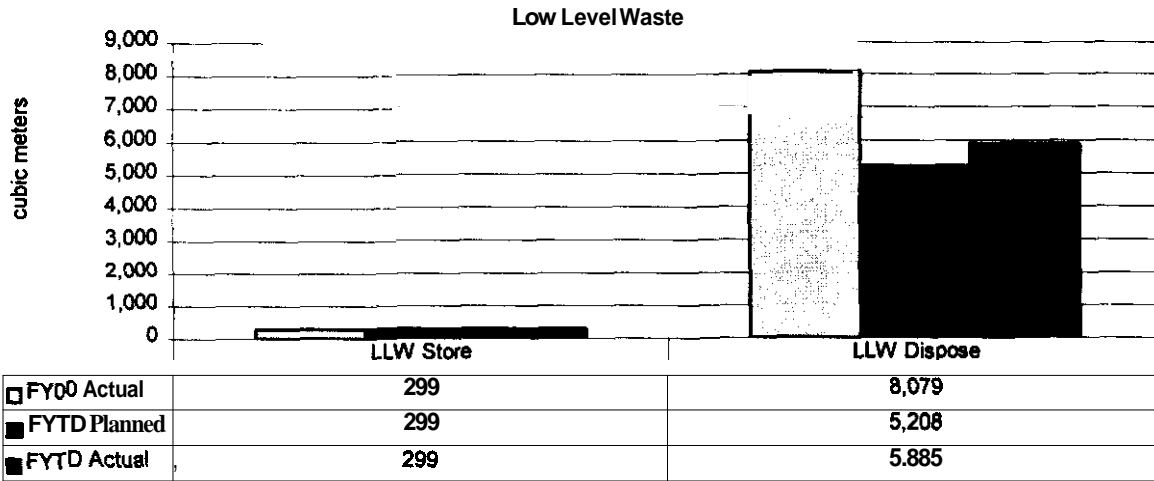


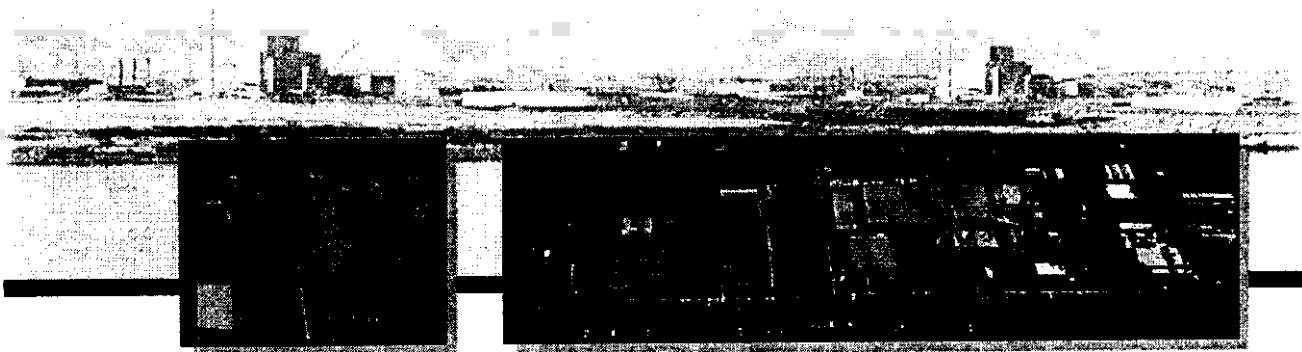
**Storage:** Storage continues to be provided for existing and newly generated **MLLW** waste. The current volume of **MLLW** in storage is within 10% of the planned amount.

**Treatment:** Treatment of **MLLW** is on schedule.

**Disposal:** Scheduled disposal volumes for FY01 are based on pre-treatment volume while the actual disposal value recorded is post-treatment. Currently there is a greater than 2:1 reduction ratio.

## LOW LEVELWASTE (LLW): STORAGE, TREATMENT, AND DISPOSAL





## **Section B:2**

### ***Analytical Services***

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

#### **PROJECT MANAGERS**

**S.H. Wisness, RL**  
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## 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 June 30, 2001. Other data is updated as noted.

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

## NOTABLE ACCOMPLISHMENTS

Analytical Services was restructured in June to establish a new Production Control Function. This function consolidates Analytical Services Project Coordination, Client Services, Integrated Scheduling, and Laboratory Information Management to improve planning and scheduling of the analytical process and all support work in the 222-S and WSCF laboratories.

Ninety-six contaminated HEPA filters, vintage 1978, were successfully replaced and tested at the 222-S Laboratory over the fourth of July weekend. Disruption of analytical work was avoided, and no injuries or skin contaminations occurred. A high level of teamwork and planning was involved in order to complete this work safely under high temperature conditions.

The analytical laboratories are performing key support to site cleanup milestones. Year to date, the laboratories have completed 10 of 12 high level waste tank grab samples and 6 of 6 high level waste tank vapor samples. Additionally, the laboratories are 95 percent complete on the first of two scheduled high level waste tank core sample reports required to meet CHG performance incentives. The final reports for one vapor sample and three Caustic Mitigation Project reports were issued in support of CHG.

The Waste Sampling and Characterization Facility (WSCF) performed 12,200 analyses through June 2001 for a wide variety of customers. Production through July 30, 2001 was 13,400 analyses.

Both the 222-S Laboratory and WSCF have completed their actions for the Ecology Corrective Measure resulting from the Inspection of Colloid Recovery Actions. Both 222-S and WSCF have identified follow-up corrective actions that will be tracked. The Corrective Measure report was transmitted to Ecology.

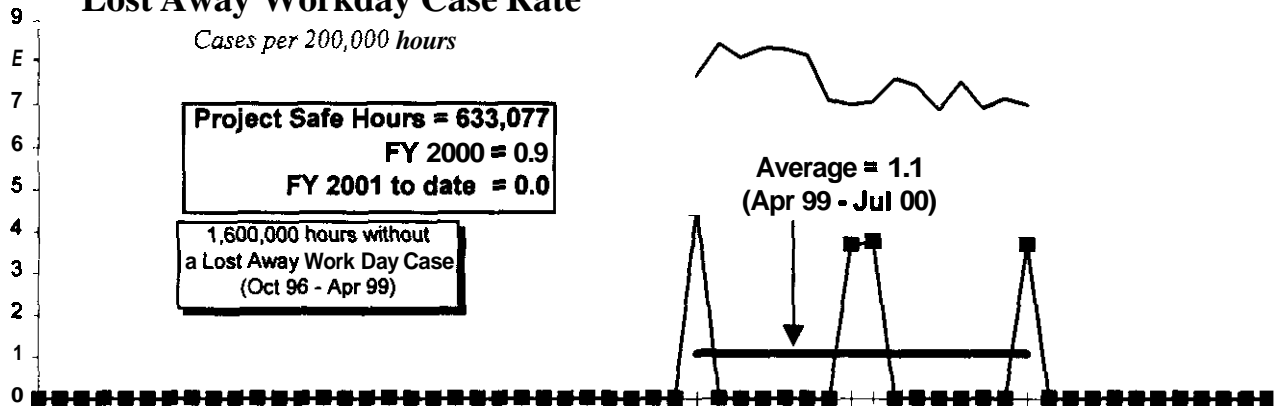
## SAFETY

In June 2001, there were no Restricted Workday cases and one First Aid Case. For the past nine months, the OSHA recordable case rate has been below average, but is rated "yellow" because the FH goal of 0.9 cases per 200,000 hours has not yet been reached. The DOE Safety Cost Index is rated "yellow", even though the FY 2001 rate of 3.8 cents per hour is lower than the FY 2000 rate of 30.5 cents per hour and the FH goal of 8 cents per hour. A "green" rating will be achieved when additional safe operations are demonstrated which establishes a positive statistical trend.

Green

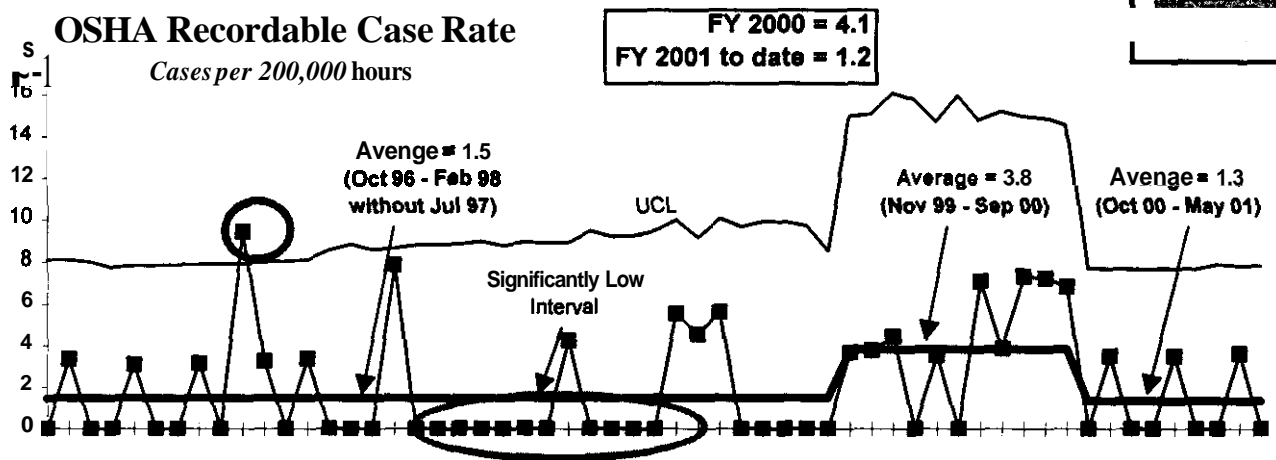
### Lost Away Workday Case Rate

Cases per 200,000 hours



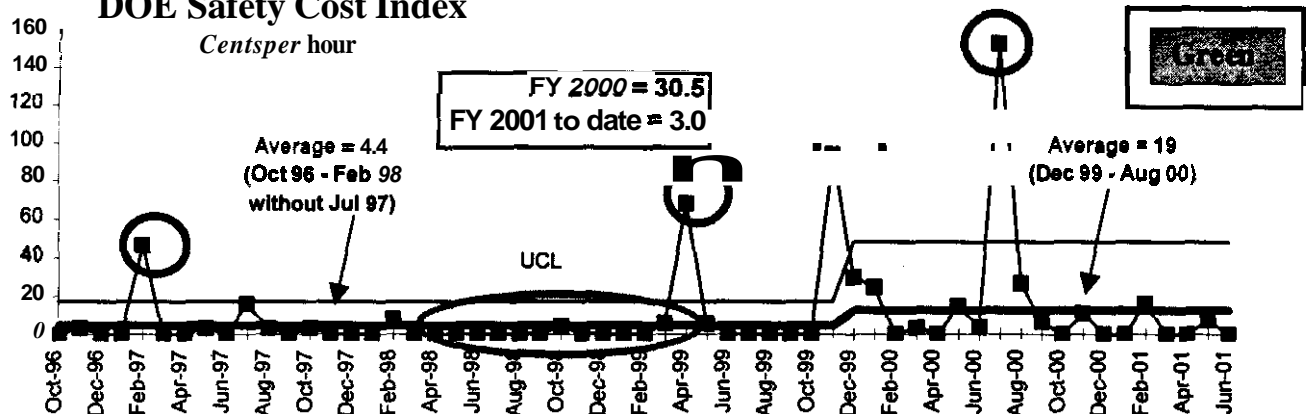
### OSHA Recordable Case Rate

Cases per 200,000 hours



### DOE Safety Cost Index

Cents per hour



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
FO	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	1	0	1

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.

<b>FY 2001 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

Green

### Laboratory Production

The analytical laboratories are performing key support to site cleanup milestones. Year to date, the laboratories have completed 10 of 12 high level waste tank grab samples and 6 of 6 high level waste tank vapor samples. Additionally, the laboratories are 95 percent complete on the first of two scheduled high level waste tank core sample reports required to meet CHG performance incentives.



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



		FYTD								
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEY	EAC
WBS 1.2.4	Analytical	\$ 23,396	\$ 23,082	\$ 22,007	\$ (314)	-1%	\$ 1,075	5%	\$ 31,842	\$ 31,469
PBS WM06	Services									
Total		\$ 23,396	\$ 23,082	\$ 22,007	\$ (314)	-1%	\$ 1,075	5%	\$ 31,842	\$ 31,469

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

### FY TO DATE SCHEDULE / COST PERFORMANCE

There is no significant schedule variance. The \$1.1million (5 percent) favorable ~~cost~~ variance is primarily due to site-wide credit passbacks and an accrual reversal of FY 2000 unearned fee. Also contributing to the favorable variance is staff vacancies and delay in receipt of contract and assessment costs.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

### Schedule Variance Analysis: (-\$0.3M)

Analytical Services - **1.2.4/WM06**

Description and Cause: The \$0.3 million (1 percent) unfavorable schedule variance is within the established thresholds.

Impact: No impact.

Corrective Action: No corrective action required.

### Cost Variance Analysis: (+\$1.1M)

Analytical Services - **1.2.4/WM06**

Description and Cause: The \$1.1million (5 percent) favorable ~~cost~~ variance is primarily due to site-wide credit passbacks and an accrual reversal of FY 2000 unearned fee. Also contributing to the favorable variance is staff vacancies and delay in receipt of contract and assessment ~~costs~~.

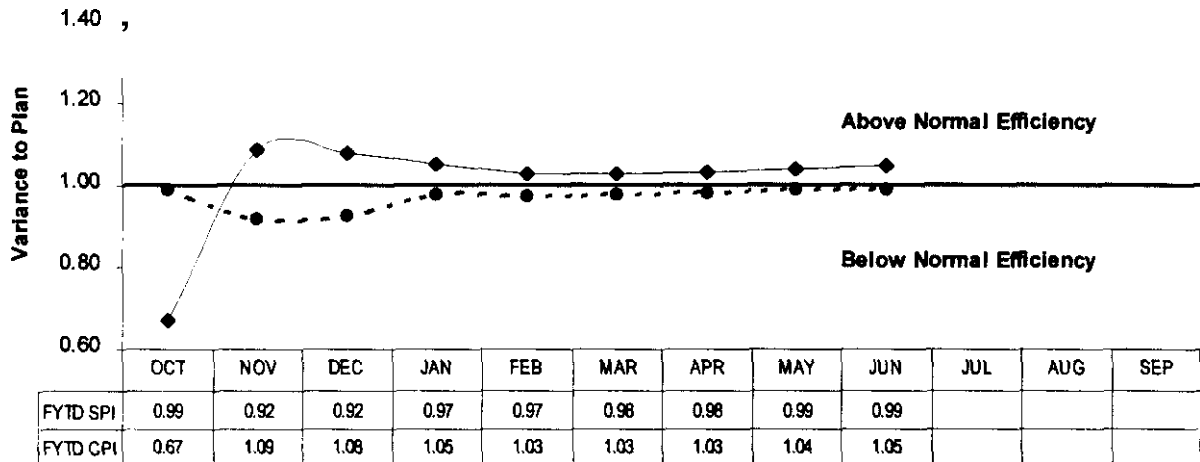
Impact: No impact.

Corrective Action: No corrective action required.

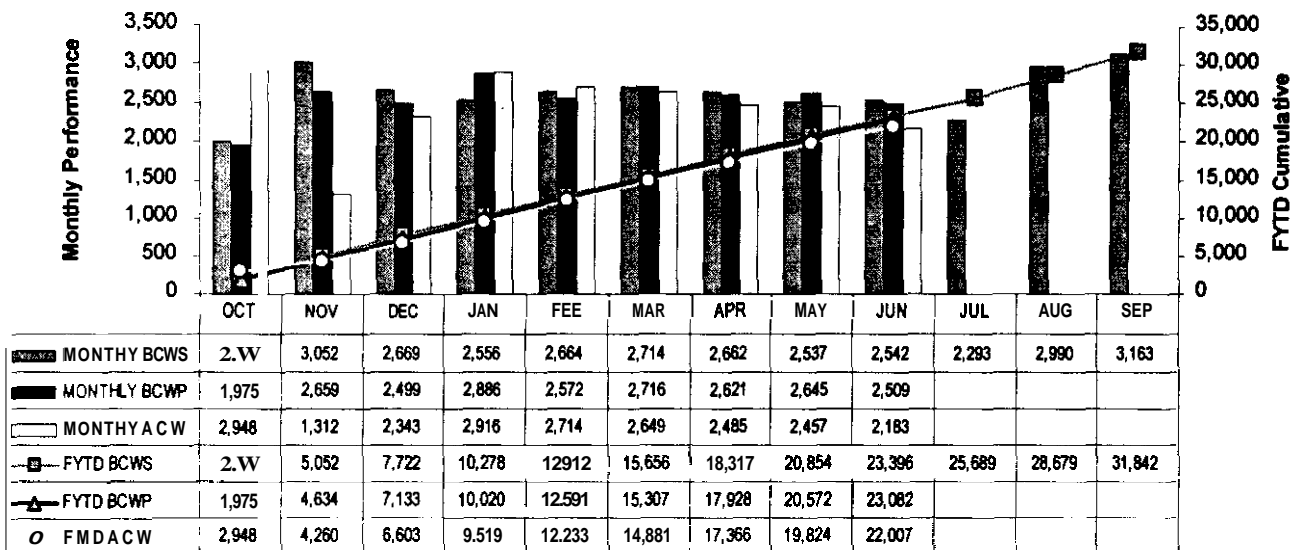
## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)

Green

Cost/Schedule Performance Indices (FYTD)



Performance Analysis  
FYTD and Monthly (\$000s)



## FUNDS MANAGEMENT — FY 2001 TO DATE FUNDS VS SPENDING FORECAST (\$000)

	Funds	FYSF	Variance
<b>1.2.4 Analytical Services</b>			
WM06			
Post 2006 - Operating	\$ 30,766	\$ 30,419	347
<b>Total</b>	<b>\$ 30,766</b>	<b>\$ 30,419</b>	<b>\$ 347</b>

### DOE, Regulatory, External, Technical Issues and DOE Requests

None identified at this time.

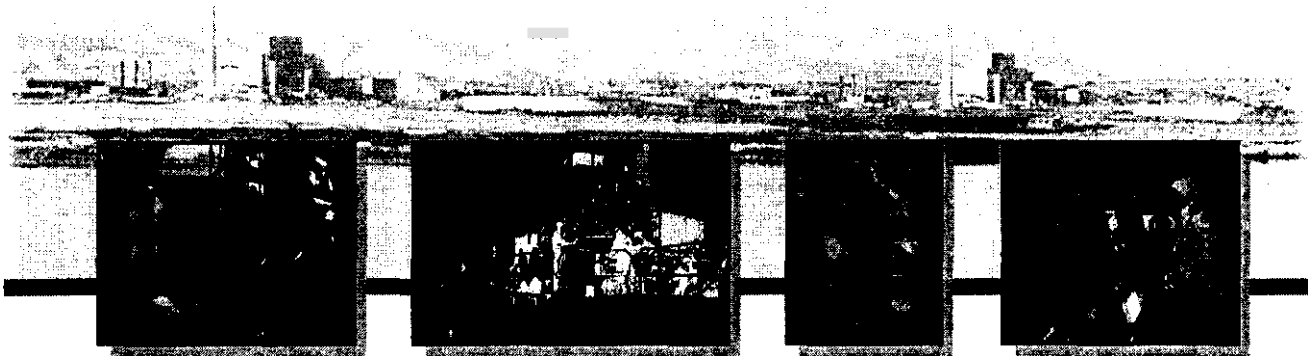
## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

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
		Nothing to report at this time.							
ADVANCE WORK AUTHORIZATIONS									
		Nothing to report at this time.							

## 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.
- Support CHG high-level waste tank and feed to WTP characterization.

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# **Section C:I**

## ***Nuclear Material Stabilization***

### **PROJECT MANAGERS**

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**G.W. Jackson, FH**  
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## SUMMARY

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

NOTE: The Safety, Conduct of Operations, milestone table and Cost/Schedule data contained herein is as of June 30, 2001. Other information is updated as noted through July 24, 2001.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that three milestones (50 percent) were completed on or ahead of schedule, one milestone (17 percent) was completed late, and two milestones (33 percent) are overdue. Further details can be found in the milestone exception report following the cost and schedule variance analysis.

## NOTABLE ACCOMPLISHMENTS

### Maintain Safe & Secure SNM

Completed installation of six (6) additional twenty-eight (28) position storage racks in Vault 4 for storage of 3013 containers. Installation of the new Proximity Card Readers and Surveillance Cameras (part of the Remote Material Surveillance System Upgrade) in 234-5Z is now 75% complete and is projected to meet the scheduled August completion date.

### Maintain Safe and Compliant PFP

The Nuclear Material Stabilization Project (NMSP) planning update was completed June 30, 2001. This deliverable incorporates \$89M in life cycle breakthrough initiative reductions and rebaselines the solution project. (Baseline Change Requests FSP-2001-061 and FSP-2001-064). Through June 30, 2001, there were 577 calendar days (over 1.9 million staff hours) since the last recorded lost workday injury. The Facility Evaluation Board (FEB) on-site assessment was completed June 11, 2001. The final FEB report was issued July 27, 2001.

### Stabilization of Nuclear Material

**Residues** — Repackaging of the 31 plutonium/aluminum (Pu/Al) Alloys Group 1 was initiated on June 11, 2001, and completed on June 19, 2001 thereby completing the residues packaging portion of milestone TRP-01-501, "Complete Plutonium Alloy Stabilization or Shipment." The Carlsbad Area Office (CAO) audited the PFP WIPP program and is expected to certify the packaging and the visual examination technique areas.

**Oxides/Metals** — Thermal stabilization and packaging of Pu alloys was initiated. The fifteen alloy items that were evaluated to be candidates for brushing and packaging were taken into the glove box and opened. Four of them were not suitable for brushing and were thermally stabilized to 3013 criteria. The remaining eleven were brushed and welded into a bagless transfer container. Seven other alloy items were tested for stability in the PPSL. As a part of testing, the items were fully stabilized to 3013 criteria. These items have been sealed into food pack cans and placed into vault storage. Fabrication of the device for relieving pressure in a BTC or 3013 can was completed and the ATP/OTP initiated. Preparations for startup of BTC packaging of oxides were initiated. Two (2) Limiting Condition for Operation (LCO) and one Administrative Control (AC) were put into place to control the operability and requirements for fire protection in the 2736-ZB facility. An additional AC was put into place for surveillance of BTC pressurization. The Readiness Assessment (RA) for this activity began July 19, 2001 and is projected to be completed July 25. RL approval is expected by July 30.

**Solutions** — A total of 562 (47) liters of solutions were added to the magnum of the [Mg(OH)<sub>2</sub>] hot plates during the month of June, bringing the FYTD total to 562 liters. The implementation checklist for the second, two-boat hot plate was completed on June 18, 2001. Glovebox temperature profiles and radiation surveys were completed on June 30, 2001 following the first 2 drying evolutions with the two hot plates. Baseline Change Request (BCR) FSP-2001-064 documenting schedule and cost changes associated with: (1) oxalate precipitation, (2) direct discard and (3) descoping the operation of the prototype vertical denitration calciner was approved on July 10, 2001 by Fluor Hanford. RL has also been formally requested to revise the DOE-HQ Defense Nuclear Facility Safety Board (DNFSB) 94-1/200-1 Implementation Plan to reflect this change in solutions stabilization processing.

**Oxalate Precipitation** — Processing of 30 liters (in 3 precipitation columns) of double pass filtrate (DPF) with oxalate precipitation was completed on Friday, July 13, 2001. A Supplement Analysis (SA) to the EIS, which documents the addition of the oxalic acid and direct discard processes, has been submitted to RL for approval.

**Direct Discard** — A decision has been made to proceed with the direct discard option. A safeguards termination letter was submitted to DOE-HQ for approval on June 28, 2001 for the material to be included in this option. Installation of the containment tent has been completed. The Startup Notification Technical Description was finalized and transmitted to RL for approval on July 12, 2001.

**Disposition of Nuclear Material** — Through July 19, 2001, the Outer Can Welder has produced two hundred and seventy-two (272) DOE-STD-3013 containers since startup on April 10, 2001. The facility completed the Standard Start up Review for the 2736-2 vault modifications required for storage of 3013 containers. All vault racks scheduled to be installed in FY 2001 have been fabricated and installed providing the plant with the needed rack configuration for the 3013 outer cans. The modifications to the digital radiograph unit to remove the transformers and therefore the fire loading from room 637 have been completed and the Acceptance Test Procedure (ATP) for the unit has been completed. One exception to the ATP is being corrected with the unit scheduled to be placed in service by the week of July 23. All of the major pieces of hardware except the retorts and furnace doors have been received. The last pieces of hardware are scheduled to arrive August 3.

## Plutonium Facility Deactivation

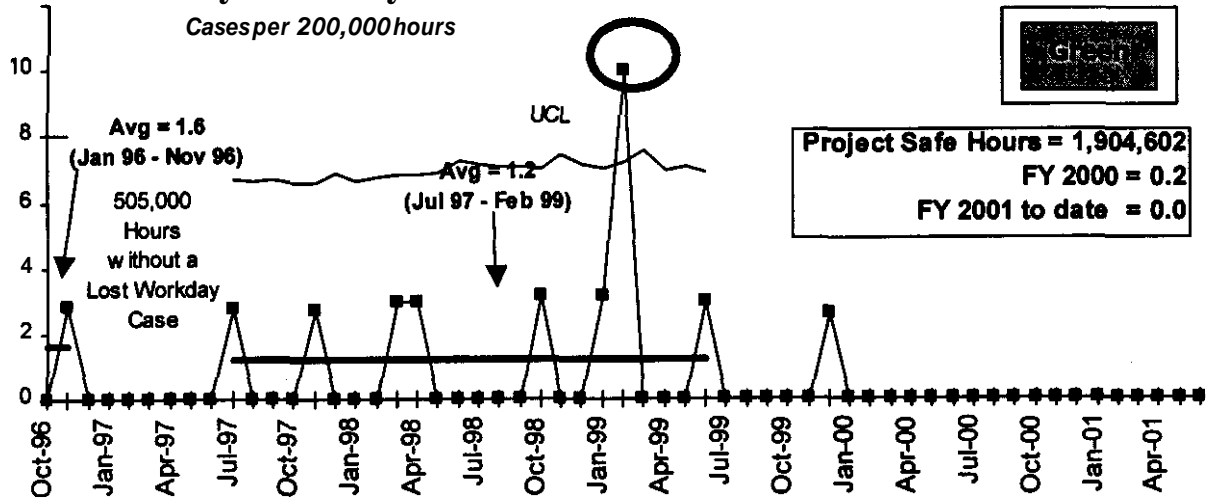
The 241-2-361 Tank Characterization Report was completed two days ahead of schedule on Thursday, June 28. DOE-HQ (EM-22, National Facility Deactivation Initiative) has authorized \$60 thousand in FY 2001 funding for two studies directly supporting PFP decommissioning. One study will review the current NMS Project Basis of Estimate against developing technology and best practices now being applied at other DOE and commercial nuclear sites for facility cleanout, equipment decontamination, and size reduction. The second study will compare the advantages and disadvantages of managing the PFP decommissioning project under CERCLA versus RCRA. It also appears that up to \$250 thousand may be available from DOE-HQ (EM-22 and EM-40) in FY 2001 and 2002 to support the further evaluation of alternative plutonium storage concepts at Hanford. A proposal for use of these funds is being jointly developed by FH and RL and will be Submitted to DOE-HQ during July.



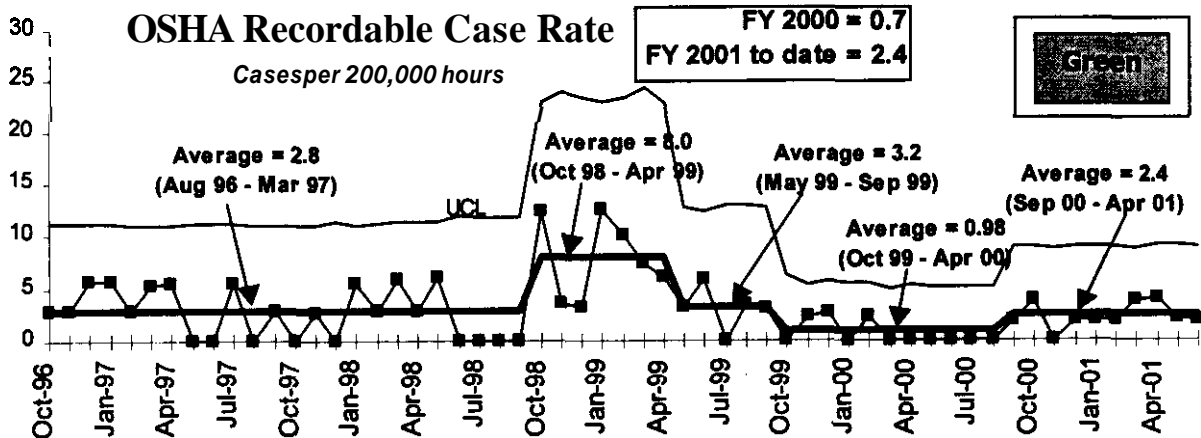
## SAFETY

Through June 30 2001, there were 577 calendar days (exceeding 1.9 million staff hours) since the last recorded lost workday injury. There has however, been an increase in the OSHA recordable case rate. Management staff has increased its presence in the field during all shifts to address this recent trend.

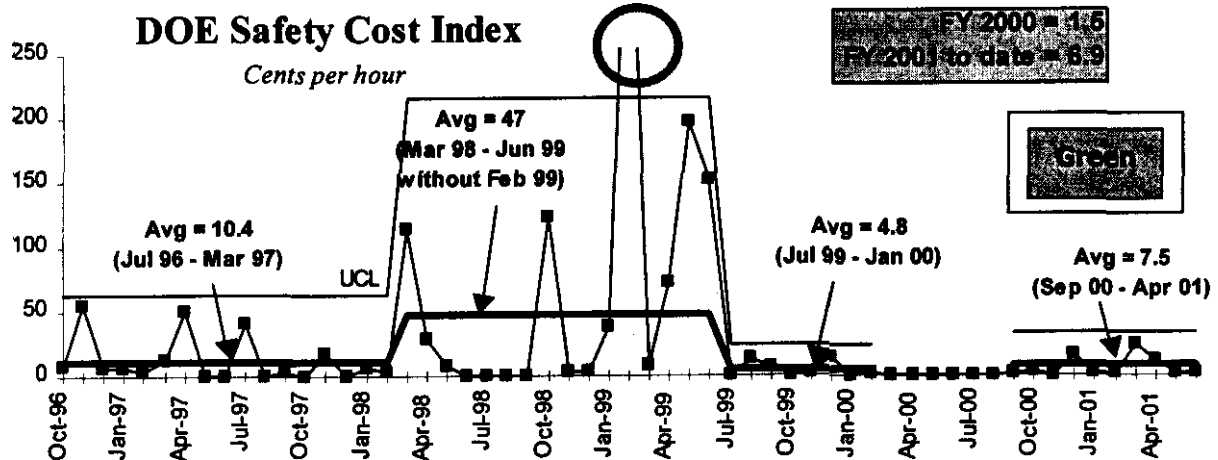
### Lost Away Workday Case Rate



### OSHA Recordable Case Rate



### DOE Safety Cost Index



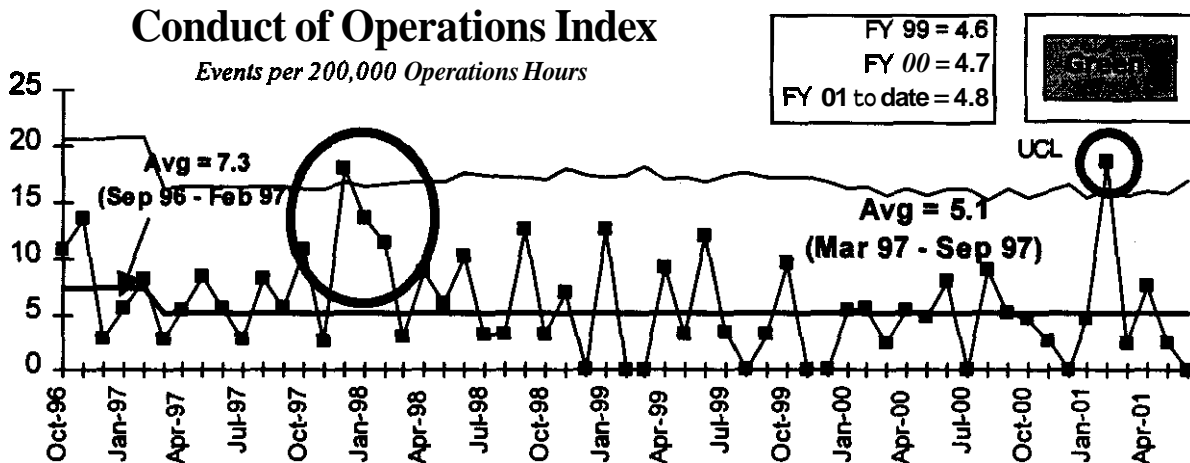
## ISMS STATUS

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



## CONDUCT OF OPERATIONS

Management staff has increased its presence in the field during all shifts to address the recent upward trend.



## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

- Project W-460 — This project will complete construction by October 1, 2001 (eighteen months ahead of the original schedule). Green
- International Atomic Energy Agency (IAEA) — The new Epithermal Neutron Multiplicity Counter (ENMC) received from Los Alamos National Laboratory (LANL) and tested at PFP has proven to be a faster and more accurate way to measure material. If PFP and Protection Technology Hanford can qualify the counter, additional items may Undergo nondestructive assay per day than is currently possible with existing calorimetry. This approach may also prevent a backlog of items needing measurement. *[No further status to be provided]*. Green
- New hot plate design — Procurement contract was placed with Bellhaven to provide an improved hot plate for use in the 230-C-2 glovebox. A new design, to improve the reliability of the hot plate and drying of the precipitate, has been developed and a prototype is in fabrication for testing at PFP. The prototype is scheduled to be available the last week of July 2001. Green

### Opportunities for Improvement

Nothing to report.

## UPCOMING ACTIVITIES




Disposition of Nuclear Material –Complete Project W-460 construction activities by **October 1, 2001**.  
Complete hot startup of the **2736-ZB** Stabilization and Packaging System (W-460) by **November 12, 2001**.



**Oxides/Metals** –Complete stabilization and repackaging of Pu metals and oxides in 3013 outer cans by **August 31, 2001**.

## MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	1	0	0	0	0	1	0	2
DOE-HQ	0	0	0	1	0	1	0	2
RL	2	0	1	1	0	1	0	5
<b>Total Project</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>9</b>

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

FY2001 Tri-Party Agreement / EA Milestones			
<b>M-083-07 (TRP-01-515)</b>	<b>"Complete Repackaging &amp; Shipping of Rocky Flats Ash to the CWC"</b>	<b>Due April 30, 2001</b> — Completed on March 29, 2001.	
<b>M-083-08 (TRP-01-516)</b>	<b>"Complete Requirements to Ship Rocky Flats Ash to WIPP"</b>	A change package has been approved that reschedules FH and RL negotiations with the regulators to begin November 2001. The NMSP believes <b>responsibility</b> for this milestone resides with Waste Management. Efforts are underway to relocate this milestone <b>accordingly</b> .	
DNFSB Commitments			
<b>M-IP-114 (TRP-01-501) R94-01</b>	<b>"Ship Alloys to SRS or Complete Stabilization of Alloys"</b>	<b>Due June 30, 2001</b> — BTS packaging of metallic alloys and pipe-n-go packaging of residue alloys were completed June 19, 2001. Completion of this activity is on hold pending a new moisture measurement method.	

<b>M-IP-111</b> (TRP-02-500)	"Complete Packaging of Metal Inventory"	<b>Due August 31, 2001</b> – On schedule.	
<b>M-IP-106</b> (TRP-01-500) (R94-01)	"Complete Stabilization & Packaging Plutonium Solutions"	<b>Due December 31, 2001</b> – Baseline Change Request FSP-2001-064 was approved that extends completion of this workscope from December 31, 2001 to July 31, 2002. A letter was sent to RL requesting the milestone in the Implementation Plan be changed.	

## MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
<b>TRP-01-510</b>	<b>RL</b>	Complete Annual IPMP Revision	05/31/2001	08/31/2001

### Overdue - 2

**1.4.5**

**Cause:** Agreement between FH and RL allowed deferral of this milestone due to the June 30, 2001 Nuclear Material Stabilization Project (NMSP) rebaseline commitment.

**Impact:** None.

**Corrective Action:** None.

**TRP-01-501** **HQ** Ship Alloys to SRS or Complete Stabilization of Alloys **06/30/2001** **TBD**  
**1.4.5**

**Cause:** Completion of this activity is on hold pending a new moisture measurement method.

**Impact:** Currently being evaluated. A lack of an approved moisture measurement system could be significant.

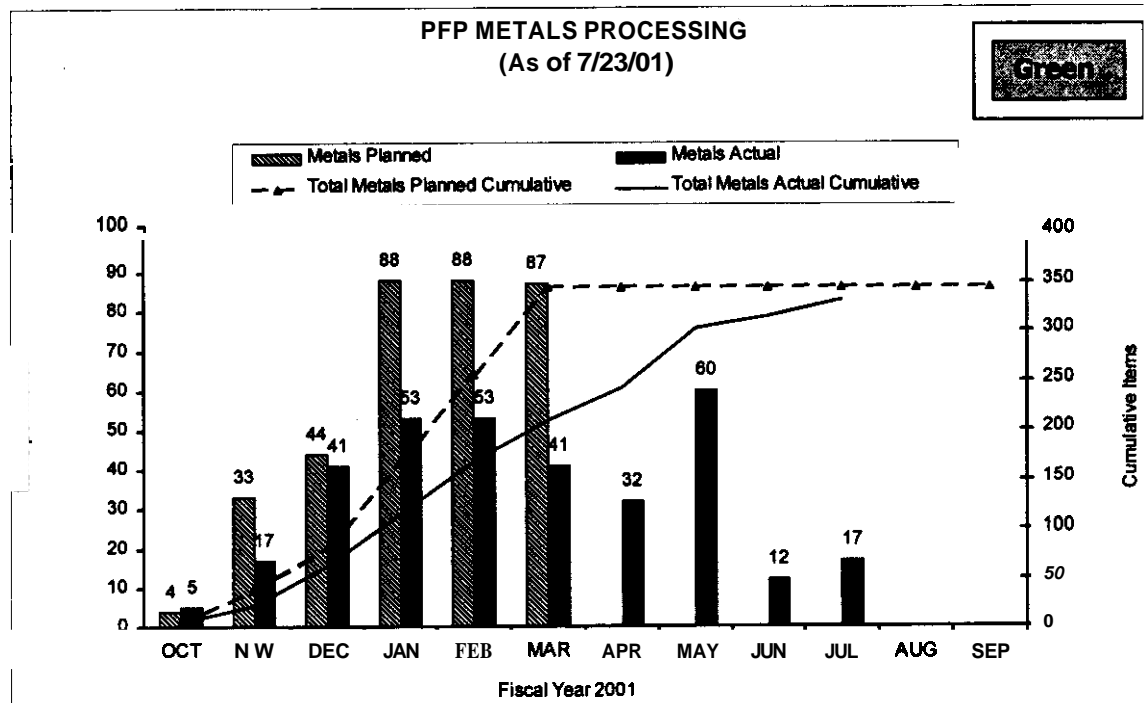
**Corrective Action:** FH, RL, and other sites throughout the DOE complex are currently investigating alternate moisture measurement technologies.

### FY 2002 Tri-Party Agreement / EA Milestones

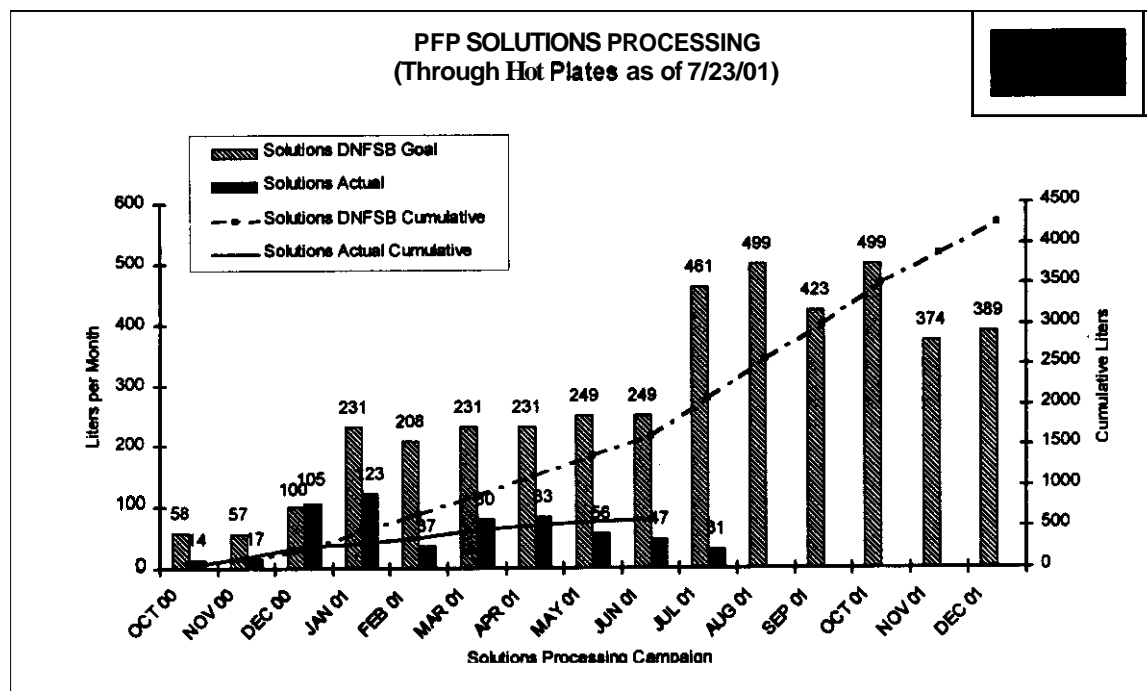
Number	Milestone Title	Status
	Nothing to report at this time.	

## PERFORMANCE OBJECTIVES

### OXIDES/METALS/POLYCUBES STABILIZATION

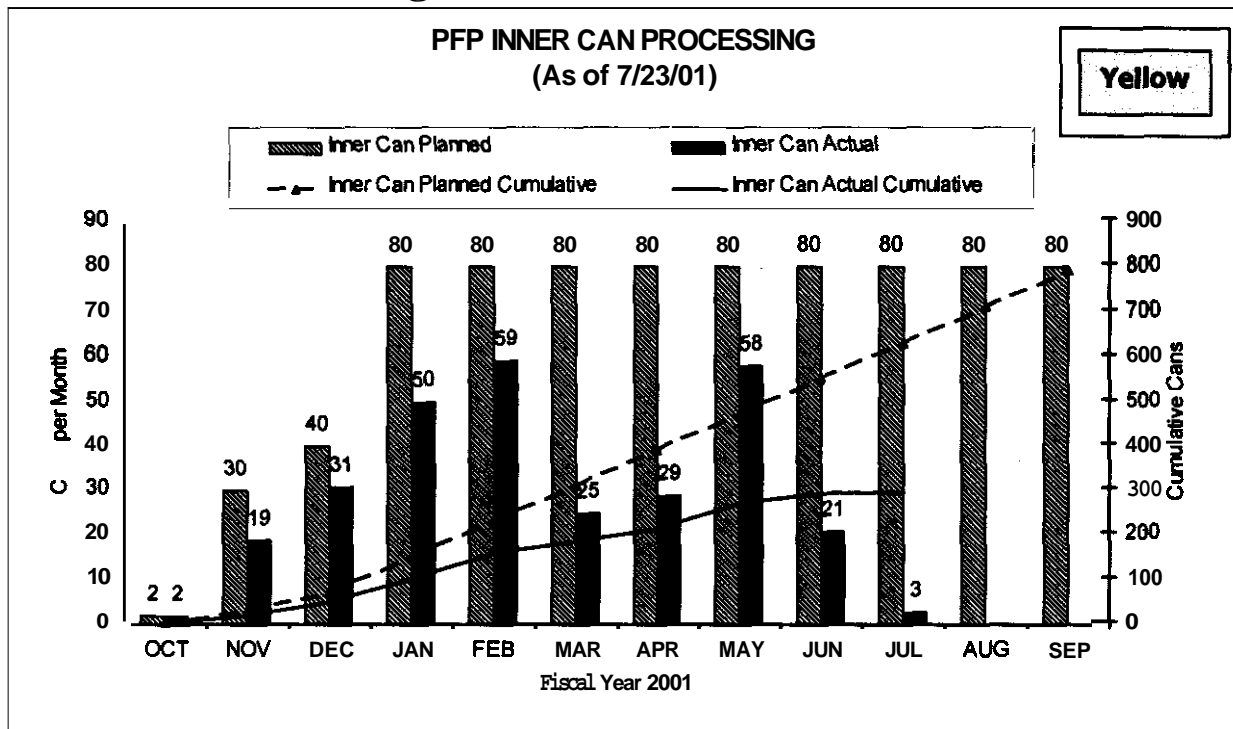


## SOLUTIONS STABILIZATION



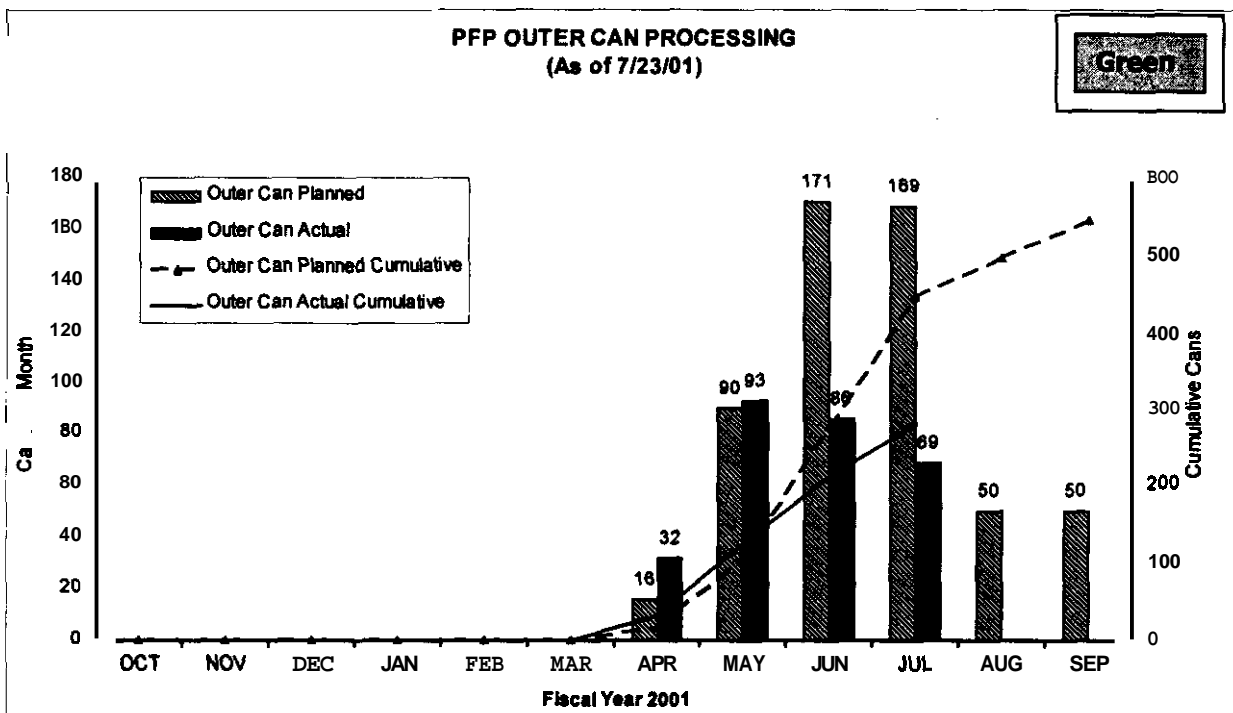
Baseline Change Request FSP-2001-064 was approved, extending completion of this workscope from December 31, 2001, to July 31, 2002. A letter was sent to RL requesting the milestone in the Implementation Plan be changed.

## Inner Can Processing

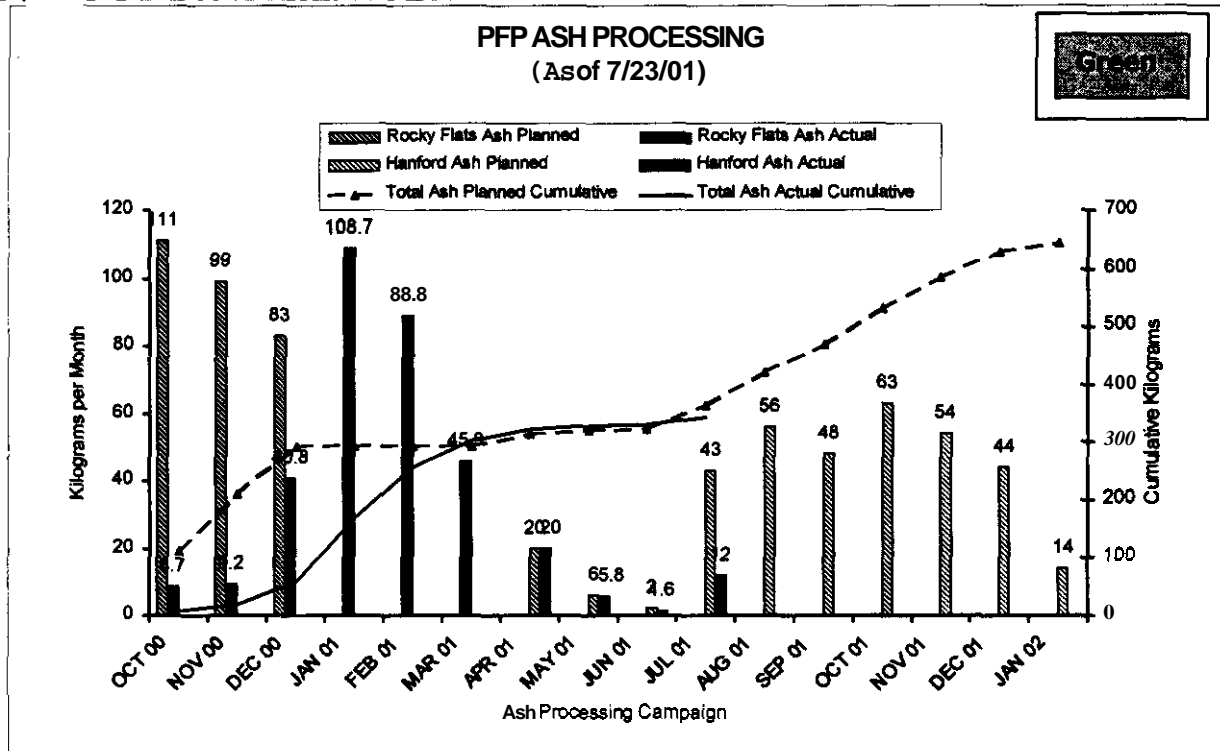


Operational reliability of the 245-5Z Bagless Transfer System (BTS) and the recent disqualification of the Super Critical Fluid Extraction System (SFE) as a moisture measurement system have impacted this activity.

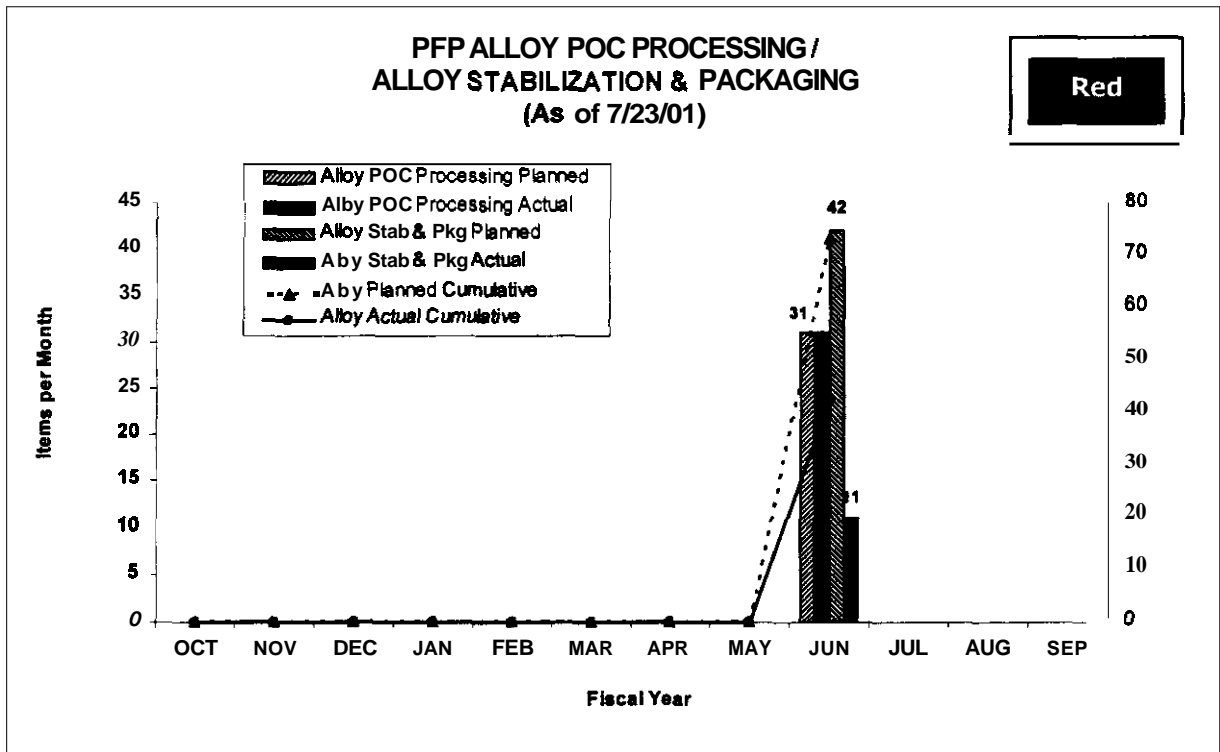
## PFP Outer Can Processing



## RESIDUE STABILIZATION



## ALLOY STABILIZATION &amp; PACKAGING



Completion of this activity is on hold pending a new moisture measurement method.

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

		FYTD								
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
WBS 1.4.5 PFP										
PBSTP05 Deactivation		\$ 82,095	\$ 77,815	\$ 80,040	\$ (4,280)	-5%	\$ (2,225)	-3%	\$ 113,359	\$ 114,586
	Total	\$ 82,095	\$ 77,815	\$ 80,040	\$ (4,280)	-5%	\$ (2,225)	-3%	\$ 113,359	\$ 114,586

## FY TO DATE SCHEDULE / COST PERFORMANCE

Both the unfavorable schedule and cost variances are within established thresholds.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

### SCHEDULE VARIANCE ANALYSIS: (~\$4.3M)

#### Nuclear Materials Stabilization Project- 1.4.5/TP-05

**Description/Cause:** The current five percent unfavorable schedule variance is primarily attributable to a two percent schedule improvement in Project W-460. The Solutions Stabilization project continues to be plagued by generation of higher than planned quantities of precipitate per liter of solution through the  $Mg(OH)_2$  process. A June 3, 2001 fire in the HA-211 furnace controller that affected availability of three furnaces also impacted the Solutions Stabilization project. Early operational reliability of the Bagless Transfer System (BTS) (since resolved) and recent Outer Can Welder (OCW) 3013 container weld porosity issues have further limited alloy and metal processing activities. The recent RL disqualification of the Super Critical Fluid Extraction system (SFE) has the potential to escalate additional oxide and alloys schedule slippage.

**Impact:** There is no schedule impact to Project W-460. Unmet progress in the Solutions stabilization Project has jeopardized two (2) DNFSB interim milestones, "Complete Solutions Stabilization" by December 31, 2001 and "Complete Stabilization of Polycubes" due in August 2002. As a result, Baseline Change Request FSP-2001-064 has been processed that extends completion of the solutions stabilization project from December 31, 2001 to July 31, 2002. This change, if approved, will also extend completion of milestone TRP-02-501, "Complete Stabilization & Packaging of Polycubes," from August 31, 2002 to December 31, 2002. A letter has been sent to RL requesting the milestones in the DOE-HQ DNKB Recommendation 94-1/2000-1 Implementation Plan be modified. The DNFSB milestone to stabilize and package all plutonium by May 2004 remains intact. Expedient resolution of the SFE and OCW issues are necessary preclude further schedule impact.

**Corrective Action:** Project W-460 Project schedule recovery is expected. A second two-boat hot plate became operational on June 19, 2001 to increase the production rate of the  $Mg(OH)_2$  process. Additionally, direct discard and a shift to an oxalate precipitation process in August 2001 are expected to further improve solutions stabilization processing. FH and RL are investigating alternative SFE moisture measurement technologies that will result in metals, alloys, and solutions processing schedule improvement.



## CONVARIANCE ANALYSIS: (-\$2.2M)

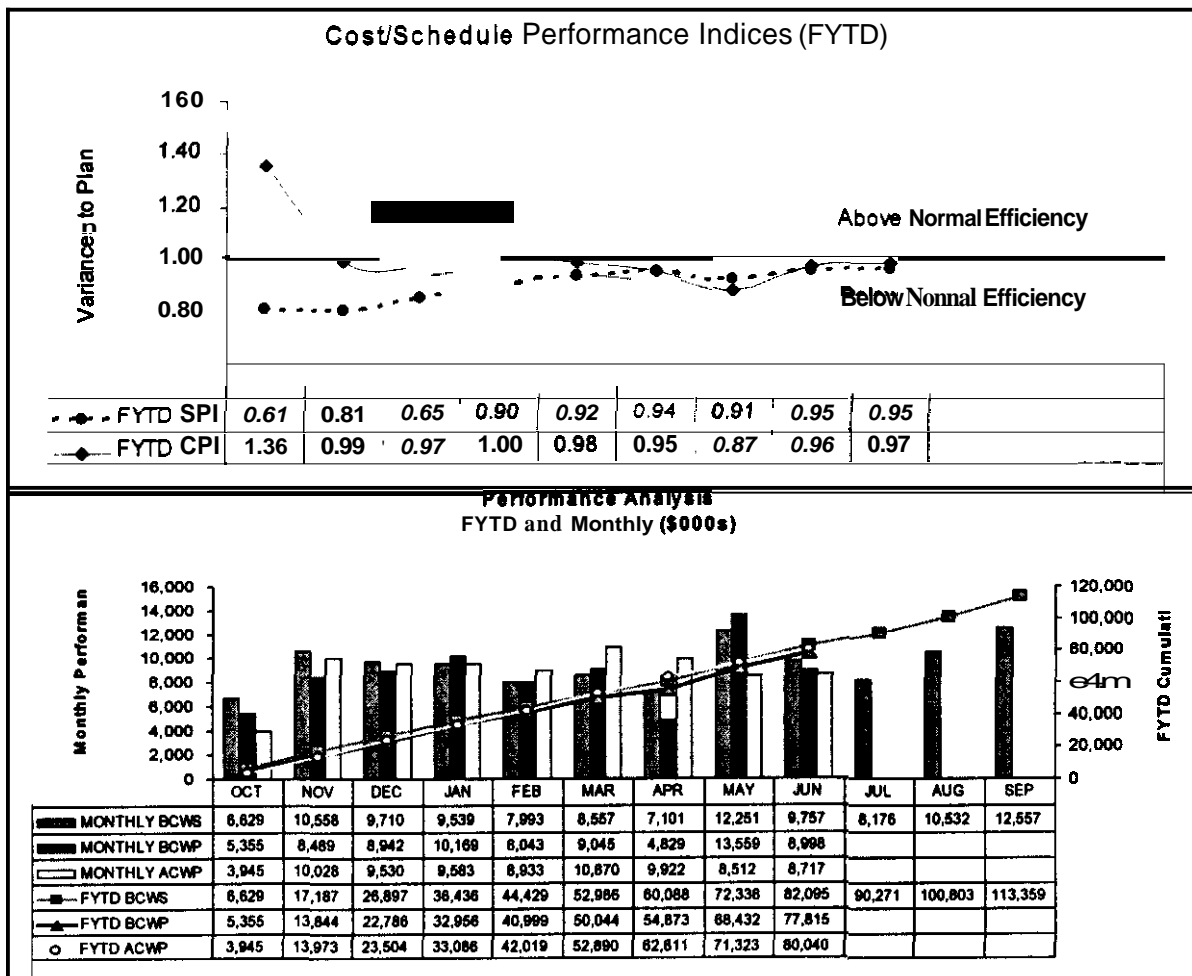
### Nuclear Materials Stabilization Project- 1.4.5/TP-05

**Description/Cause:** The unfavorable cost variance of \$2,225K, or three percent, represents a \$640K, or two percent improvement from May 2001. The major contributors to the current cost variance are late completion of Rocky Flats Ash processing, extended metals stabilization due to operational reliability of the 234-52 Bagless Transfer System (BTS), and cost increases associated with Project W-460 schedule recovery.

**Impact:** The per unit cost of processing and packaging alloys and metal items is expected to further increase until alternative SFE technologies for moisture measurement are developed and implemented. The costs associated with late completion of Rocky Flats Ash are non-recoverable. Efficiencies from other project areas are expected to cover this expense cost variance.

**Corrective Action:** Reclassification of selected completed Line Item costs to expense will enable the remaining Capital Line Item project W-460 work to be brought forward into FY 2001 to allow project completion by October 2001. Repair and alignment of the 234-52 BTS unit has been completed and demonstrated improved operational reliability. Additionally, implemented cost control actions limiting overtime, subcontract costs and material purchases are showing positive results.

## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)



**FUNDS MANAGEMENT**  
**FUNDS VS SPENDING FORECAST(\$000)**  
**FY 2001 TO DATE**

Yellow

	Funds	FYSF	Variance
<b>1.4.5 Nuclear Materials Stabilization</b>			
<b>TP05</b>			
<b>Project Completion - Operating</b>	\$ 95,812	\$ 94,197	\$ 1,615
<b>- Line Item</b>	\$ 12,125	\$ 12,125	0
<b>Total</b>	\$ 107,937	\$ 106,322	\$ 1,615

**Issue:** With the DOT-6M issue, the PFP will not be able to complete their material shipment to Lawrence Livermore National Laboratory (LLNL).

**Impact:** The transfer of this material to LLNL will not be completed.

**Corrective Action:** The transfer of this material to UNL accelerates vault de-inventory and reduces the number of items requiring stabilization thereby improving progress of the Performance Incentive. If this DOT 6M issue can be resolved, or a waiver granted to UNL to use DOT-6M's, this transfer may still occur. The only option currently available is the 9975 container and it can only be used for metal shipments. The next revision of the SRS Safety Analysis Report for Packaging (SARP) for the 9975 container will allow oxides to be shipped but they must be greater than 85% Pu and packaged to 3013 criteria, which is due out in the next 3 months. Another SARP revision that will allow other oxides in 7-inch food pack cans is still a year or more away.

**Issue:** Completion of stabilization and packaging of plutonium alloys is contingent upon installation and testing of alternate moisture measurement equipment.

**Impact:** Completion of alloy processing will be carryover work scope for next fiscal year.

**Corrective Action:** The type of equipment and location are currently under evaluation.

**Issue:** The Nondestructive assay (NDA) calculation of plutonium concentrations in packaged waste has recently come under question. FH, Bechtel Hanford, and RL continue to address this issue.

**Impact:** In addition to PFP, there are impacts to the River Corridor Project (see Section C 2).

**Corrective Action:** At this time approximately two hundred forty (240) items have been reanalyzed and recalculated. An additional four hundred items are expected to undergo a second non-destructive assay by September 14, 2001.

## Regulatory, External, and DOE Issues and DOE Requests

**Issue:** No other issues identified at this time.

**Impact:** None at this time.

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

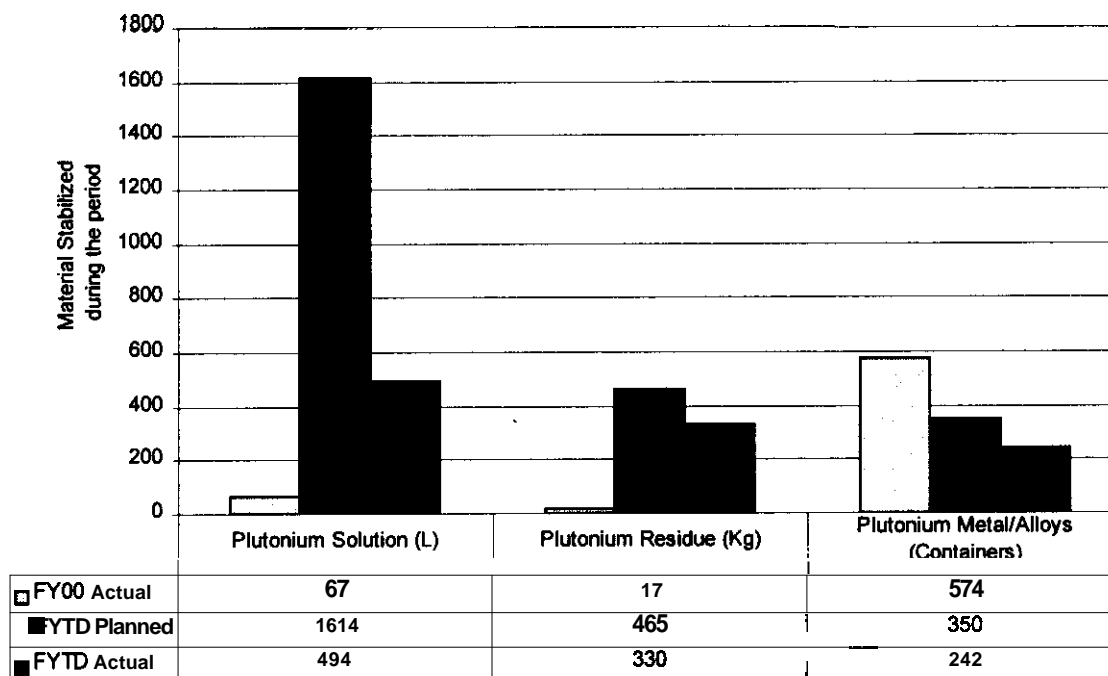
## BASELINE CHANCE REQUESTS CURRENTLY IN PROCESS

BCR NUMBER	DATE ASSIGNED	BCR TITLE	FY 01 IMPACT	SCH	TECH	DRAFT COPY	TO FH	FH APPROVAL	DOE-RL APPROVAL
FSP-2001-054	15-May-01	Interoffice Work orders	(\$1,835)	---	---	05-Jun-01	19-Jul-01		
FSP-2001-055	16-May-01	Direct Discard - Stabilized Mtl	---	---	---	---	--- Cancelled ---		
FSP-2001-061	19-Jun-01	Breakthrough Initiatives	---	X	X	28-Jun-01	29-Jun-01	11-Jul-01	Not Required
FSP-2001-064	19-Jun-01	Solutions Rebaseline	---	X	X	29-Jun-01	29-Jun-01	10-Jul-01	Not Required
FSP-2001-067	18-Jul-01	Delay SRIDs to FY 2002	TBD	X	---				
FSP-2001-068	18-Jul-01	Transfer 2nd BTS to CENRTC	---	---	---				
FSP-2001-069	18-Jul-01	TGA Moisture Measurement	\$235	X	---				

## KEY INTEGRATION ACTIVITIES

- Techniques for improving the precipitate processing continue to be worked jointly by staff members of the PPSL and PNNL
- Fluor Hanford, Bechtel Hanford and the Department of Energy Richland Operations Office (DOE) are working together to resolve questions regarding the NMSP provided calculation of plutonium concentration in packaged waste from two Hanford facilities undergoing deactivation in the 200 West Area.
- PFP is working with General Electric (GE) Vallecitos on a plan to transport a fuel pin to Hanford. This will assist GE Vallecitos with the final step in their nuclear material deinventory.
- PFP coordination with Lawrence Livermore National Laboratory (UNL) to ship requested oxide material (81 kg) to that facility continues. A final determination of the material LLNL is requesting is still being negotiated. The shipper/receiver plan was submitted to LLNL for review. A meeting between DOE, LLNL and PFP to finalize transportation, container, and shipping agreements is expected to be held in mid-August.

## Nuclear Materials Stabilized During the Current Period



**Plutonium Solution:** The Solutions Stabilization project continues to be plagued by generation of higher than planned quantities of precipitate per liter of solution through the  $Mg(OH)_2$  process. A June 3, 2001 fire in the HA-211 furnace controller that affected availability of three furnaces also impacted the Solutions Stabilization project. As a result, Baseline Change Request FSP-2001-064 has been processed that extends completion of the solutions stabilization project from December 31, 2001 to July 31, 2002.

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

**Plutonium Metal/Alloys:** Early operational reliability of the Bagless Transfer System (BTS) (since resolved) and recent Outer Can Welder (OCW) 3013 container weld porosity issues have further limited alloy and metal processing activities. Additionally, the recent RL disqualification of the Super Critical Fluid Extraction (SFE) as a moisture measurement system has the potential to escalate additional oxide and alloys schedule slippage. FH and RL are investigating alternative SFE moisture measurement technologies to mitigate further schedule slippage.

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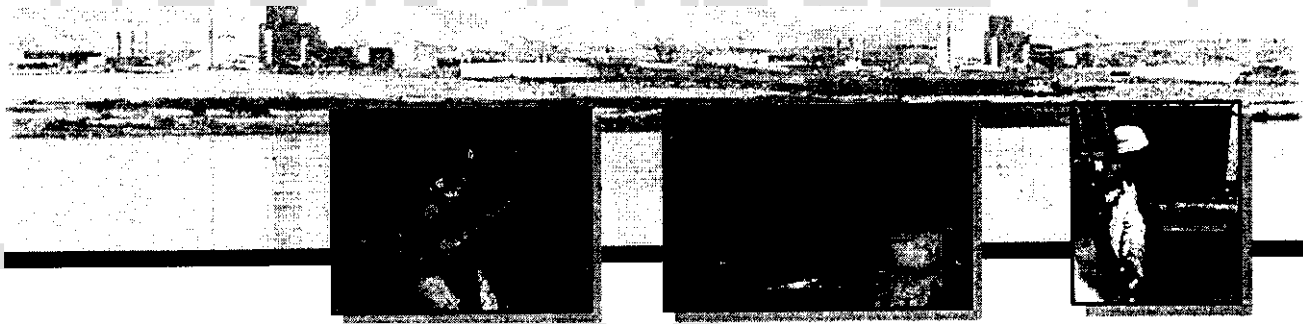
## The River

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.

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# **Section C:2**

## ***River Corridor***

### **PROJECT MANAGERS**

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(509)376-7435

N.C. Boyter, FH  
(509) 373-3725

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## 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; **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.

NOTE: **B Plant** WBS **1.4.1**, PBS TP01 work scope was completed in FY **2000** and contains no data. Therefore, the PBS has been eliminated from this and all future reports.

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 the 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 its baseline.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of June **30, 2001**. All other information is as of July **25, 2001**.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that **two** milestones (**67 percent**) were completed on or ahead of schedule and one milestone is overdue.

## NOTABLE ACCOMPLISHMENTS

**The 324 Building Deactivation Project** — All twenty-one **3-82B** Grout Containers have been loaded out and shipped to the Central Waste Complex, completing the work scope of **M-89-02**, "Complete Removal of **324 Building** Radiochemical Engineering Cells (REC) **B-Cell** Mixed Waste (MW) and Equipment." Additionally, transfer of the D Cell skids and ion exchange columns to B Cell was completed, and size reduction of the D Cell skids initiated.

**The 327 Building Deactivation Project** — Through effective deployment of minimum safety (min-safe) staff, the last retrievable nine cans were transferred from Dry Storage to A Cell; the first of two lead lined drums of dry storage waste was loaded; the north backflow preventer was installed; and the annual crane preventive maintenance was completed.

**The 300 Area Treated Effluent Disposal Facility (TEDF) 340 Facility** — During the month of June, the TEDF Facility treated **5.17** million gallons of wastewater. In addition, a video inspection of 340-A above ground tanks was performed; and piping modifications were completed to improve operation of the biocide addition system on the **310 TEDF** ion exchangers.

**Accelerated Deactivation Project** — The project has completed all nine shipments (**135 metric tons**) of contaminated fuel to the Low-Level Burial Ground (**LLBG**). Additionally, both water towers scheduled for demolition are now on the ground; the first entry into **224-T's** E Cell was successful, finding no airborne and minimal contamination; packaging and shipping PCB waste from the **242-B/BL** facility is complete.

**Equipment Disposition Project** — The first of four tail well cars was shipped from Hanford to Memphis, TN, on July **16, 2001**.

The River Corridor Project (RCP) has achieved more than 1.75 million safe work hours since its last lost away workday case. The OSHA Recordable Case Rate is 1.3, which is above the company goal of 0.9. The overall rating for RCP is green.

*Cases per 200,000 hours*

UCL

Average = 1.4  
(Mar 98 - Dec 98)

628,000 hours without  
a Lost Away Work Day Case  
(Dec 96 - Mar 98)

Project Safe Hours = 1,770,264  
FY 2000 = 0.0  
FY 2001 to date = 0.0

Oct-96 Jan-97 Apr-97 Jul-97 Oct-97 Jan-98 Apr-98 Jul-98 Oct-98 Jan-99 Apr-99 Jul-99 Oct-99 Jan-00 Apr-00 Jul-00 Oct-00 Jan-01 Apr-01

**OSHA Recordable Case Rate**

Cases per 200,000 hours

UCL

Average = 3.4  
(Oct 96 - Nov 98)

Average = 3.0  
(Jun 00 - Sep 00)

FY 2000 = 1.0  
FY 2001 to date = 1.3

726,000 hours between OSHA

Recordable Cases

Oct-96 Jan-97 Apr-97 Jul-97 Oct-97 Jan-98 Apr-98 Jul-98 Oct-98 Jan-99 Apr-99 Jul-99 Oct-99 Jan-00 Apr-00 Jul-00 Oct-00 Jan-01 Apr-01

**DOE Safety Cost Index**  
*Cents per hour*

UCL

Average = 4.7  
(Oct 96 - Feb 98)

726,000 hours  
between OSHA  
Recordable Cases

FY 2000 = 1.0  
FY 2001 to date = 3.1

Average = 3.7  
(Jun 00 - Jan 01)

Oct-96 Jan-97 Apr-97 Jul-97 Oct-97 Jan-98 Apr-98 Jul-98 Oct-98 Jan-99 Apr-99 Jul-99 Oct-99 Jan-00 Apr-00 Jul-00 Oct-00 Jan-01 Apr-01

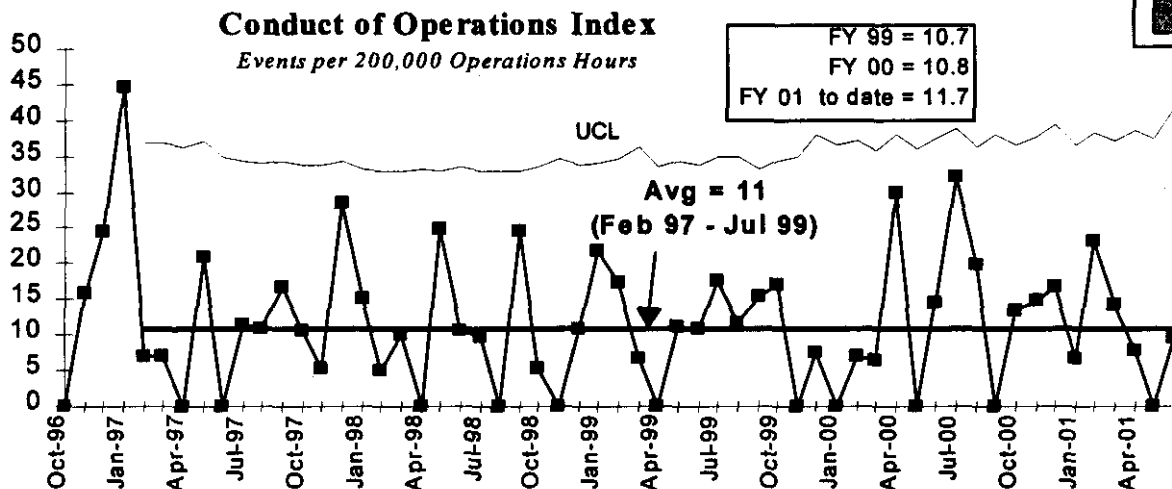
## ISMS STATUS

Green

- The RCP ISMS "Sustain and Maintain" process is in place. RCP is supporting the update of the FH annual ISMS training module through the ISMS Center of Expertise.
- The Voluntary Protection Program application was submitted to the DOE-RL Manager on June 21, 2001, and forwarded to DOE-HQ. The application will be reviewed by DOE-HQ personnel and a DOE-HQ on-site field review scheduled for later in the year.

## CONDUCT OF OPERATIONS

Green



## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

## Breakthroughs

- **Technical Review of 327 Hot Cell Removal** — Technology Management, supported by RCP, completed a review of the feasibility of intact removal of the hot cells from the 327 Facility. The review team found the concept of intact removal to be feasible, and potentially had significant ALARA, cost, and schedule benefits. RCP concurs with the conclusions and recommendations for near term actions as first steps toward re-planning the deactivation baseline. RCP and Technology Management collaboratively prepared the *327 Building Stabilization Science and Technology Plan*, which provides a schedule for Identifying and demonstrating technologies supporting monolithic hot cell removal. Green
- **Value Engineering for Configuration Management** — The RCP procedures, "Configuration Baseline Management" and "Engineering Document Change Control," were approved June 1, 2001. The two procedures authorize the use of alternate configuration management methods. Use of the alternate methods has the potential to dramatically change the way in which facility modifications are documented within the RCP. The procedures allow for a streamlined configuration management process that should have the greatest benefits during demolition and equipment removal activities. (No further status to be provided.) Green
- **Permit By Rule Treatment at 300 Area TEF** — FH is investigating the potential to treat limited categories of liquid non-radioactive hazardous wastes using the existing capabilities of the 300 Area TEF by applying a permit exclusion available within the Green

waste regulations. Treatment of hazardous wastes at TEDF could provide a low-cost option for disposal of some wastes currently sent off-site. The regulatory analysis is complete, and for the next two months the benefits and site needs for waste treatment will be compared against the costs and risks of implementing the treatment. A decision on whether to proceed will be made in September 2001.

## Opportunities for Improvement

- New EM-50 Funds (**\$450K**) for Robust Manipulator Arm — Via support from **EM50**, RCPs 324 Building will acquire an AEA ARTISAN manipulator arm to support hot cell deactivation. ~~ALARA/extremity-dose~~ savings are expected due to an anticipated reduction in maintenance and repair. AEA's Project Manager for the ARTISAN arm met with 324 Building staff during the week of June 25, 2001. The focus of the visit was to ensure that the robotic system and facility interface requirements are well defined and mutually understood. Following site testing and operations training, the ARTISAN will be deployed in the Shielded Materials Facility hot cells located in the 324 Building. **Delivery** of the ARTISAN arm to Hanford is expected by the end of FY 2001. **(No further status to be provided.)**

## UPCOMING ACTIVITIES

Uranium Disposition — Approximately 5 metric tons of miscellaneous uranium scrap materials will be transferred to the Low-Level Burial Ground by September 30, 2001. In addition, the final disposition of thorium materials located within the 303-K Facility will be completed by September 30, 2001.

**327 Authorization Basis** — Implement technical update of **327 Authorization Basis** by the end of **FY 2001**. This was slipped from May 2001 due to resource limitations created by the new requirements of the 10CFR830 Nuclear Safety Rule.

**300 Area Skyline Initiative - Demolish 303-K and complete disposition of the water towers by September 30, 2001.**

## Milestone Achievement

Milestone Type	Fiscal Year-to-Date				Remaining Scheduled			Total FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	0	0	0	1	0	0	0	1
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	2	0	0	1	1	0	2
<b>Total Project</b>	0	2	0	1	1	1	0	3

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.

Tri-Party Agreement / EA Milestones		
Number	Milestone Title	Status
M-89-02	Complete Removal of 324 Radiochemical Engineering Cells (REC) B-Cell Mixed Waste (MW) and Equipment.	Final 3 The Central Waste Complex was completed July 18, 2001, 14 days ahead of the revised date of July 31, 2001. This completes M-89-02.
DNFSB Commitments		
	Nothing to report at this time.	

## MILESTONE EXCEPTION REPORT

Number/WS Level	Milestone Title	Baseline Date	Forecast Date
-----------------	-----------------	---------------	---------------

### Overdue - 1

TRP-99-901 1.4.10	EA Complete Removal of 324 Radiochemical Engineering Cells (REC) B Cell Mixed Waste (MW) & Equip.	11/30/00	07/18/01
----------------------	--	----------	----------

Cause: Technical and operational issues delayed completion of this work scope.

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

Corrective Action: A revised schedule was developed with the support of RL and Ecology. This milestone is now complete.

FY 2002 Tri-Party Agreement / EA Milestones		
Number	Milestone Title	Status
MX-92-06-T01	"Complete Disposition for all Site Unirradiated Uranium"	Due 12/31/01 — On schedule.
DNFSB Commitments		
	Nothing to report at this time.	

## PERFORMANCE OBJECTIVES

Outcomes	Performance Indicator	Status
Restore the River Corridor for Multiple Uses	<b>FHI-M8 - 300 Area Cleanup</b>	
	Measure 1: Accelerate 300 Area Cleanup	
	Expectation 1: Deactivate 324/327 Buildings	
	Base: Complete 26.5% remaining 324/327-baseline work by June 30, 2002.	99 percent of the remaining life-cycle work scope completed October 2000 through June 2001.
	Ease: Complete B Cell cleanout and shipment of B Cell waste to 200 Area Burial Grounds.	The twenty-first and final 3-82B shipment to the Central Waste Complex was completed July 18, 2001, 14 days ahead of the revised date of July 31, 2001. This completes the cleanout of B Cell and the shipment of B Cell waste to the 200 Area Burial Grounds.
	Stretch: Complete additional 2.5% remaining 324/327-baseline work.	No additional work scope has been performed to date.

FHI-M3 – 200 Area Facility Disposition  
Measure 1: Disposition Surplus Buildings  
and Rolling Stock

Expectation 1:

Base: Decontaminate &  
Decommission (D&D) 233-S & 233-SA  
Facilities by September 30, 2004.

Stretch: D&D 233-S & 233-SA by  
June 30, 2004.

Expectation 2: Complete installation of  
new roofs on **WREX** & B Want by  
September 30, 2002.

Expectation 3:

Base: Disposition contaminated  
railcars by June 30, 2006.

Stretch: Disposition contaminated  
railcars by August 31, 2005.

Super stretch: Disposition  
contaminated railcars and  
heavy equipment by September  
30, 2003.

Expectation 2: Disposition surplus  
facilities

Base: Disposition 3902A, 38026 &  
303-K by September 30, 2001.

Stretch: Disposition 377 Bldg. by  
June 30, 2002.

Expectation 3: Disposition uranium  
billets, uranium dioxide, scrap materials  
in 200/300 Areas, and 303-K thorium-  
232 by September 30, 2001.

Measure 2: Support RCP Contract Transition  
Expectation 1:

Stretch: Support RCP contract  
transition by July 1, 2002.

Completed 3902A and 3902B water tower  
dismantlement. The 303-K demolition  
schedule has been revised to incorporate the  
BCR for CERCLA to RCRA waste disposition  
(FSP-01-050). The Notice of Construction (NOC)  
has been approved by DOH and is at the EPA.  
BHI has provided a schedule and estimate that  
completes 303-K demolition by September 20,  
2001.

The EE/CA #1, which includes the 377 building  
demolition scope, was completed June 13,  
2001, and submitted to RL. However, a  
decision has been made by RL not to proceed  
with the EE/CA process at this time. The work  
scope will need to be performed under RCRA vs.  
CERCLA disposition regulations.

Completed shipment of uranium billets and UO<sub>2</sub>  
to the DOE Portsmouth Site in Ohio.  
Additionally, the Project has completed all 9  
shipments of contaminated fuel (135 MT) to the  
low level burial grounds.

A draft transition plan has been prepared.

Work will be initiated July 1, 2002.

Work will be initiated July 1, 2002.

Work will be initiated February 1, 2002.

The first of four tall well cars was shipped from  
Hanford to Memphis, TN, on July 16, 2001.  
Nothing to report.

Nothing to report.



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



		FYTD									
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC	
PBS TP04	300 Area/ Special Nuclear	\$ 3,250	\$ 3,159	\$ 3,004	\$ (91)	-3%	\$ 155	5%	\$ 4,357	\$ 4,712	
WBS 1.4.4	Materials										
PBS TP12	Transition Program	\$ 4,947	\$ 4,947	\$ 4,572	\$ 0	0%	\$ 375	8%	\$ 6,747	\$ 6,235	
WBS 1.4.6	Management										
PBS TPIO	Accelerated Deactivation	\$ 2,904	\$ 2,848	\$ 2,878	\$ (56)	-2%	\$ (29)	-1%	\$ 3,611	\$ 4,237	
WBS 1.4.8											
PBS TP08	324/327 Facility Transition	\$ 26,185	\$ 23,040	\$ 21,980	\$ (3,145)	-12%	\$ 1,061	5%	\$ 35,153	\$ 34,157	
WBS 1.4.10											
PBS TP14	Hanford Surplus Facility	\$ 574	\$ 668	\$ 510	\$ 94	16%	\$ 157	24%	\$ 1,345	\$ 1,271	
WBS 1.4.11	Program (300Area Revitalization)										
Total		\$ 37,860	\$ 34,662	\$ 32,943	\$ (3,197)	-8%	\$ 1,719	5%	\$ 51,212	\$ 50,612	

Notes: RL-Directed costs (steam and laundry) are included in the PEM BCWS. 310 TEDF/340 Facility performance data is reported under PBS WM05 (Waste Management).

Authorized baseline is per the Integrated Planning Accountability, and Budget System (IPABS) - Project Execution Module (PEM).

## FY TO DATE SCHEDULE / COST PERFORMANCE

The unfavorable schedule variance was due to a change in strategy for preparation in support of SNF removal, 324 B-Cell waste shipment delays and crane repairs. The favorable cost variance is primarily due to lower than planned FY 2001 fee accruals and favorable variance distributions (FY 2000 unearned fee reversals).

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

## Schedule Variance Analysis: (-\$3.2M)

### 324/327 Facility Transition - 1.4.10/TP08

**Description and Cause:** The unfavorable schedule variance (-\$3,145K) was due to several factors; the primary contributor continues to be the Spent Fuel Removal preparation (-\$1,757K). The baseline does not reflect current single contractor methodology developed in the vendor forum, making it difficult to report progress against the current baseline. Other contributors include the completion of shipping B Cell waste to the central plateau (-\$181K), and the delay in starting the D Cell work (-\$452K) that required an approved NOC prior to start.

**Impact:** Tri-Party Agreement milestone M-89-02 ("Complete Removal of 324 Building Radiochemical Engineering Cells B Cell Mixed Waste and Equipment") was missed but is on target to be complete by the regulator agreed to revised date of July 31, 2001. Spent Fuel Removal preparation continues to support initiation of spent fuel removal from B Cell in July 2002,

**Corrective Action:** Spent Fuel removal project work scope is being updated to reflect a single contract methodology, which is targeted for implementation by July 31, 2001. Although delayed from the original TPA milestone date, waste shipments to the central plateau are on schedule to be complete by mid-July, and completion of D Cell work scope is expected by September 29, 2001.

**Hanford Surplus Facility Program — 1.4.11/TP14**

**Description and Cause:** The favorable schedule variance (+\$94K) was due to Water Tower Demolition activities completed ahead of schedule.

**Impact:** No impact.

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

All other schedule variances are within threshold.

**Cost Variance Analysis: (+ \$1.7M)****324/327 Facility Transition — 1.4.10/TP08**

**Description and Cause:** The favorable cost variance (\$1,061K) was primarily due to lower than planned FY 2001 fee assessment accruals and a favorable variance distributions received in May and June.

**Impact:** No impact.

**Corrective Action:** Funds made available via underruns will be utilized toward other high priority workscope within the project.

**Hanford Surplus Facility Program — 1.4.11/TP14**

**Description and Cause:** The favorable cost variance (\$157K) was due to labor resources diverted to other high priority work, and a favorable variance distributions received in May and June.

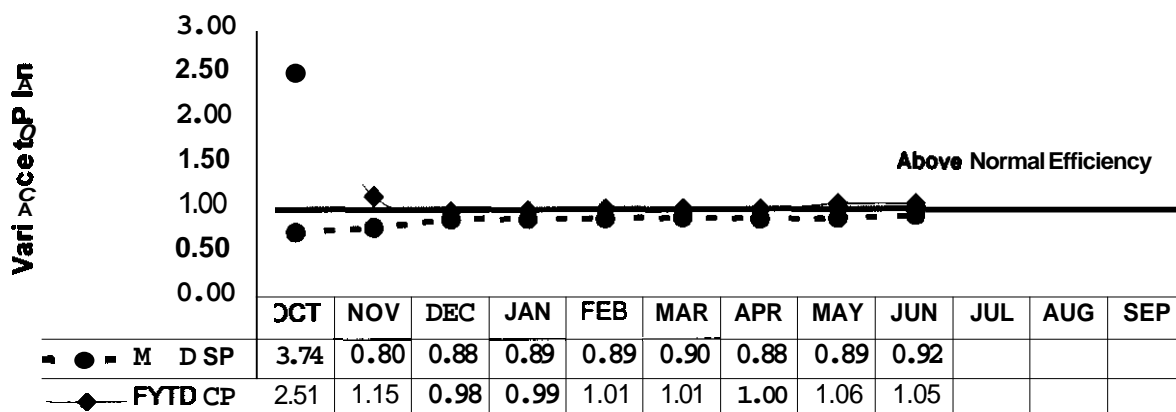
**Impact:** No impact.

**Corrective Action:** Funds made available via underruns will be utilized toward other high priority workscope within the project.

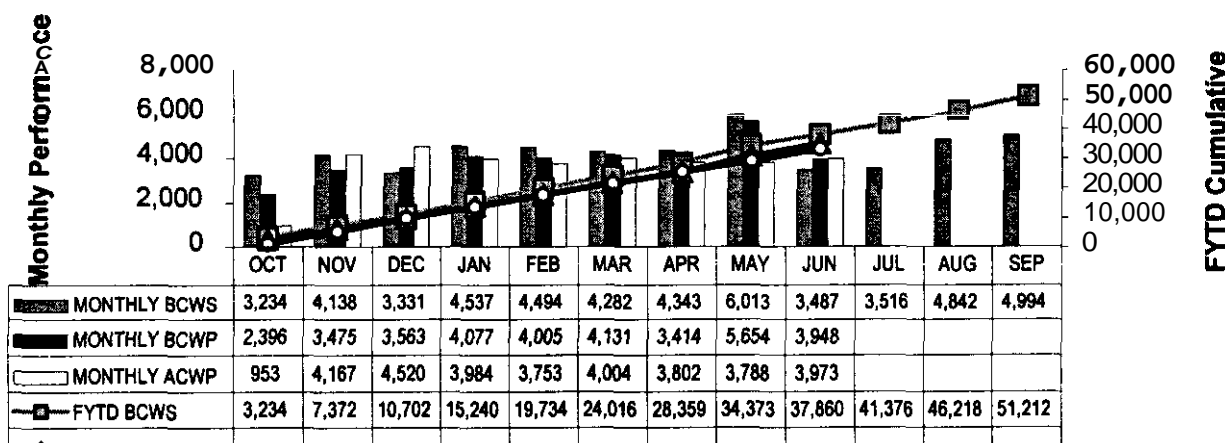
All other cost variances are within established thresholds.

## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)

### Cost/Schedule Performance Indices (FYTD)



### Performance Analysis FYTD and Monthly (\$000s)



## FUNDS MANAGEMENT

### FUNDS VS SPENDING FORECAST (\$000)

### FY 2001 TO DATE

	Funds	FYSF	Variance
1.4 River Corridor			
TP01, TP04, TP10, TP12, TP14, WM05			
Project Completion - Operating	\$ 48,964	\$ 47,405	\$ 1,559
Post 2006 - Operating	\$ 5,637	\$ 5,342	295
Total	\$ 54,601	\$ 52,747	\$ 1,854

## ISSUES

### Technical Issues

**Issue:** BHI verbally informed RCP that it may **not** be able to support the demolition schedule for the 303-K facility.

**Impab.** The delay will result in RCP missing the RCRA Part B permit condition of clean closure certificated submittal due September 30, 2001.

**Corrective Action:** BHI has provided a schedule and estimate that completes 303-K demolition by September 20, 2001, which will meet the PI, but will require an extension to the RCRA Part B permit closure. Ecology is receptive to an extension and the process to extend the permit closure to December 31, 2001 has been initiated. *(No further status to be provided.)*

**Issue:** Characterization activities at 224-T and 231-2 are impeded by the suspension of the non-destructive assay (NDA) program at the Plutonium Finishing Plant (PFP). The PFP program has been suspended due to problems associated with specific plutonium value calculations resulting from NDA measurements.

**Impact:** Delays characterization activities for both 231-2 and 224-T. These delays impact Master Documented **Safety** Analysis development, Fire Hazards Analysis, and Emergency Planning Hazard Analysis. These activities tie into the **Safety** Analysis Report compliance issues per the 830 Rule. In addition, there is a potential cost impact if an outside organization is used.

**Corrective Action:** Currently investigating replacement of PFP NDA program with PNNL NDA personnel. Initial investigation suggests that PNNL can support NDA at 224-T by mid-August, and 231-2 NDA activities in fiscal year 2002.

## REGULATORY ISSUES

**Issue:** The delay in approval of the NOC for 324 Building deactivation work has delayed D-Cell equipment size reduction (planned to begin in April 2001) to July 2001.

**Impact:** D-Cell work will continue to be delayed until the Notice of Construction (NOC) is issued. D-Cell delays will impact work in the pipe trench (August 2001), which may jeopardize spent nuclear fuel shipments (July 2002).

**Corrective Action:** The NOC was received on June 29 and work on D Cell started on July 2. Work has proceeded much faster than planned on the D Cell project. In addition, incorporation of waste minimization ideas will likely reduce the number of containers shipped from 6 to 4, along with incorporating a shielded grout container design to address exposure concerns for personnel at 324 and at the Burial Grounds. (*No further status to be provided.*)

**Issue:** In preparing for transfer of a curium source from the 327 Facility fuel basin, it was determined that the source potentially violated an Operational Safety Requirement (OSR) and an Unusual Occurrence (UO) was declared.

**Impact:** This discovery delays the issuance of the developed Basis for Interim Operation (BIO), scheduled for transmittal to the DOE in June 2001.

**Corrective Action:** Specified recovery actions per the OSR were implemented to include suspending operations within the fuel basin. Subsequent information confirmed the OSR was not violated. Discussion continued with the Transportation and Packaging and Central Waste Complex staff to determine the requirements for disposition of the material. Based on the latest discussion an agreement on a path forward is close. (*No further status to be provided.*)

## EXTERNAL AND DOE ISSUES

None to report.

## DOE Requests

None to report.

## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

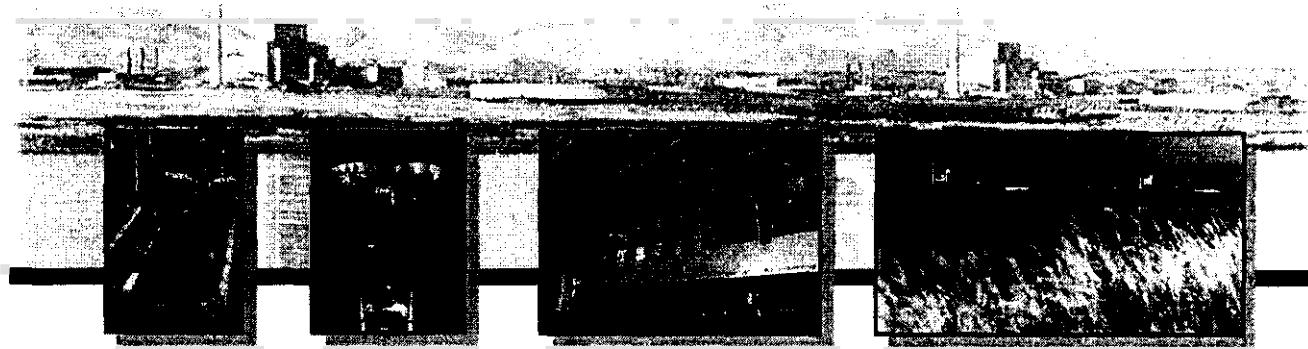
PROJECT CHANGE NUMBER	DATE ORIGIN	BCR TITLE	FY01 COST IMPACT (\$1,000)	SCH	TECH	DATE To FH CCB	FH CCB APR'VD	RL APR'VD	CURRENT STATUS
FSP-2000-002	11/2/99	Mark-42 Project Completion	\$304		X	04/05/00			Additional funding requested
FSP-2001-001	10/9/00	Baseline Adjustment to TP08	(\$498)		X				Draft Prepared
FSP-2001-056	5/24/01	Transfer of PNNL facilities to Fluor Hanford	\$526	X	X				On hold
FSP-2001-057	5/3/01	Engineering Study - Disposition of Remaining 300 area Fuel	\$70		X	6/20/01	6/20/01		Pending RL Review
FSP-2001-058	6/1/01	Revised Milestones for RL-TP04	\$0		X	6/20/01			8/15/01 Approved by RCP Board
FSP-2001-059	6/7/01	Delete Mani Decon Station; Add SWBD LT Storage, 3-82B SEP/SARP	(\$229)	X		7/3/01			FH CCB Approved 7/16/01. Forward to RL for approval.
FSP-2001-060	5/1/01	FY 2001 Award Fee	(\$829)	X			6/19/01	N/A	Implemented 6/2001
FSP-2001-065	7/2/01	Revised Uranium Disposition Completion Dates	\$0	X		N/A	N/A	N/A	RCP Approved on 7/16/01
FSP-2001-066	7/10/01	New Approach for 324 Building Spent Nuclear Fuel	\$77	X	X	7/16/01			Re-review with FH CCB on 7/23/01

Advanced Work Authorization

None									
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## KEY INTEGRATION ACTIVITIES

- **Potential Technology Funding for 327 Building Deactivation** - The current FY 2002 planning budget for EM50's Transuranic (TRU) and Mixed Waste Focus Area (TMFA) as managed from Idaho National Engineering and Environmental Laboratory, now targets \$790K for technology tasks focused on waste equipment size reduction at Hanford. In top consideration for a portion of this funding are opportunities at the 327 Building (e.g., detachment of H Cell using diamond wire cutting; removal and size reduction of an IX-column presently stored in the 327 wet basin; and removal and size reduction of heating, ventilation, and air conditioning ducting). If funded, this project would be a collaborative effort for FH, the TMFA, and PNNL/EM50's Robotics Crosscutting Group.
- **West Valley Hot Cells Proposal Resubmitted to EM50** - Based on a request from EMM, the Large Scale Demonstration and Deployment Project proposal for West Valley hot cell deactivation was rewritten and resubmitted May 2, 2001, for funding consideration. This proposal was initially submitted to EM50 in September 2000, but was not selected for the first round of awards. If funded in the next round of awards RCP will participate on the Integrated Contractor Team (ICT) for influencing hot cell technologies to be demonstrated at West Valley, and potentially transferred to RCP's 324 and 327 Facilities.



# **Section D**

## ***Spent Nuclear Fuel***

### **PROJECT MANAGERS**

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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] WM01) and the subsequent Canister Storage Building (CSB) Operations Project WBS 1.3.2.1 (PBS WM02), which does not start until FY 2005.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of June 30, 2001. All other information is as of July 25, 2001, unless otherwise noted.

Fiscal year-todate milestone performance (EA, HQ, and RL) showed that three out of four milestones (75 percent) were completed late and one milestone is overdue.

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

## NOTABLE ACCOMPLISHMENTS

**Fuel Movement Activities** — Sixteen Multi-Canister Overpack (MCOs) (332 canisters = 4608 fuel assemblies) have been removed from K West (KW) Basin for a total of 74.85 Metric Tons of Heavy Metal (MTHM) shipped. The fifteenth MCO was shipped to the Canister Storage Building (CSB) on July 3, 2001. The sixteenth MCO was shipped to the Cold Vacuum Drying (CVD) Facility on July 9, 2001. After being processed at the CVD Facility, it was then shipped to the CSB on July 12, 2001. The second maintenance outage was completed on schedule for K West Basin. All new equipment for supporting and operating the manual process tables has been installed and tested. The new equipment is expected to be fully operational by August 1, 2001. An additional reduction in average processing time of up to 30 percent is anticipated when the new equipment is fully operational.

**K Basins Construction Projects** — Activities conducted during this report period include: initiated 30 percent design review of Fuel Transfer System (FTS) Cask, submitted the FTS Functional Design Criteria (FDC) for review and approval, submitted KE FTS Notice of Construction (NOC) to RL, Canister Cleaning System (CCS) construction initiated on mechanical, electrical and structural packages, Construction initiated the conceptual design of the Sludge Water System (SWS), issued contracts for the FTS Cask and Cask Transportation System for CSB Production Improvements to PacTec.

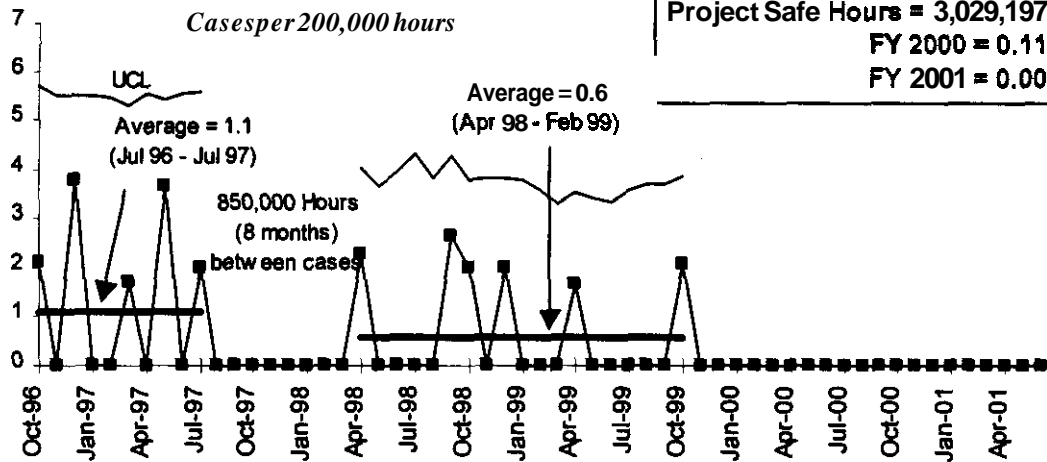
**Site-Wide SNF Integration Activities** — The first production Shippingport Spent Fuel Canister (SSFC) was placed into a cask and shipped to T Plant for dry runs and Operational Readiness Review (ORR) Demonstrations. The second and third SSFCs were received at the Hanford Site. The Baseline Design Criteria Document for the Sludge Handling Project was revised and the Preliminary Design was initiated.

## SAFETY

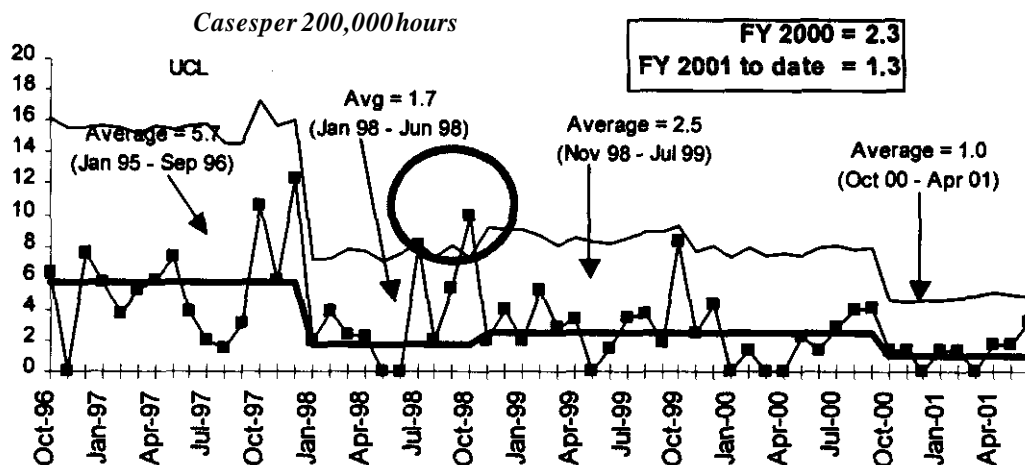
The Spent Nuclear Fuel (SNF) Project has achieved over three million safe work hours. No Lost Away Workday Cases have been reported in twenty-two months. In addition to the three million safe hours reached at the end of June, during both May and June there was a reduction in the number of first aid cases reported.

## SAFETY (CONTINUED)

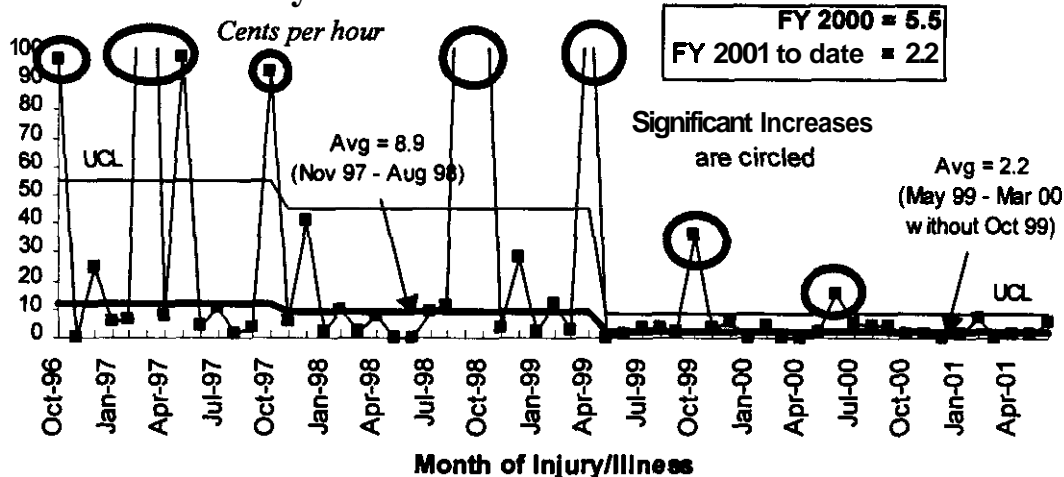
### Lost Away Workday Case Rate



### OSHA Recordable Case Rate



### DOE Safety Cost Index

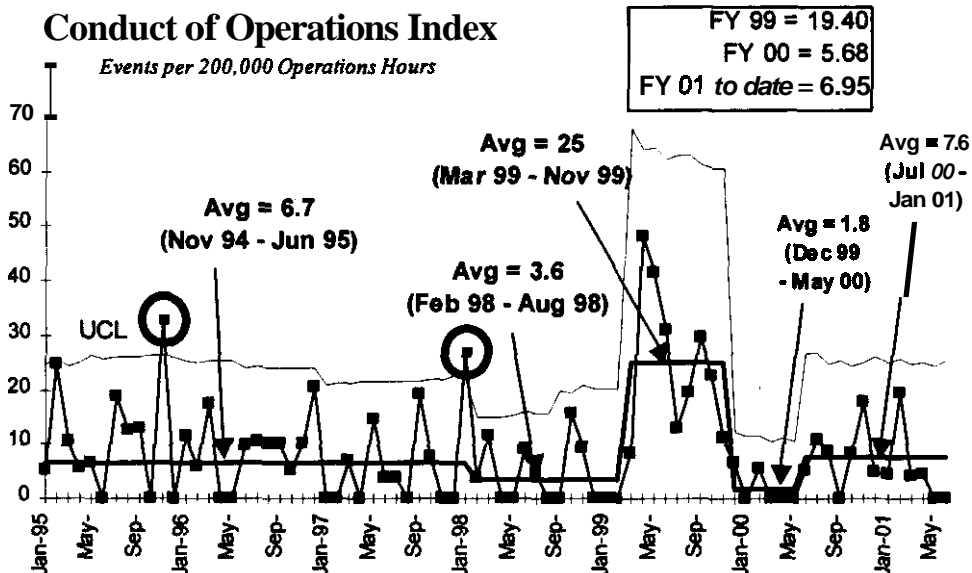


## ISMS STATUS

SNF Project personnel continue to demonstrate a commitment to ISM in "Doing Work Safely." Several examples of this include:

- Implemented a priority system to accomplish work that focuses on corrective maintenance necessary to continue facility operation and preventive maintenance to support the facility authorization basis. Currently, Engineering, Planning, Work Control and Maintenance organizations are working to the same goals established by Facility Managers.
- Completed the second maintenance outage cycle by maintenance and operations personnel.
- Conducted a "Time Out for Safety" following the completion of the second maintenance outage.
- Achieved over 3 million safe work hours.

## CONDUCT OF OPERATIONS



In an effort to raise the projects focus on worker safety and conduct of operations, a weekly review of lessons learned and Occurrence reports is conducted at the opening of the SNF Project senior staff meeting. The project continues to emphasis worker safety and conduct of operations with all project personnel.

## BREAKTHROUGHS/ OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs



**SNF Accelerated Closure Team (ACT)** - Phase I of the SNF ACT has identified several prospective **improvements** and breakthroughs that have the potential to further reduce fuel removal processing times and accelerate the completion of the Project. BCRs were submitted for DOE approval on two of the ACT initiatives:

- Accelerated Sludge Capture and Removal Strategy
- Transition Deactivation Budget Reallocation

Other potential breakthroughs continue to be **actively** analyzed to reduce MCO drying requirements and to **determine** the thermal stability of alternate "wet" sludge storage alternatives.

**MCO Production Rate Improvements** - All equipment required to support and operate the manual process tables has been installed and tested. The new equipment is expected to be **fully** operational by August 1, 2001 and a reduction in the average processing time of up to 30 percent is expected. When this improvement is realized, MCO production capacity from K West Basin will be sufficient to meet all production requirements.

### Opportunities for Improvement

None to report at this time.

## UPCOMING ACTIVITIES

- Continue MCO shipments through FY 2001.
- **Complete** standard startup review for process modifications in K West Basin in July 2001.
- Initiate KW Basin spent nuclear fuel canister cleaning operations in August 2001.
- Initiate debris removal from dummy elevator pit and basin in August 2001.
- Facility Evaluation Board (FEB) here in August 2001.
- Complete Standard Startup Review for Shippingport SNF receipt and storage at CSB by September 2001.
- Receive all Shippingport Spent Fuel Canisters by September 2001.
- Approve Start of Construction for the K East and K West Basin facility modifications for Accelerated Fuel Transfer Strategy (AFTS) by September 2001.
- Issue revised transition plan for the Sludge Handling Project by September 2001.
- Initiate Shippingport fuel shipments to the CSB in November 2001.

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

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-34-16</b> (DOE-HQ Milestone No. <b>S00-01-900</b> )	"Initiate Removal of K West Basin Spent Nuclear Fuel"	Due <b>11/30/00</b> - Completed on December 7, 2000. <span>Green</span>
<b>M-34-06-T01</b> (RL Milestone No. <b>S04-99-521</b> )	"Initiate K West Basin Spent Nuclear Fuel Canister Cleaning Operations"	Due <b>12/31/00</b> - Overdue. Forecast start, August 31, 2001. Completion of Canister cleaning operations is driven by the fuel removal schedule. No additional impacts projected. <span>Yellow</span>
<b>M-34-26-T01</b> (WE-HQ Milestone No. <b>S15-02-002</b> )	"Approve Start of Construction for the K East and K West Basin facility modifications for AFTS"	Due <b>09/30/01</b> - On Schedule. <span>Green</span>

## 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 - 1

<b>S04-99-521</b>	RL	Start K West Canister Cleaning Operations	12/31/00	8/31/01
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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 August 31, 2001.

## Forecast Late - 0

## FY 2002 Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-34-29	"Complete K East Basin and K West Basin facility modifications for AFTS cask transportation system"	Due 03/31/2002 On Schedule
M-34-12-T01 (S04-97-621)	"Complete Construction of K East Basin Integrated Water Treatment System (IWTS) to Support Spent Nuclear Fuel Removal"	Due 09/30/2002 On Schedule

## DNFSB Commitments

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## PERFORMANCE OBJECTIVES

### Move Fuel Away from the River

**EXPECTATION:** Remove spent fuel from K Basins

Move first MCO of SNF from KW Basin and transport to the CVD Facility for processing by December 7, 2000 (TPA M34-16)

Status: Completed on schedule.

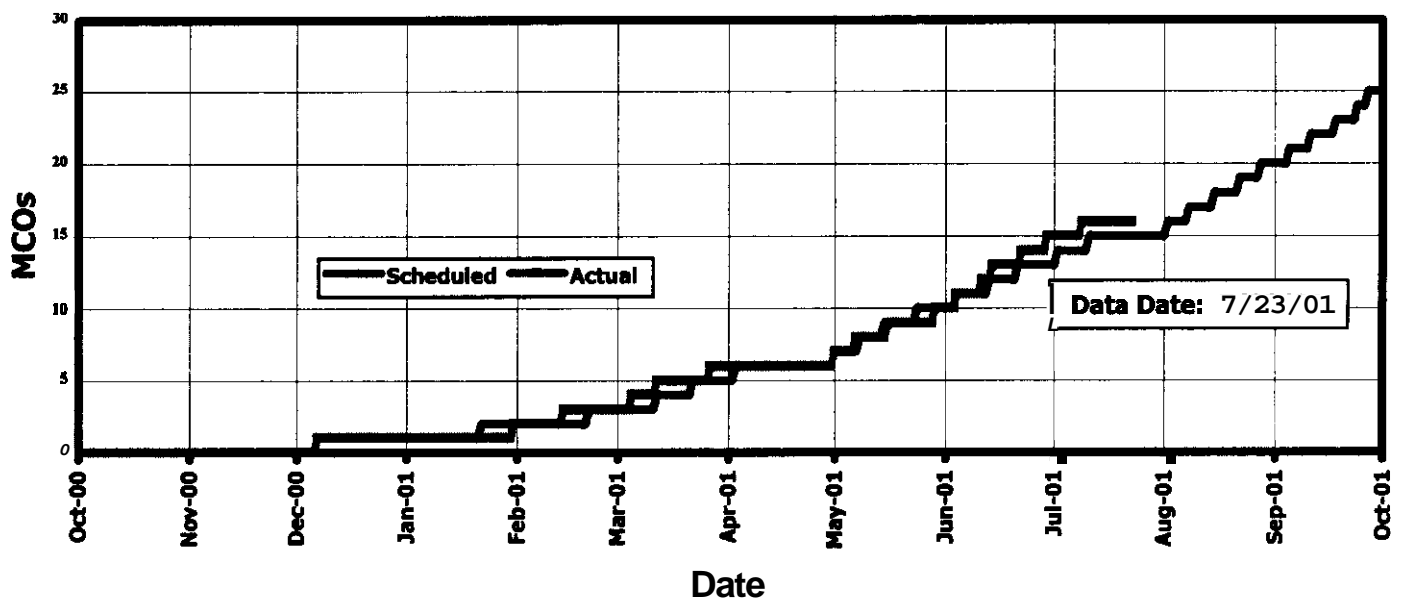
### Move 116 Metric Tons Heavy Metal from KW Basin by end of FY 2001

Status: Ten days ahead of schedule.

### Complete construction on Fuel Transfer System (FTS) by March 30, 2002

Status: On schedule.

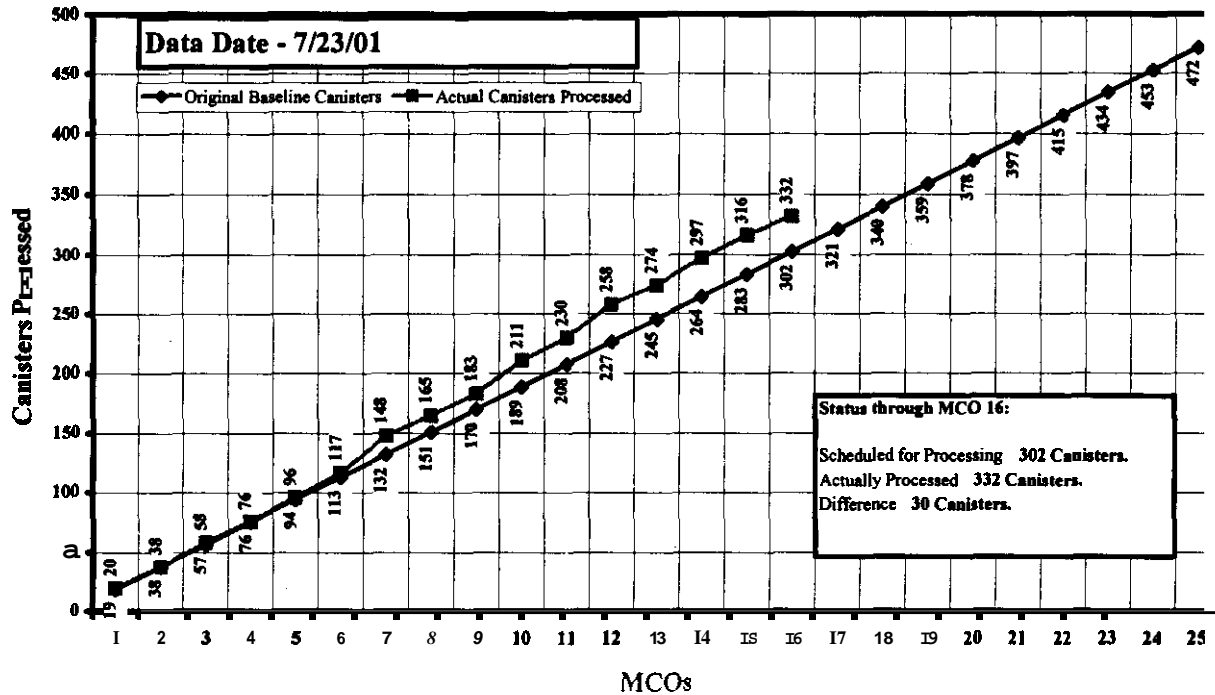
### FY 2001 MCO Baseline Production Performance



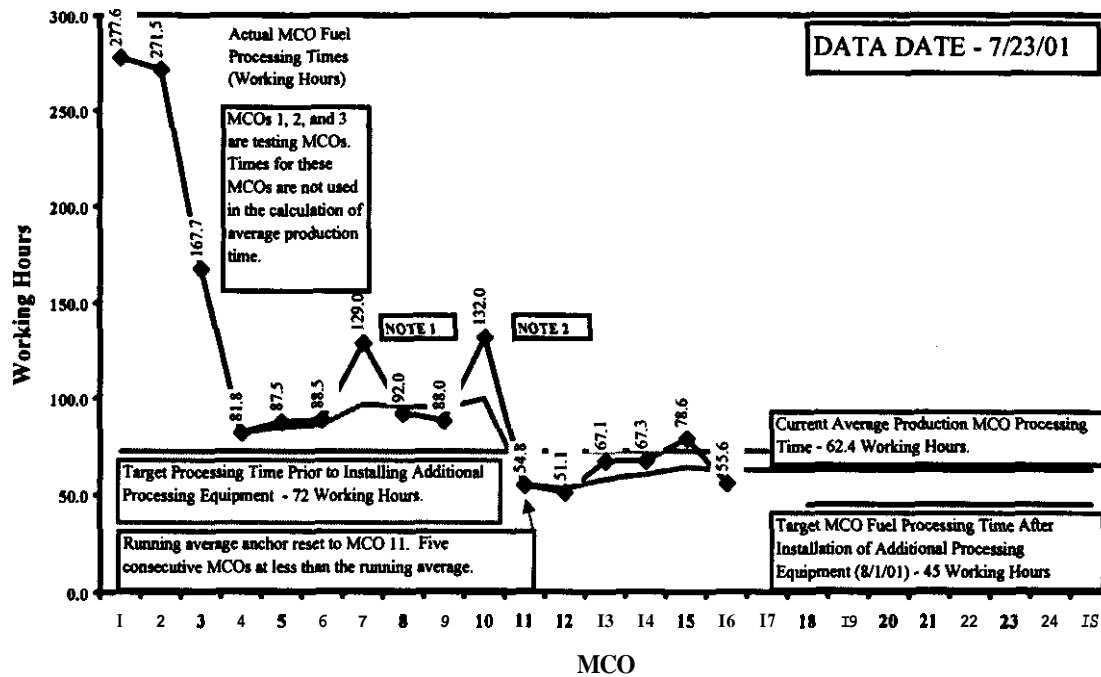
The fourteenth MCO was shipped to the CVD Facility from K West Basin on June 22, 2001. The eleventh MCO was shipped to the Canister Storage Building (CSB) on June 11, 2001, the twelfth MCO was shipped to the CSB on June 17, 2001, and the thirteenth MCO was shipped to the CSB on June 19, 2001. The fourteenth MCO is currently being processed at the CVD Facility.

## PERFORMANCE OBJECTIVES (CONTINUED)

Actual versus Scheduled Canisters Processed



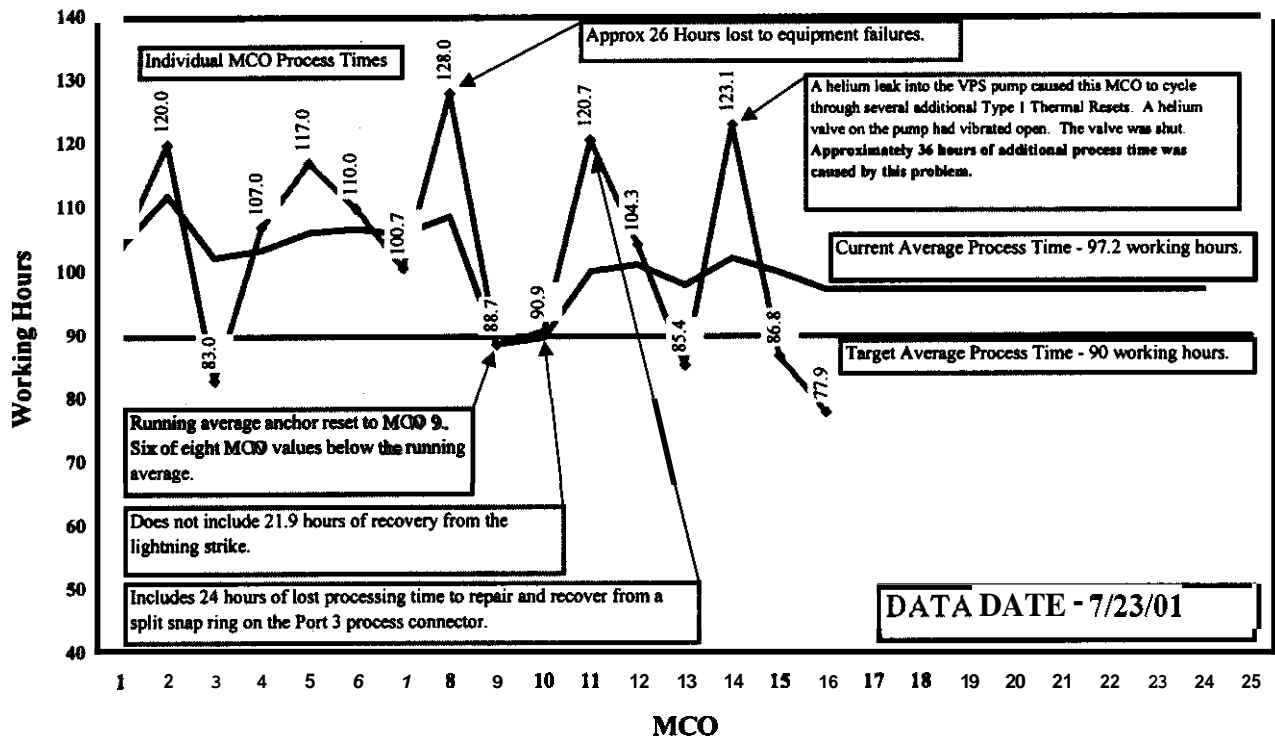
105K West MCO Fuel Processing Times



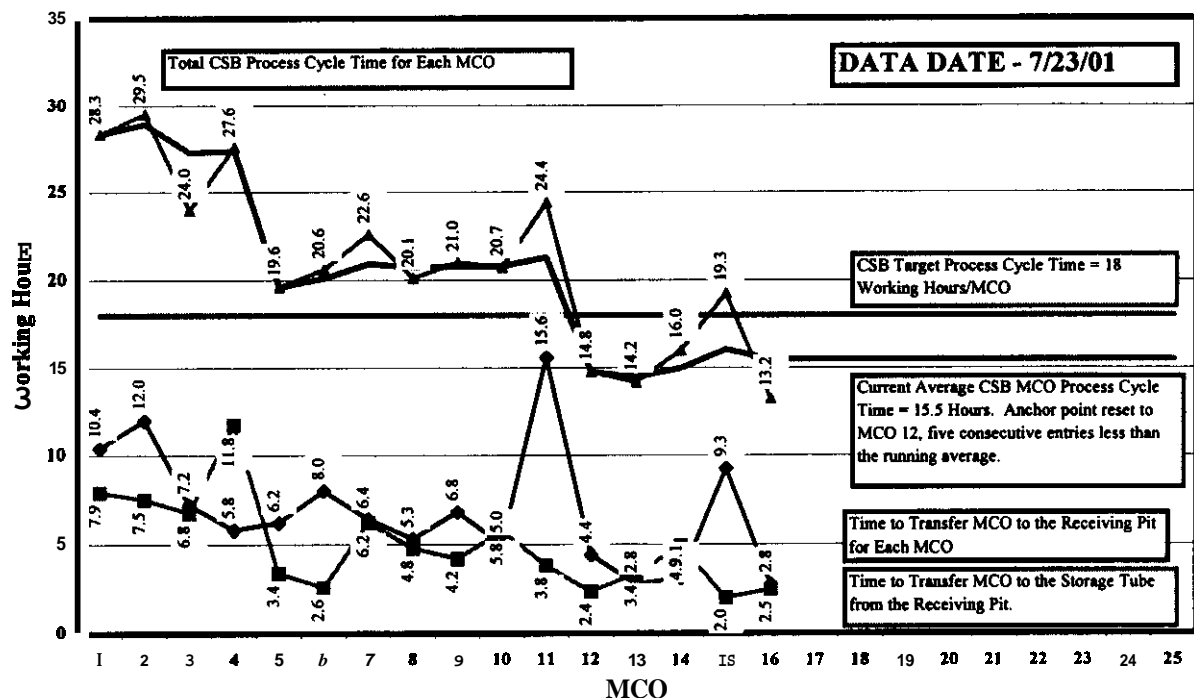


## PERFORMANCE OBJECTIVES (CONTINUED)

### CVDF MCO Processing Times



### CSB MCO Process Cycle Times



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

Green

		FYTD									
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC	
PBS WM01 Spent Nuclear		\$ 129,600	\$ 122,391	\$ 121,752	\$ (7,209)	-6%	\$ 640	1%	\$ 189,336	\$ 186,400	
WBS 1.3 Fuel Project											
Total		\$ 129,600	\$ 122,391	\$ 121,752	\$ (7,209)	4%	\$ 640	1%	\$ 189,336	\$ 186,400	

Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) - Project Execution Module (PEM).  
Note: Above data includes RL contract for Steam.

## FY TO DATE SCHEDULE / C o n PERFORMANCE

FYTD, SNFP is behind schedule. SNFP cost and schedule figures now reflect Incorporation of the Accelerated Fuel Transfer Strategy (AFTS) baseline changes, which more accurately portrays current performance. The unfavorable schedule variance of \$7.2 million (6 percent) was due to re-planning activities for Site Wide SNF, Deactivation and MCO Production.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

### Schedule Variance Analysis: (-\$7.2M)

#### Spent Nuclear Fuel Project - 1.3.1/WM01

**Description /Cause:** The unfavorable schedule variance is due to re-planning activities for Site Wide SNF, Deactivation and MCO production.

**Impab:** None to report.

**Corrective Action:** Baseline Change Requests are in process.

### Cost Variance Analysis: (+\$0.6M)

#### Spent Nuclear Fuel Project - 1.3.1/WM01

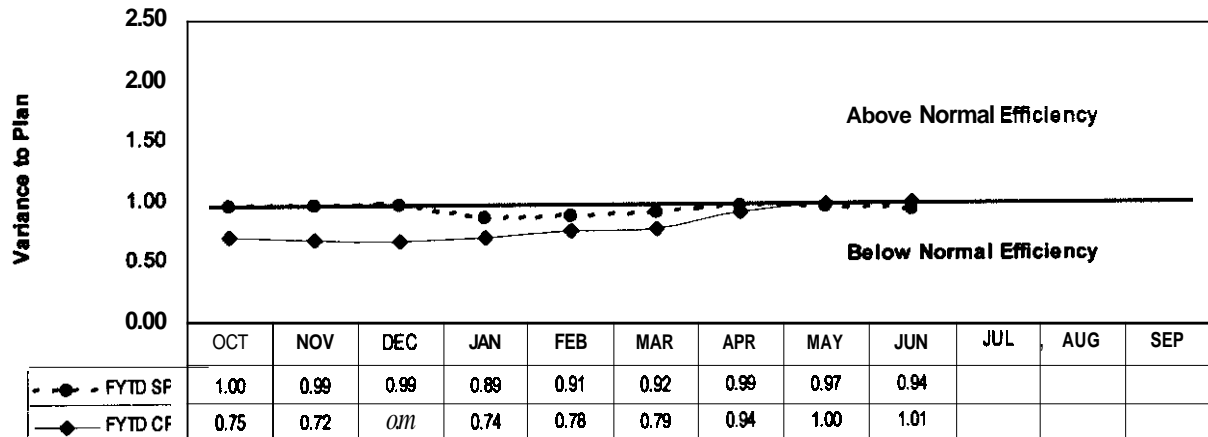
**Description /Cause:** The favorable cost variance is due to under runs in the Infrastructure support account and positive passbacks.

**Impab:** None to report.

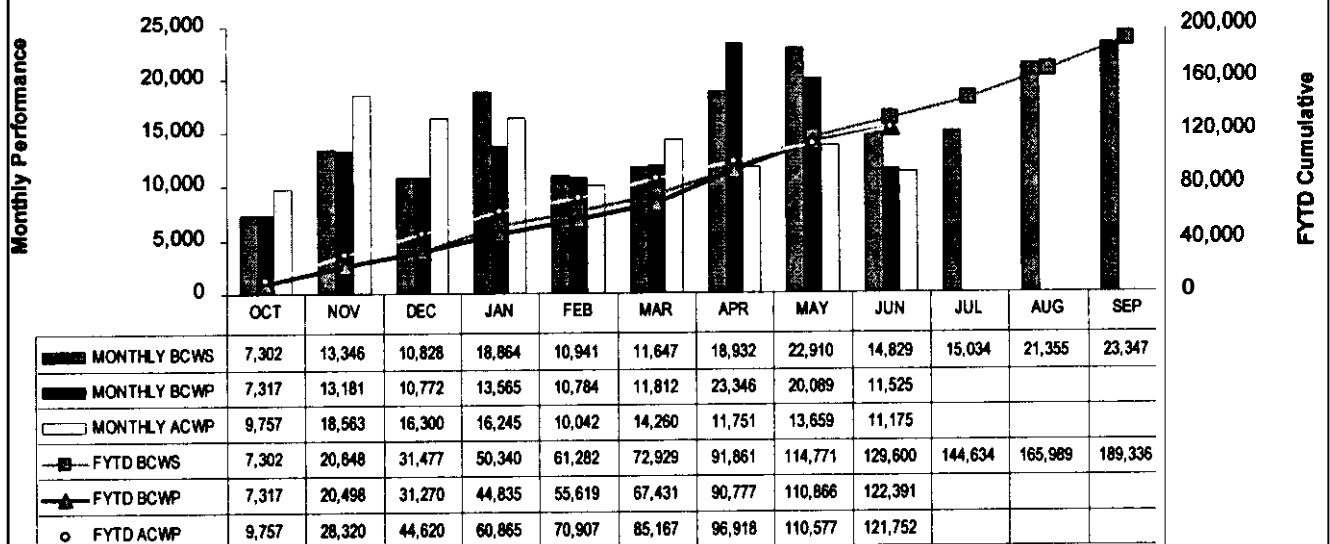
**Corrective Action:** None required.

## COST/SCHEDULE PERFORMANCE (MONTHLY AND FYTD)

### Cost/Schedule Performance Indices (FYTD)



### Performance Analysis FYTD and Monthly (\$000s)



## FUNDS MANAGEMENT

### FUNDS VS SPENDING FORECAST (\$'000)

### FY 2001 TO DATE

	Funds	FYSF	Variance
<b>1.3 Spent Nuclear Fuel</b>			
<b>WM01</b>			
Project Completion - Operating	\$ 196,462	\$ 176,825	\$ 19,637
- Line Item	\$ -	\$ -	0
<b>Total</b>	<b>\$ 196,462</b>	<b>\$ 176,825</b>	<b>\$ 19,637</b>

## ISSUES

### Regulatory Issues

**Issue:** Notice of Construction (NOC) reviews by Washington Department of Health (WDOH) are dependent on **good** working relations and proactive information sharing. The request for turn around allows only a but 60 days versus 90 days.

**Impacts:** Interim Milestone due September 30, 2001 could be late by up to 30 days. No impact on March 30, 2002 milestone.

**Corrective Action:** NOCs submitted to RL and informally to WDOH. Joint meeting (RL, FH and WDOH) and discussion scheduled for July 24, 2001. Preliminary discussions have already been held between FH and WDOH with RL concurrence.

### Technical, External and DOE Issues and DOE Requests

None to report.

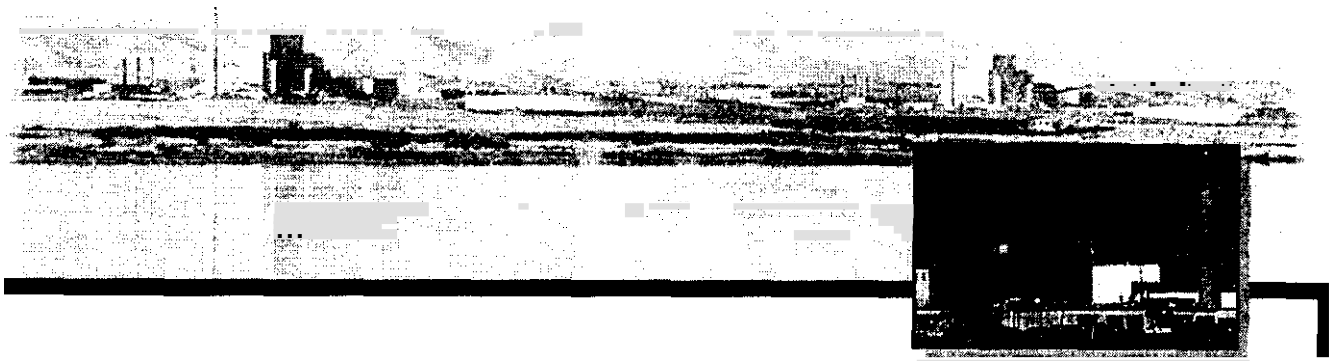
## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY01 COST IMPACT \$'000	SCH	TECH	DATE TO FH RMB	RMB APR'VD	RL APR'VD	CURRENT STATUS
SNF-2001-014	04/20/2001	CSB Weld Station Acceleration	174	Y	Y	06/05/2001	06/14/2001		RL comments to be addressed. BCR in revision. AWA in process.
SNF-2001-016	04/30/2001	Accelerated Sludge Capture and Removal Strategy	-6840	Y	Y	07/09/2001	07/16/2001		To RL for review/approval 7/17/01.
SNF-2001-023	06/09/2001	K Basins Deactivation Acceleration	N	Y	N	07/09/2001	07/16/2001		To RL for review/approval 7/17/01.
<b>ADVANCE WORK AUTHORIZATIONS</b>									
None									

## **KEY INTEGRATION ACTIVITIES**

- SNF final disposition interface activities are ongoing with the National SNF Program, including Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Program implementation. OCRWM QA Program Plan Audit is **on-going** by the National SNF Program.
- The SNF Project and Waste Management Project continued preparations for Shippingport (PA) Pressurized Water Reactor Core 2 SNF removal. The third and fourth Shippingport Spent Fuel Canisters were received.
- The SNF Project and the River Corridor Project continued to interface on 324 Building (B Cell) SNF removal.
- Neutron Radiography Facility Training Research along with Isotope Production General Atomics (TRIGA) and Fast Flux Test Facility (FFTF) SNF relocation planning is ongoing with the FFTF Project.
- **Activities continued** for potential receipt of SNF that may be discovered by Bechtel Hanford Inc. during upcoming 105F and 105H reactor basins deactivation at K Basins.
- The Sludge Handling Project and T Plant Operations continued preparations for K Basin sludge storage at T Plant.

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# **Section E**

## ***Advanced Reactors Transition***

### **PROJECT MANAGERS**

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## SUMMARY

The Advanced Reactors Transition (ART) Program, WBS 1.12.1, PBS RL-TP11, consists of the Nuclear Energy (NE) Legacies and the 309 Building/Plutonium Recycle Test Reactor (PRTR) activities.

NOTE: Cost/Schedule data contained herein is as of June 30, 2001. All other information is as of July 26, 2001 unless otherwise noted.

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

## NOTABLE ACCOMPLISHMENTS

**NE Legacies Deactivation** - The first phase of electrical, instrumentation, and insulation removal on the 337B sodium loop is complete. This phase removed insulation and electrical/instrument (trace heat/thermocouples, etc.) from piping in the cold trap/sodium sampling room, and the piping in the 3718-M tank cell.

**309 Facility Fuel Transfer Pit** - Cleanout of the sludge on the fuel transfer pit floor was completed. The application of a radiological fixative was completed.

## SAFETY

Safety data for ART is included in other project reports.

## ISMS STATUS

Work continued on improving the **work** process through enhanced training and planning efforts to improve work packages. These activities are part of the ISMS Sustain and Maintain **Process**.

## CONDUCT OF OPERATIONS

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

## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

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

## UPCOMING ACTIVITIES

- The second phase of electrical, instrumentation, and insulation removal on the 337B sodium loop will be initiated in July.
- Stabilize the 309 Building/ PRTR Fuel Transfer Pit by August 20, 2001.

## MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	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>	0	0	0	0	0	1	0	1

## PERFORMANCE OBJECTIVES

Nothing to report at this time.

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



		FYTD								
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
PBS TP11 WBS 1.12	Advanced Reactors Transition	\$ 1,341	\$ 1,200	\$ 802	\$ (141)	-11%	\$ 398	33%	\$ 1,905	\$ 1,905
	Total	\$ 1,341	\$ 1,200	\$ 802	\$ (141)	-11%	\$ 398	33%	\$ 1,905	\$ 1,905

Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM).  
ACWP reflects only Cost in WBS 1.12. \$1.7M of Cost in WBS 2.1.1.1.4.1 is not included as it is not ART cost.

## FY TO DATE SCHEDULE/ COST PERFORMANCE

The \$0.1 million (11 percent) unfavorable schedule variance was due to additional planning time and fieldwork complications in the cleanout of the PRTR Fuel Transfer Pit.

The \$0.4 million (33 percent) favorable cost variance was due to lower than anticipated corrective maintenance costs in NE Legacies and the 309 Facility.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

### Schedule Variance Analysis: (-\$0.1M)

#### Advanced Reactors Transition – 1.12.1/TP11

**Description and Cause:** Additional planning time and fieldwork complications caused delays in the cleanout of the Fuel Transfer Pit.

**Impact** There is no direct adverse impact on the completion of planned work at the 309 Facility by the end of the fiscal year.

**Corrective Action:** The fuel transfer pit cleanout has been rescheduled to complete by August 20, 2001. The schedule variance will be carried until completion of this activity.

## **Cost Variance Analysis: (\$0.4M)**

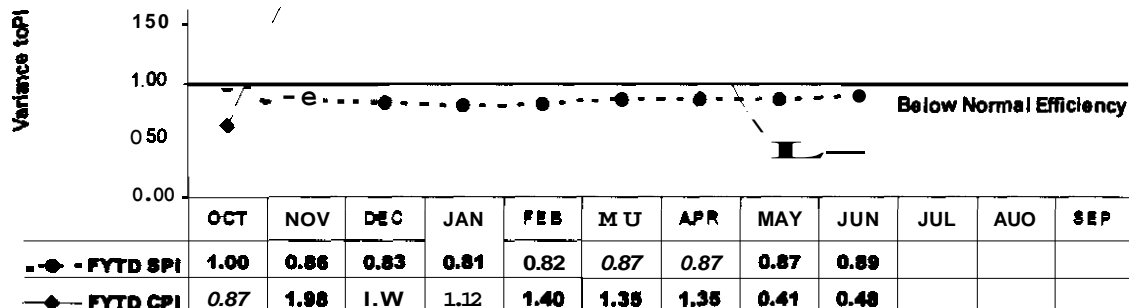
### **Advanced Reactors Transition — 1.12.1/TP11**

**AND CAUSE:** Corrective maintenance is level-loaded though the year. Requirements for corrective maintenance have been minimal to date.

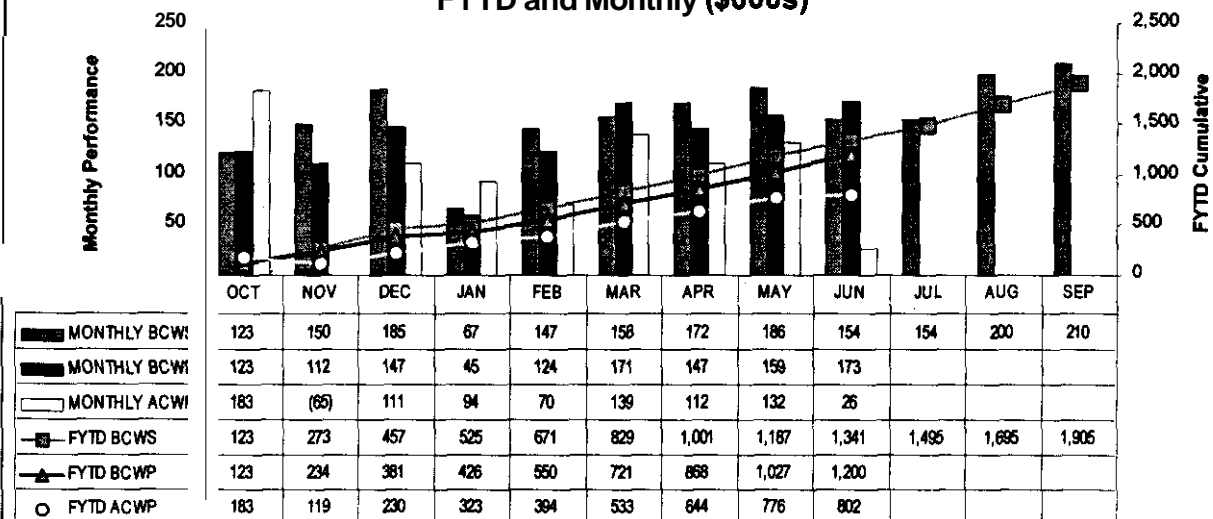
**Impab:** There is no project impact at this time.

**Corrective Action:** None required; continuing to monitor.

## COST / SCHEDULE PERFORMANCE (MONTHLY AND FYTD)



### Performance Analysis FYTD and Monthly (\$000s)



## FUNDS MANAGEMENT

### FUNDS VS SPENDING FORECAST(\$000)

		Funds	FYSF	Variance
1.12	Advanced Reactor Transition TP11	\$ 3,483	\$ 3,180	\$ 303
	Total	\$ 3,483	\$ 3,180	\$ 303

## ISSUES

### Technical, Regulatory, External, and DOE Issues and DOE Requests

**Issue:** Nothing to report at this time.

Impacts: None.

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

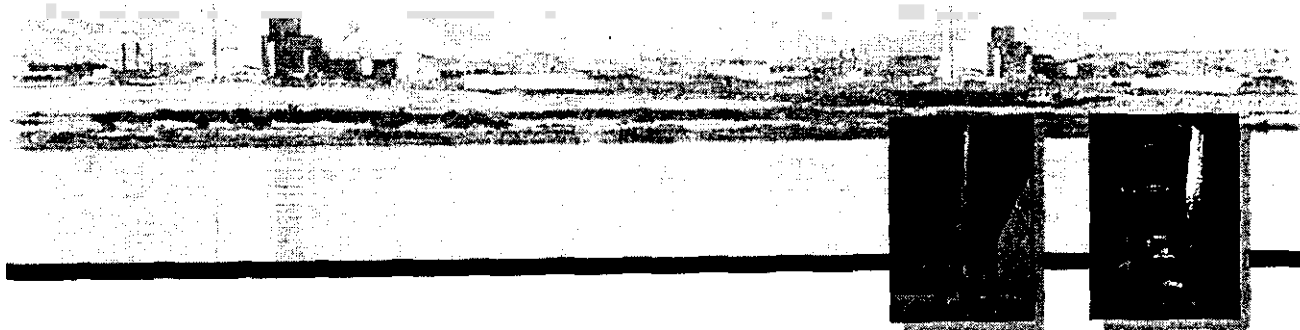
## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS (\$000)

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-2001-002	12/15/2000	MYWP Phase 2 - FY 2002 and Out Years	-0-	X	X				Draft
ADVANCE WORK AUTHORIZATIONS									
		Nothing to report at this time.							

## KEY INTEGRATION ACTIVITIES

Nothing to report at this time.





# **Section F**

## ***EM-50***

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

### ***Activities***

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**MILESTONE ACHIEVEMENT**

MILESTONE TYPE	ISCAL 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	1	0	0	0	1
RL	0	0	1	0	0	0	0	1
<b>Total Project</b>	0	0	1	1	0	0	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 - 1**

009DD61/5	HQ	Complete Installation of Robotic Work Platform in B-Cell	05/31/2001	09/15/2001
-----------	----	--	------------	------------

Cause: The robotic platform has been put into the 306E building because it was found to be more conducive to pre-deployment training, which is being conducted at this time. It will be installed in 324 by September 15, 2001.

**Impact** None. Still planning on deployment by 9/30/2001.

**Corrective Action:** None.

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

Green

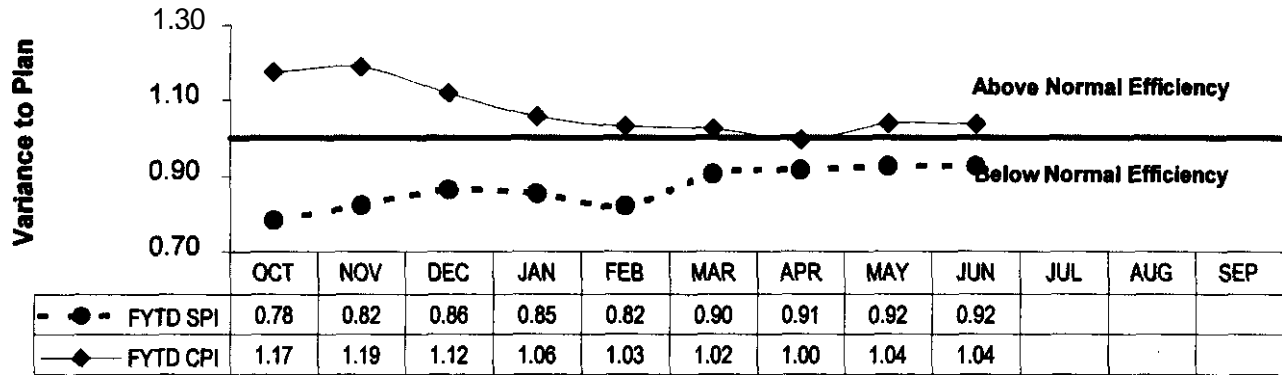
	FYTD									
	BCWS	BCWP	ACWP	SV	SV%	CV	CV%	PEM	EAC	
Technology Development (EM-50)	\$ 18,250	\$ 16,870	\$ 16,300	\$ (1,379)	-8%	\$ 571	3%	\$ 24,392	\$ 21,539	
<b>Total</b>	<b>\$ 18,250</b>	<b>\$ 16,870</b>	<b>\$ 16,300</b>	<b>\$ (1,379)</b>	<b>-8%</b>	<b>\$ 571</b>	<b>3%</b>	<b>\$ 24,392</b>	<b>\$ 21,539</b>	

**FY TO DATE SCHEDULE / COST PERFORMANCE**

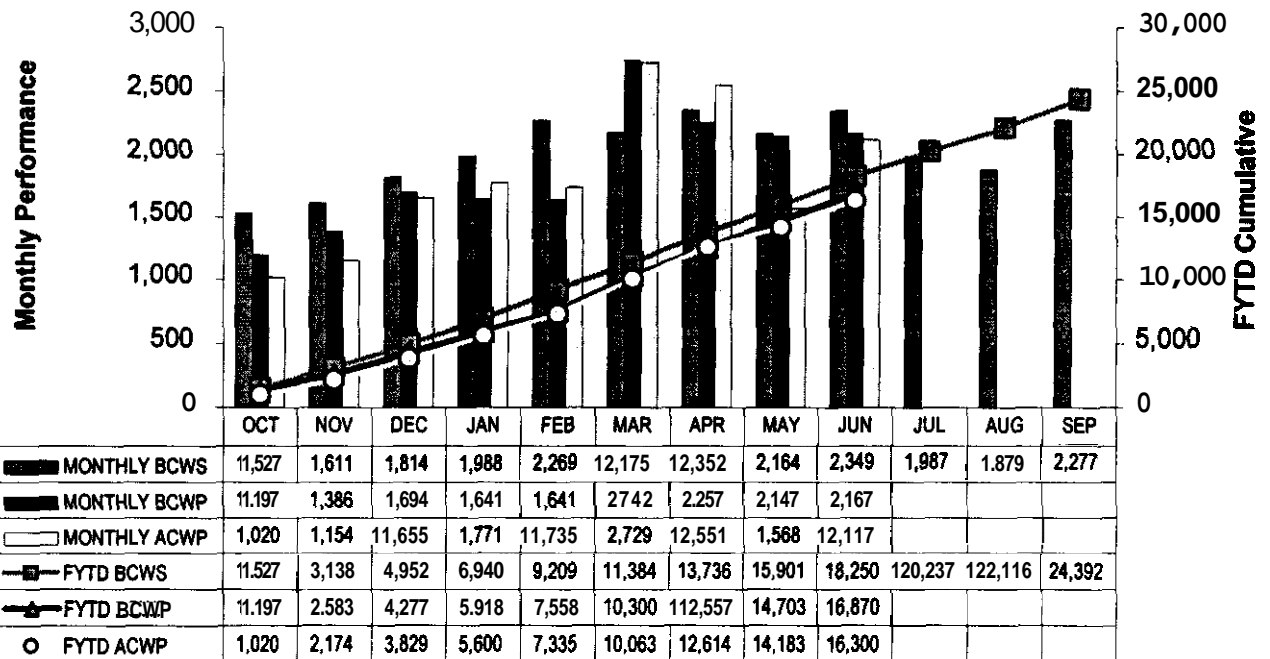
The schedule and cost variances are within established thresholds.

## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)

### Cost/Schedule Performance Indices (FYTD)



### Performance Analysis FYTD and Monthly (\$000s)

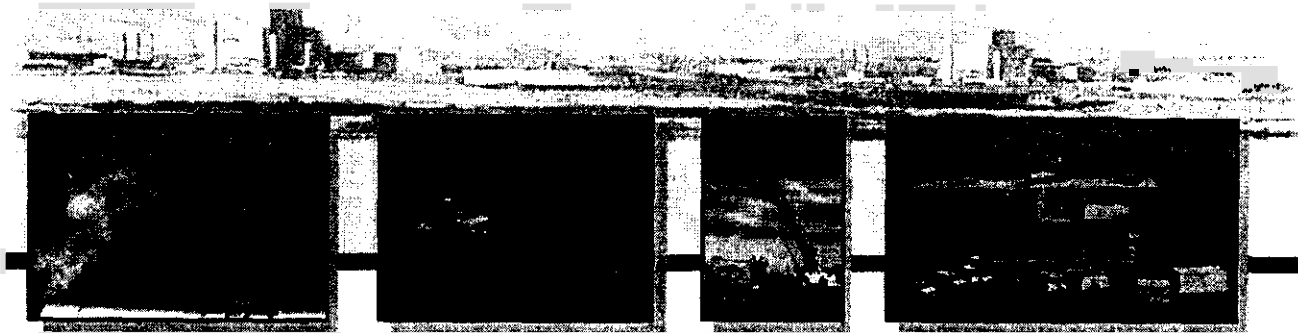




## The Future

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.

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# **Section G**

## ***HAMMER***

### **PROJECT MANAGERS**

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## 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 June 30, 2001.

Fiscal-year-to-date milestone performance (EA, DOE-HQ and RL) shows that three milestones (60 percent) were completed on or ahead of schedule and two milestones (40 percent) are overdue. Further details can be found in the milestone exception report following the cost and schedule variance analysis.

## NOTABLE ACCOMPLISHMENTS

Volpentest HAMMER's first priority is to deliver hands-on training to the Hanford workforce. During June one hundred sixty-four classes were conducted at the Volpentest HAMMER facility, for a total of 2,569 Hanford site student days. Highest attended health and safety classes included Hazardous Waste Operations, Respiratory Protection, Radiation Worker II Requalification, Basic Medic First Aid training, and Breaker Operation Electrical Safety training.

HAMMER personnel supported the presentation of two Building Emergency Director (BED) Initial Training classes (course #02028B) and two Hanford Incident Command System (ICS) Initial Training classes (course #038100) which were presented to Bechtel Hanford, Incorporated (BHI) employees on June 18-19, 2001. In addition, the revised Drill Coordinator Training (course #02028R) was piloted on June 27-28, 2001 and 143 web-based refresher-training courses were completed.

The Hanford Fire Department sponsored a four-day HAZMAT Chemistry class at HAMMER. By including Site training coordinators in the plans, the class was filled with other Site workers needing the training.

Official cold testing of the Pit Viper was successfully completed at the HAMMER facility. Pit Viper end effectors will perform work in Hanford valve pits where, previously, radiation exposure levels only allowed workers to perform tasks for short periods. The Pit Viper will also allow CH2M Hill Hanford Group (CHG) employees to work remotely in pits where high levels of radiation make it impossible for people to enter.

HAMMER held University of Washington Occupational Safety and Health Association (UofW/OSHA) Ed Center and OSHA Training Institute courses at the HAMMER facility. Both programs allow Hanford workers to gain knowledge from national subject matter experts.

At the request of the Federal Emergency Management Administration (FEMA) and Washington State Emergency Management Division, HAMMER facilitated increased tribal participation in the June 14-15, 2001 Washington State Emergency Planning Commission meeting. The meeting was part of an ongoing effort to secure more training for HAMMER tribal partners and better prepare them for emergencies that may occur on their reservations. It also links the tribes into a larger set of FEMA-funded training Opportunities. The courses will be held at the HAMMER facility and would be available to the Hanford Site workers.

Strategic partnering opportunities involving development of virtual training components to enhance HAMMER's training capabilities have been initiated with Lockheed Martin - Information Services. This type of partnering opportunity is consistent with Lockheed's strategic plan to expand their involvement in virtual training technologies for non-military applications. Candidate target areas included virtual training to support the Hanford Cleanup Mission, as well as emergency response, firefighting and law enforcement training.

## SAFETY / ISMS STATUS / CONDUCT OF OPERATIONS

Nothing to report at this time.

## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Nothing to report at this time.

## UPCOMING ACTIVITIES

HAMMER Steering Committee meeting, HAMMER, September 2001

## MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	0	0	0	0	0	0	0	0
DOE-HQ	0	0	0	0	0	0	0	0
RL	2	1	0	2	0	4	0	9
<b>Total Project</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>9</b>

Only TPAJEA 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 2002 TPA/EA Milestones		
Number	Milestone Title	Status
	Nothing to report at this time.	
NESA 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>
-------------------	--------------	------------------------	--------------------------	--------------------------

### Overdue - 2

**HMR-01-004 RL** Update Integrated Outreach Plan 6/29/01 N/A  
Cause: Agreement between FH and DOE-RL to retain HAMMER work scope in the contract allowed development of new Performance Measurements and deletion of this milestone.

**Impact:** None.

**Corrective Action:** Baseline Change Request (#HMR-01-008) Is in process to delete this milestone from the schedule baseline.

**HMR-01-005 RL** Update the HAMMER Business Plan 6/29/01 N/A  
Cause: Agreement between FH and DOE-RL to retain HAMMER work scope in the contract allowed development of new Performance Measurements and deletion of this milestone.



**Impact:** None.

**Corrective Action:** Baseline Change Request (#HMR-01-008) is in process to delete this milestone from the schedule baseline.

## Forecast Late - 0

FY 2002 (1) Party Agreement / EA Milestones		
Number	Milestone Title	Status
	Nothing to report at this time.	
DNESB Commitments		
	Nothing to report at this time.	

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

Green

		FYTD								
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
PBS HM01	Hammer	\$ 4,498	\$ 4,341	\$ 3,935	\$(157)	-3%	\$406	9%	\$ 6,360	\$ 6,315
WBS 1.9.1										
	Total	\$ 4,498	\$ 4,341	\$ 3,935	\$(157)	-3%	\$406	9%	\$ 6,360	\$ 6,315

Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) - Project Execution Module (PEM).

## FY TO DATE SCHEDULE / COST PERFORMANCE

The \$0.2 million (3 percent) unfavorable schedule variance is insignificant.

The \$0.4 million (9 percent) favorable cost variance is within established thresholds.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

### Schedule Variance Analysis: (-\$0.2M)

#### HAMMER - 1.9.1.1/HM01

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

**Impab:** None.

**Corrective Action:** None.

### Cost Variance Analysis: (+\$0.4M)

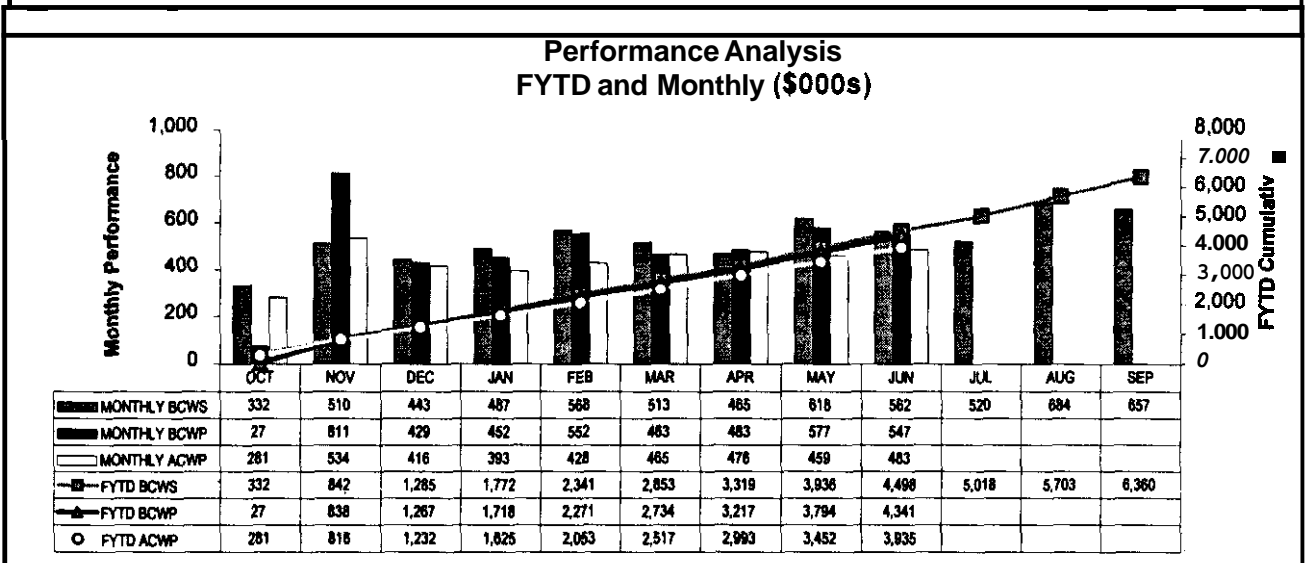
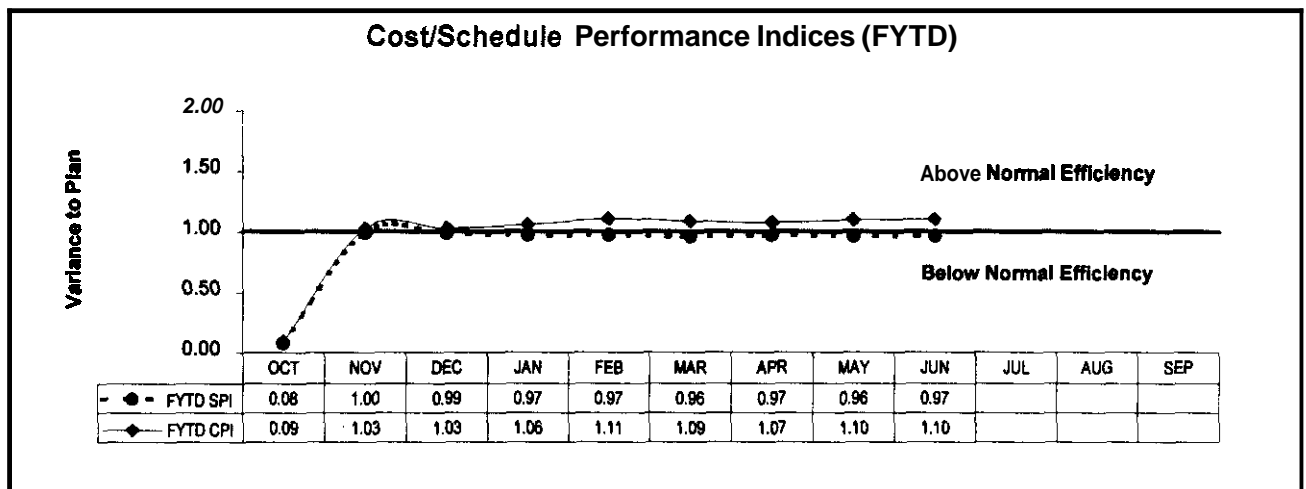
#### HAMMER - 1.9.1.1/HM01

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

**Impab:** None.

**Corrective Action:** None.

## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)



## FUNDS MANAGEMENT FUNDS VS SPENDING FORECAST (\$000) FY 2001 TO DATE

		Funds	FYSF	Variance
19 HAMMER				
HM01				
Post 2006	- Operating	\$ 6,284	\$ 6,041	243
Total		\$ 6,284	\$ 6,041	\$ 243

[status through June 2001]

## ISSUES

## Technical, Regulatory, External, and DOE Issues and DOE Requests

Issue: Nothing to report at this time.

Impacts: None.

Corrective Action: None at this time.

## BASELINE CHANCE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY01 COST IMPACT \$000	SCH	TECH	DATE TO CCB	CCB APR'VD	RL	APR'VD	CURRENT STATUS
HMR-01-006	5/1/01	FH FY 2001 Fee Re-Allocation	4	NA	NA	6/11/01	6/12/01	NA		Approved FH
HMR-01-007	6/25/01	Breakroom Remodel	45	X	NA	NA	NA	NA		Approved Project
HMR-01-008	6/27/01	Revise Schedule Baseline	0	X	NA	7/9/01				In Process
Advance Work Authorizations										
		Nothing to report.								

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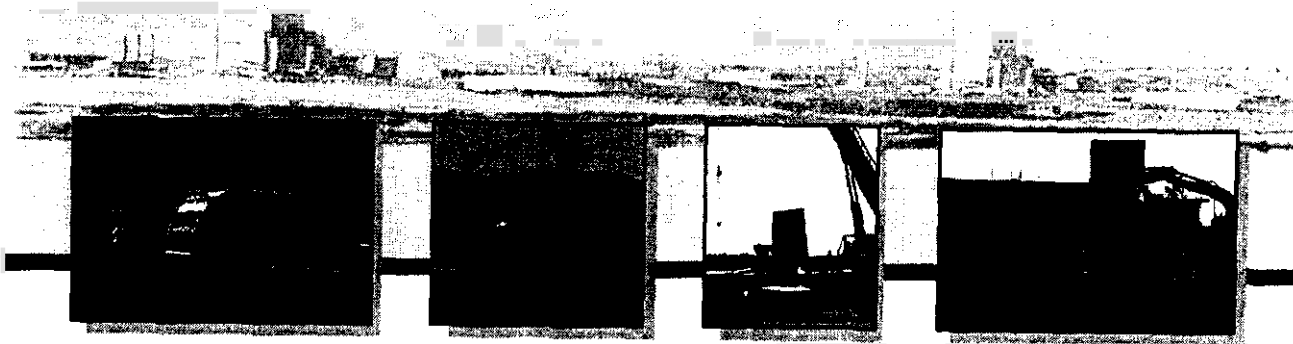


# **Multiple Outcomes**

**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.**

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# **Section H**

## ***Landlord***

### **PROJECT MANAGERS**

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## SUMMARY

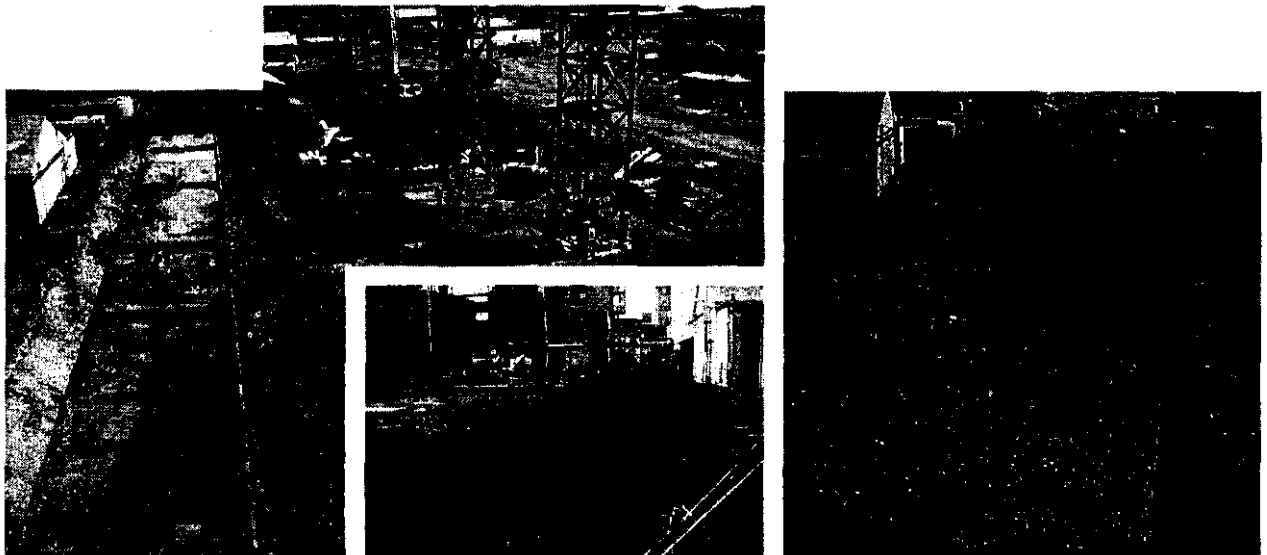
The Landlord mission area consists of the Landlord Project, WBS 1.5.1, Project Baseline Summary (PBS) RL-TP13.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of June 30, 2001. All other information is as of July 18, 2001.

Fiscal-year-to-date milestone performance (EA, DOE-HQ and RL) shows that four milestones (100 percent) were completed on or ahead of schedule.

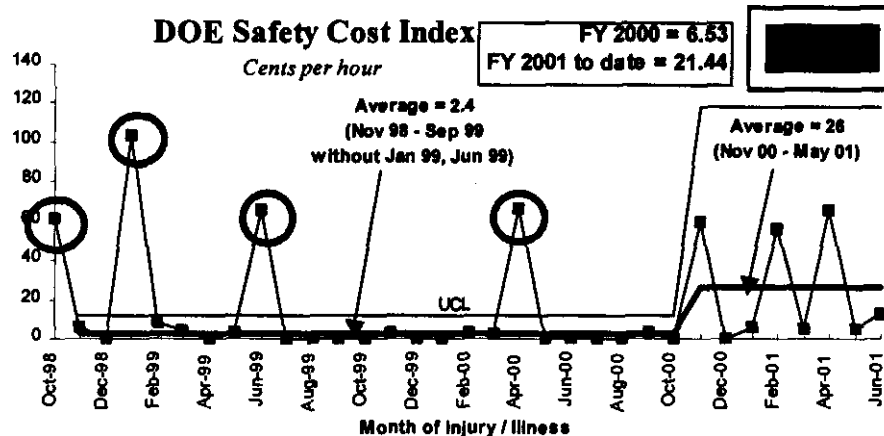
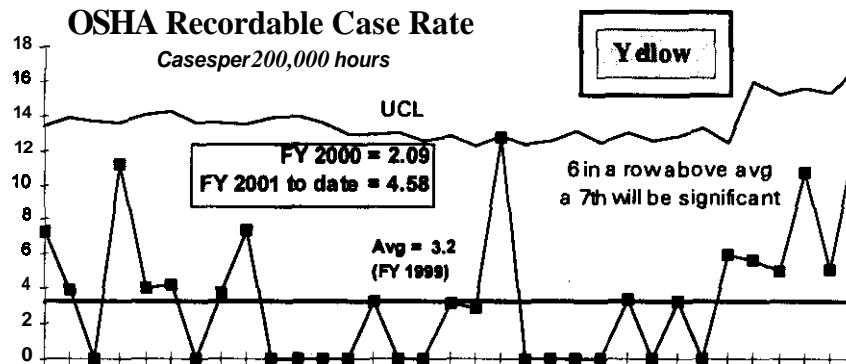
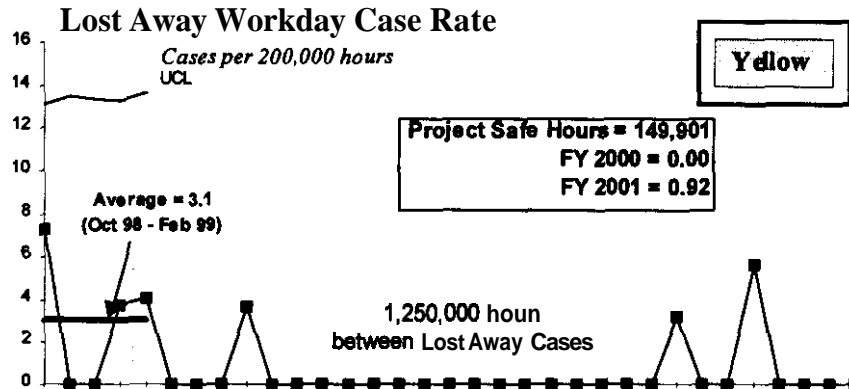
## NOTABLE ACCOMPLISHMENTS

The 300 Area Powerhouse Bunker Tank Removal project provides for the removal of the 300 Area powerhouse concrete bunker tank. This 450,000 gallon tank is 54 years old and until 1998, was used to **store** diesel fuel for the powerhouse supplying steam to the entire 300 Area. Over its life span, the tank had leaked and consequently, removal was required by the Washington State Department of Ecology (WSDOE) to eliminate a source of fuel contamination to the 300 Area. The removal of the concrete bunker tank was completed on July 17, 2001 (RL Milestone LLP-01-505). The only remaining demolition work is the disposition of a radiologically contaminated piece of **concrete** (10' wide and 25' long) that was encountered during the breakup of the northeast concrete tank wall. A piece of the contaminated concrete is being sampled and characterized for burial in the 200 West Area low level burial ground. This work is planned to complete by August 17, 2001. The WSDOE has also required that the fuel contaminated soil be removed to a depth of at least fifteen feet below grade and staged by the end of this fiscal year for future remediation.



## SAFETY

Landlord exceeded one and a quarter million project safe hours between July 1999 and October 2000. In February 2001 a case became Lost Away status, which caused a significant spike on the DOE Safety Cost Index and reset the safe hours clock. As of February 2001, the Fire Department was transferred out of DynCorp. The Fire Department history is being left in the pre-February 2001 data.



## 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.

- As previously reported, DynCorp was awarded Voluntary Protection Program (VPP) STAR status by DOE on January 30, 2001. The VPP application was submitted to DOE and the evaluation was conducted November 14 through November 16, 2000.

## CONDUCT OF OPERATIONS

Nothing to report at this time.

## BREAKTHROUGHS/ OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

Green

There is currently nothing to report.

### Opportunities for Improvement

Green

A clear understanding of the requirements of the aging infrastructure needs to be addressed. The Landlord Master Plan provides a basis for the needs of the Hanford site infrastructure and addresses this issue. Information from the Landlord Master Plan will be incorporated into the lifecycle baseline update.

## UPCOMING ACTIVITIES

- Complete Construction of Project L-310, "Distribution Water Line," by August 31, 2001 (RL Milestone LLP-01-510).
- Complete Project L-298, "Road Resurfacing," by September 28, 2001 (RL Milestone LLP-01-540). There was an error in last months report showing completion of the milestone by August 31, 2001.

## 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	4	0	0	0	1	6	1	12
<b>Total Project</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>12</b>

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 TPA/EA Milestones		
Number	Milestone Title	Status
	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 - 1

LLP-01-505/1.5.1.3	RL	Complete Bunker Tank Disposition	7/6/01	8/17/01
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FY 2002 TPA/EA Milestones		
Number	Milestone Title	Status
	Nothing to report at this time.	
DNFSB Commitments		
	Nothing to report at this time.	

## 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
Restore the River Corridor for Multiple Uses & Transition the Central Plateau	Project L-276, "Emergency Services Equipment Bay Renovation," GPP to renovate and expand the 200 Area Fire Station Equipment Bay Facility (609A).	FFS awarded the fixed price construction contract on May 18, 2001. The fixed price construction low bid was approximately \$460,000 above the current budget, therefore, the additional vehicle bay and medical aid mom construction award will be deferred to FY 2002. This delay does not impact construction completion by June 14, 2002 (RL Milestone LLP-01-515) assuming funding for the additional bay is available in December 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 connection issues with the 200 West Area potable water system.	The Definitive Design (DD) was approved on April 12, 2001, eight days ahead of the scheduled date of April 20, 2001 (RL Milestone LLP-01-530). FFS has issued the construction bid package and plans to award the construction contract by July 27, 2001.
	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 connection issues.	Construction completed on June 25, 2001, four days ahead of the accelerated completion date of June 29, 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.	The project completed construction on June 21, 2001, one week ahead of the accelerated schedule date of June 29, 2001 (RL Milestone UP-01-560).
	Project L-270, Emergency Services Renovation," complete renovation of the 200 Area Fire Station.	All project exceptions completed on July 5, 2001, one day ahead of schedule (Milestone LLC-01-310).
	Shutdown approximately 20 vacant office facilities and deactivate 20 vacant facilities.	Approximately 75 vacant facilities are in the Surveillance and Maintenance (S&M) status, nine have been shutdown, and 20 have been deactivated.
	Capital Equipment replacement purchases of a Fire Engine Pumper Truck, Electrical Utilities Truck, and a 33-Ton Crane.	Electrical Utilities Truck procurement (FY 2000 funded) was placed With the vendor on August 11, 2000 and delivered On June 11, 2001. Vendor order was placed on November 15 on the Fire Engine Pumper Truck for delivery in August 2001. The 33-Ton Crane was ordered on May 15 with an expected delivery in late July 2001. The FY 2001 Electrical Utilities truck procurement has been deferred due to funding reductions.

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



		F M D								
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
PBS TP13	Landlord	\$ 16,051	\$ 14,720	\$ 13,964	\$ (1,331)	-8%	\$ 755	5%	\$ 23,202	\$ 23,499
WBS 1.5.1										
	Total	\$ 16,051	\$ 14,720	\$ 13,964	\$ (1,331)	-8%	\$ 755	5%	\$ 23,202	\$ 23,499

Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) - Project Execution Module (PEM).

The Landlord Project is currently base-lined at **\$25.7M** and includes BCWS for FY **2001** and FY **2002**. Funding **actually** received totals **\$23.5M**; of which **\$21.4M** will be **costed** this FY and **\$2.1M** next FY. This EAC assumes deferring work scope for **L-339**, PFP, water system isolation, replacement of electrical utilities truck, and installation of additional vehicle **bays** for the fire department in order to cover the **\$1.6M** shortfall.

### FY TO DATE SCHEDULE / COST PERFORMANCE

The **\$1.3M** (8 percent) unfavorable schedule variance is mainly attributed to the contract to BHI for disposition of the Fuel Bunkers being delayed due to Ecology's review of the Removal Plan taking longer than **expected**. Further information at the PBS level can be found in the following Schedule Variance Analysis details.

The **\$0.8M** (5 percent) favorable cost variance is within reporting thresholds.

For all active sub-PBSs and TTPs associated with the Operations/Field **Office**, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding **+ / - 10** percent or one million dollars require submission of narratives to explain the variance.

### Schedule Variance Analysis: (-\$1.3M)

#### Landlord - 1.5.1/TP13

**Description and Cause:** The unfavorable **schedule** variance is mainly attributed to the contract to **BHI** for disposition of the Fuel Bunkers being delayed due to Ecology's review of the Removal Plan taking longer than **expected**. Oil between the liner and the tank and radioactive contamination in the soil was not anticipated. Also, activities funded for the BAER in the Fire Recovery account have not begun pending direction from RL.

**Impact** None.

**Corrective Action:** None.

### Cost Variance Analysis: (+\$0.8M)

#### Landlord - 1.5.1/TP-13

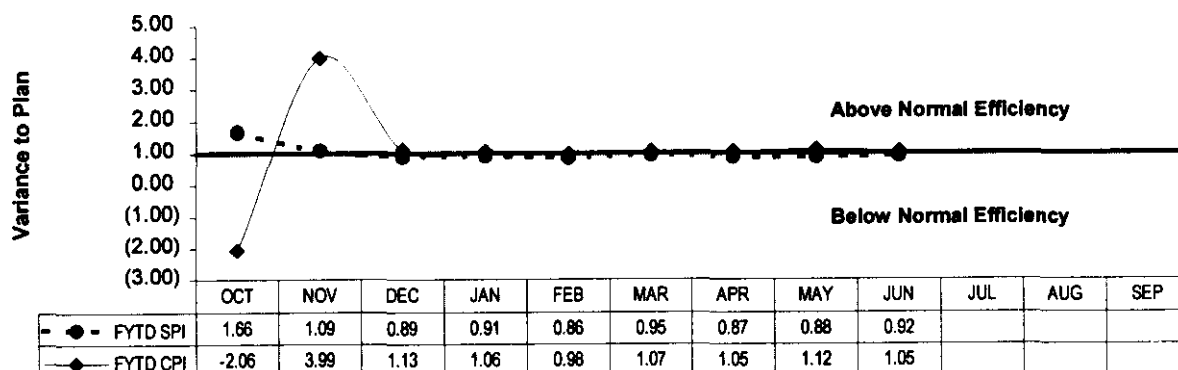
**Description and Cause:** The favorable **cost** variance is within reporting thresholds.

**Impab:** None.

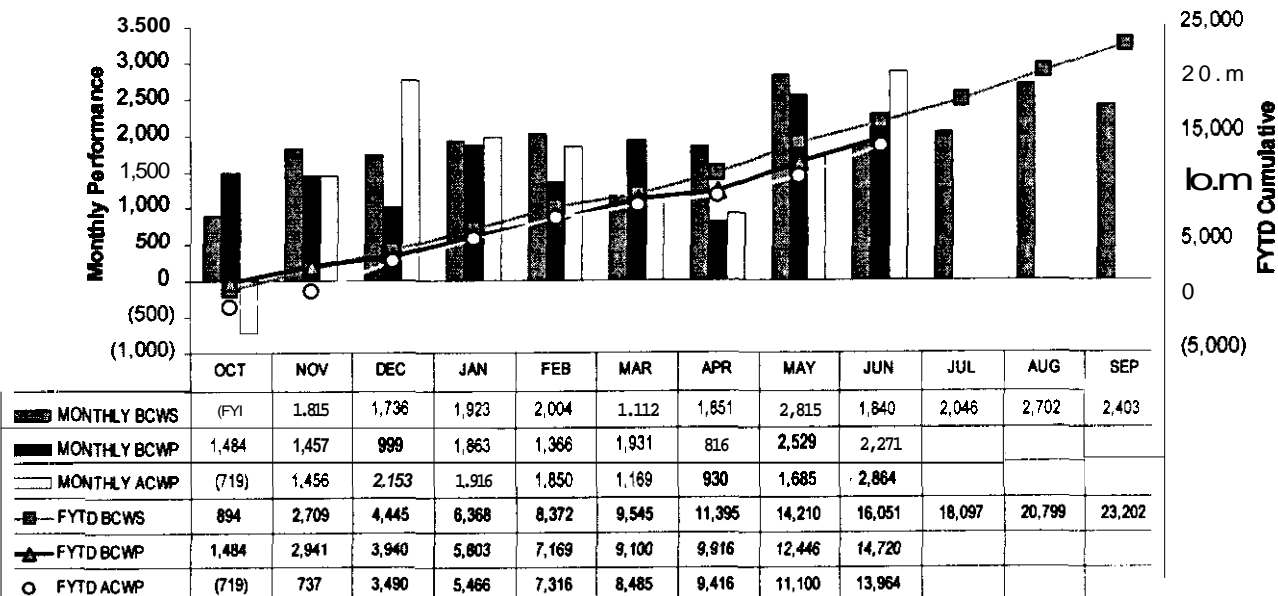
**Corrective Action:** None.

## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)

CosffSchedule Performance Indices (FYTD)



### Performance Analysis FYTD and Monthly (\$000s)



## FUNDS MANAGEMENT

### FUNDS VS SPENDING FORECAST (\$000)

### FY 2001 TO DATE

		Funds	FYSF	Variance
1.5 Landlord				
TP13				
Post 2006	- Operating	\$ 22,437	\$ 20,965	\$ 1,472
Total		\$ 22,437	\$ 20,965	\$ 1,472

*[Status through July 2001]*

## ISSUES

### Technical, Regulatory, External, and DOE Issues and DOE Requests

**Issue:** None at this time.

**Impacts:** None at this time.

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

## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

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
LPM-2001-007	4/26/01	Added Scope for Waste Sites	\$71				6/20/01		Approved.
ADVANCE WORK AUTHORIZATIONS									
		Nothing to report at this time.							

## 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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	L.R. Hafer, FH	(509)375-2655
<b><i>SSE</i></b>	W.W. Ballard, RL	(509)376-6657
	M.L. Grygiel, FH	(509)372-2983
<b><i>ECP</i></b>	S.H. Wisness, RL	(509)373-9337
	J.W. Hales, FH	(509)376-4069
<b><i>PSRP</i></b>	S.H. Wisness, RL	(509)373-9337
	R.L. Dirkes, PNNL	(509)376-8177

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## SUMMARY

Mission Support, Project Baseline Summary (PBS) OT01, consists of four sub-projects:

- Budgeting & Planning Analysis (WBS 1.8.2.1)
- Systems Engineering & Integration (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 May 31, 2001. All other information is as of June 21, 2001 unless otherwise noted.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that twenty-seven milestones (96 percent) were completed on or ahead of schedule and 1 milestone (4 percent) was completed late.

## NOTABLE ACCOMPLISHMENTS

### BUDGET & PERFORMANCE ANALYSIS (B&PA)

**Support to the Integrated Lifecycle Baseline Update Deliverable** – Budgeting and Performance Analysis (B&PA) coordinated the development of cost exhibits for the June 29, 2001 submittal. The cost exhibits reflected the correlation of current FH work scope to that in the new FH contract baseline for FY 2001-2006. In addition, the updated cost baseline reflected approved change requests processed during FY 2001 and directed RL changes (change actions will be processed). These cost exhibits were provided by Project Baseline Summary (PBS), and FH Contract Work Breakdown Structure (WBS). B&PA also provided key support to the revision/update of the Project Master Schedules that were included as part of the deliverable.

**Support to Pricing Validation for FY2003** – Preliminary work has been initiated to support the pricing validation of the FY 2003 Budget Submittal. Rates and summary cost baseline documentation have been provided to show traceability in the planning and budget process. Several projects will be selected for this year's validation, and will be asked to provide resource-loaded schedules supporting the November 15, 2000 baseline submittal. These schedules will be reviewed in parallel with the RL-approved FH planning rates. The baselines that were provided in the November deliverable will then be audited to the FH contract, and to the FY 2003 Budget Submittal.

**System Modifications** – Work is underway to modify the Integrated Planning and Reporting System (IPARS), Hanford Data Integrator (HANDI), and the Performance (PERF) modules to support FH's revised contract data collection and reporting requirements. A Forecast module was developed and will be deployed in July to provide an electronic source for the development of fiscal year spending forecasts (FYSF) and estimates at completion (EAC).

In a coordinated effort with FH Finance and Lockheed Martin Services, Inc., BWA supported the modification of the Indirect Planning System (IPS) for loading budget resources for routine (level-of-effort) work by direct projects. This resource loading approach in IPS is more efficient than resource loading routine activities through Primavera. Training on the system was also initiated.

**Control Module Development** – A new WBS control table is being developed as part of the HANDI-PERF-IPARS Control Module. The table will become the controlling source for WBS data in all applications and will allow the implementation of the new Contract WBS as well as provide a crosswalk to the RL WBS. The WBS control table will be deployed in July.

**Funds Management** – B&PA continued to obtain FYSF and EAC data from the projects on a monthly basis to analyze projected PHMC spending in comparison to available funds. Meetings were held with the major project areas to review forecasts and identify potential issues. Presentation formats for exhibiting funds management status have been initiated for the Resource Management Board in support of its decision-making efforts to maximize clean-up work while controlling spending within available funds.

**Performance Management Meetings (PMMs)** – In June, three PMMs were held. Two “FH Projects” PMMs were held – the first on June 6, 2001 (including April cost and schedule status), and the second on June 28, 2001 (addressing May cost and schedule status). And, on June 13, 2001, the quarterly “PHMC Services and Support/ Comprehensive Performance Incentives (PIs)” PMM was held. At that meeting, a quarterly review of the Hanford Site Operations organization was presented, as well as a to-date summary of FHs Comprehensive PIs’ progress/status. The next PMMs scheduled are the “FH Projects” PMM, to be held on August 2, 2001, and “The Future” PMM, to be held on August 8, 2001.

**FH Internal Project Reviews** – B&PA continued to support the FH Project Reviews. These coordination efforts are intended to save the Projects’ time and not exercise them unnecessarily in their reporting preparations. Additionally, a template file with page-by-page guidance was prepared and distributed to each of the Projects’ directors and their POCs to ensure compliance to the format as completely as possible.

**Performance Execution and Reporting Module (PERM) Status** – The Performance Execution Module (PEM) FY 2001 May Status Report was delivered on June 21, 2001 as scheduled through the electronic batch feed to the DOE-HQ IPABS-PEM. Performance data is collected monthly from all RL contractors and transmitted via PERM to DOE-HQ.

**Environmental Management Performance Report (EMPR) Submittal** – FH delivered the monthly report that included April 2001 cost/schedule data on June 5, 2001. Distribution to all other addressees was made on June 12, 2001 (two days ahead of schedule), in bound copy.

**Business Management Oversight Process (BMOP) Status** – RL issued revised FY 2001 BMOP criteria on June 12, 2001. Per these criteria, FH must include a description of how key in-process requirements are being met, including “...compliance with applicable requirements and key Internal control...” B&PA met with the Office of Independent Assessment and determined that each BMOP functional area will be required to submit all management and/or self-assessments as directed by the RL contracting officer. To follow up on this action, each BMOP functional area has been notified that it must provide copies of its management/self-assessment(s) to B&PA, which will deliver them to RL by October 31, 2001, in conjunction with the final FH BMOP self-assessment.

## SYSTEMS ENGINEERING AND INTEGRATION (SEI)

SE&I worked with the FH Projects to provide the required deliverables from the W E Implementation Plan for DNFSB Recommendation 2000-2, *Configuration Management of Vital Safety Systems*. SE&I also coordinated the update of the technical baseline data for the June 30, 2001 Integrated Baseline Planning deliverable. This update included the work necessary to ensure that the requirements from the new FH contract were properly allocated to the technical baseline functions and then to the FH WBS dictionaries.

SE&I developed an electronic version of the June 30, 2001 deliverable with “hot links” between the technical, schedule, and cost sections. A demonstration was provided for the FH Project and some of the

RL staff. SE&I is also providing support to the August 15, 2001 Integrated Planning, Accounting, and Budgeting System (IPABS) data feed for RL. Support continued to be provided to the Requirements Initiatives Integration Team.

## ENVIRONMENTAL COMPLIANCE PROGRAM (ECP)

A FH chemical segregation and storage procedure that is patterned after the system used at PFP has been drafted and is being reviewed internally.

A National Environmental Policy Act (NEPA) Finding of No Significant Impact (FONSI) for the *Environmental Assessment K Basins Sludge Storage at 221-T Building, Hanford Site, Richland, Washington*, DOE-EA-1369 was signed by Keith Klein on June 20, 2001.

On June 15, 2001, FH was provided with a copy of a May 2001 letter from the Confederated Tribes of the Umatilla Indian Reservation to the Pollution Control Hearings Board raising questions about Ecology's air permitting approval for the PFP thermal stabilization of polycubes. Ecology requested information from RL and FH in order to prepare for a preliminary hearing by the board on June 22, 2001. The information was provided on June 20, 2001. The same day Ecology met with RL, FH E&R, and PFP staff and a representative of the tribes to discuss the questions and Hanford information.

Regulatory analysis white papers on new source review applicability were developed for the River Corridor Project (RCP) and PFP during this period. Several permit/compliance strategy meetings were held for PFP and Waste Management Project (WMP) facilities, offering interpretive authority support/consultation for proposed facility/project activities.

A strategy was developed regarding the RCRA Part B permit application Notice of Deficiency process for the T Plant Complex and the Mixed Waste Disposal Units.

The WMP was provided assistance on the public release of Dangerous Waste Training Plans prepared to meet WAC 173-303 regulatory requirements and the management of mixed waste in the T Plant Complex canyon. RCP was assisted on how to address the receipt of low-level waste containers that have failed verification.

The FH and RL legal staffs were provided support regarding the appeal of the Revision 7 of the HF RCRA Permit, and the Corrective Measures report for the Collodion Notice of Compliance.

**Site-Wide Compliance and Issue Resolution** - Fluor Hanford (FH) issued a letter of direction from RL requesting information and assistance in responding to a WDOH Notice of Correction to the Office of River Protection (ORP). The letter also included the requirement for a site-wide evaluation of monitoring, tracking, and trending of all radioactive air emission-points on the Hanford Site. The System Configuration Management Plan (SCMP) process was initiated by E&R on June 20, 2001.

FH was notified by Ecology on June 21, 2001 that the planned public review period for Modification F of the Hanford RCRA Permit would be July 25 through September 10, 2001. The primary focus of this modification is incorporation of 222-S Laboratory Complex into the Permit.

The Categorical State Waste Discharge Permit for Hydrotest, Maintenance, and Construction Discharges to Ground (Permit ST 4508) permit expires May 5, 2002. The permit renewal application is due to DOE-RL for review September 2, 2001. Work is underway with RL, ORP, and contractors on this renewal effort, with gathering discharge data and facility feedback. By FH contract as well as WAC 173-216, it is necessary to submit a complete draft renewal application to RL by September.

Work to complete the Air Operating Permit (AOP) implementation plan is continuing. Efforts are also underway to prepare a permit modification package to address a number of minor issues with the final permit.

The following regulator facility inspections and follow-up to information and/or action requests were coordinated:

- On June 6, Washington State Department of Health (WDOH) inspected the Main stack at the 327 Facility (EP-327-01-S) and the Main stack at the 324 facility (EP-324-01-S).
- On the morning of June 6, 2001, WDOH performed an EPA Level II inspection of the 327 Facility, focusing on building exhaust controls and EP-327-01-S stack sampling. During the afternoon, WDOH inspectors performed an EPA Level II inspection of the 324 Facility, focusing on building exhaust controls and EP-324-01-S stack sampling.
- On June 27, 2001 the Washington State Department of Ecology (Ecology) performed a follow-up inspection and closeout for the Inactive Miscellaneous Underground Storage Tank Inspection and cited 5 Concerns.
- On June 14, a RCRA Permit inspection of the 100 Areas was performed per Permit Condition 11.0. Two potential lead-containing materials were identified and proper disposition is underway.

**Monitoring and Reporting** - The Hanford Site Toxic Chemical Release Inventory (TRI) Reporting Compliance Validation Report for Reporting Year 2000 (Milestone Control Number ECP-01-502) was transmitted to RL on June 15, 2001, seven days ahead of the milestone completion date. This report was prepared to document activities leading to the determination that TRI reporting is not required for reporting year 2000 because Hanford Site toxic chemical use did not exceed triggering threshold levels.

The 2000 Annual Polychlorinated Biphenyl (PCB) Document Log (Milestone Control Number ECP-01-504) was completed and transmitted to RL on June 14, 2001, eight days before the scheduled milestone completion date of June 22, 2001.

ECP delivered the Calendar Year 2000 Hanford Site Mixed Waste Land Disposal Restrictions Report on June 15, 2001, for final concurrence review and approval. The delivery of the report was on time, based on the prior schedule agreements with. The document was due for submittal to Ecology on or before June 30, 2001, in accordance with TPA Milestone 26-01K, as amended by agreement. The agreement was to extend the regular due date from April 30 to June 30, 2001, as a result of the extended negotiations surrounding the content of the Land Disposal Restrictions (LDR) report. The negotiations had delayed the start of information gathering for the report. Delivery of the final annual LDR report to the U.S. Environmental Protection Agency (EPA) and Ecology was accomplished on June 28, 2001, two days ahead of schedule. The report, "Calendar Year 2000 Hanford Site Mixed Waste Land Disposal Restrictions Report" (DOE/RL-2001-20), fulfills TPA Milestone M-26-01K.

On June 15, 2001, the *Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2000*, DOE/RL-2001-32 (Milestone Control Number ECP-01-803) was submitted by FH on schedule. This document satisfies requirements in 40 CFR 61, Subpart H and in WAC 246-247 to report the highest dose to a member of the public, referred to as the maximally exposed individual (MEI). For CY2000, members of public employed with private companies located on the Hanford Site and not affiliated with DOE or its contractors were considered when determining the MEI. The result of this broadened MEI definition was the selection of an employee at the Washington State University laboratory in the 300 Area to be the new MEI. The dose to that person, from all stack emissions on the Hanford Site in CY2000, was calculated to be 0.046 mrem effective dose equivalent (EDE). The dose in 2000 to the former MEI, a person who resided offsite on Sagemoor Road in Franklin County, was 0.022 mrem EDE, as compared to the CY1999 dose to that same person of 0.29 mrem EDE.

Milestone ECP-01-410, Portable/Temporary Radioactive Air Emissions Units and High-Efficiency Particulate Air Filtered Vacuum Radioactive Air Emission Units Annual Report for 2000, was submitted to RL on June 14, 2001.

Milestone ECP-01413, Portable/Temporary Radioactive Air Emission Units NOC Performance Assessment was submitted to RL on June 20, 2001 (nine days ahead of schedule).

E&R has initiated work on preparing the annual environmental permitting status report (DOE/RL-96-63, Revision 5). This report is updated annually and provides a summary description for the current environmental permits.

For the month of June 2001 there were five (5) 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 and four (4) reportable code non-compliance events were reported directly to the regulators by the FH Environmental Single-Point-of-Contact (SPOC) through the Occurrence Notification Center (ONC) recorded phone line.

**Continuous Improvement-** The Environmental Compliance Workshop Series are continuing to provide current information and discussion on compliance topics. The June topic was the RCRA Permit and approximately 40 prime contractor staff attended it.

A new report was developed for Environmental Action Tracking System (EATS) per RL-RCA request for information. The new report also includes a custom filter generator to filter on contractor, dates, etc.

A FH Emergency Preparedness (EP) management assessment of the "Environmental Notification Process" has been completed and finalized.

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

The MCS has subscribed to real-time lightning strike data through the National Lightning Detection Network. This service provides real-time lightning strike location, time of strike and strength data. It also provides the capability for looking at and plotting historical lightning strike data, color-coded by time. The MCS project also began entering Hanford Meteorology Station (HMS) data via the Internet into the Weather Information Management System for the calculation of fire danger rating indices.

TM Poston, Project manager, was recognized as one of three winners of the Pacific Northwest National Laboratory, Fitzner-Eberhardt Laboratory Director's award for outstanding contributions in science and engineering education in CY2000. Part of the basis for this award was the effort put forth to communicate the SESP's efforts to inform the public and students about the environment around Hanford and how Hanford Site operations have affected the environment. To this end, the Environmental Surveillance Forum, the success of which Mr. Poston was instrumental in, was conducted on March 8, 2000, in Richland, Washington.

A manuscript describing the field trials with Empore® Disks and their usefulness in routine water monitoring programs across the DOE complex was recently published. This culminates a multiple year collaborative effort with Savannah River to evaluate the relatively new water sampling technology. One SESP staff member (GW Patton) was a co-author on this paper:

Beals, D. M., K. J. Hofstetter, V. G. Johnson, G. W. Patton, and D. C. Seely. 2000. Development of Field Portable Sampling and Analysis Systems, 1. Radioanalytical and Nuclear Chemistry, **248**, 315-319.

## ISMS STATUS

Nothing to report at this time.

## CONDUCT OF OPERATIONS

Nothing to report at this time.

## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

Nothing to report at this time.

### Opportunities for Improvement

Nothing to report at this time.

## UPCOMING ACTIVITIES

- ECP-01-804, Annual Environmental Release Report is due August 31, 2001.
- The annual *Site Environmental Report for CY 2000*, which is currently in preparation, is scheduled for completion and distribution by September 30, 2001.



## MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast	Forecast On Schedule	Forecast	
Enforceable Agreement	3	0	1	0	0	1	0	4
DOE-HQ	0	0	0	0	0	0	0	0
RL	17	6	1	0	0	11	0	35
<b>Total Project</b>	<b>20</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>39</b>

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
ECP-01-901	Issue Quarterly NESHAP Status Report to RL for EPA	Due October 20, 2000 – Completed three days early.
ECP-01-902	Issue Quarterly NESHAP Status Report to RL for EPA	Due January 29, 2001 – Completed on January 3, 2001, 26 days early.
ECP-01-904	Issue Quarterly NESHAP Status Report to RL for EPA	Due April 23, 2001 – Completed on April 6, 2001, 17 days early.
ECP-01-906	Issue Quarterly NESHAP Status Report to RL for EPA	Due July 30, 2001 – On schedule.
DNESB Commitments		
Nothing to report at this time.		

## MILESTONE EXCEPTION REPORT

Overdue - 0

Forecast Late - 0

Green

FY 2002 Tri-Party Agreement / EA Milestones		
Number	Milestone Title	Status
-	Report to RL for EPA	Status
ECP-02-902	Issue Quarterly NESHAP Status Report to RL for EPA	Due January 29, 2002
ECP-02-904	Issue Quarterly NESHAP Status Report to RL for EPA	Due April 19, 2002
ECP-02-906	Issue Quarterly NESHAP Status Report to RL for EPA	Due July 30, 2002
DNESB Commitments		
Nothing to report at this time.		

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

YELLOW

		FYTD								
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
PBS OT01	Mission									
WBS 1.8.2	Support Other MYPs	\$ 17,444	\$ 16,088	\$ 18,575	\$ (1,356)	-7.6%	\$ (2,487)	-15.46%	\$ 23,785	\$ 22,763
Total		\$ 17,444	\$ 16,088	\$ 18,575	\$ (1,356)	-7.8%	\$ (2,487)	-15.46%	\$ 23,785	\$ 22,763

## **FY TO DATE SCHEDULE / COST PERFORMANCE**

The \$1.4 (8%) unfavorable schedule variance is within Site thresholds.

The \$2.5M unfavorable cost variance, which falls outside established thresholds, is mainly driven by PNNL cost erroneously processed against OT01's cost account. The costs in question were incorrectly budgeted under the wrong B&R code.

### **Schedule Variance Analysis: (-\$1.4M)**

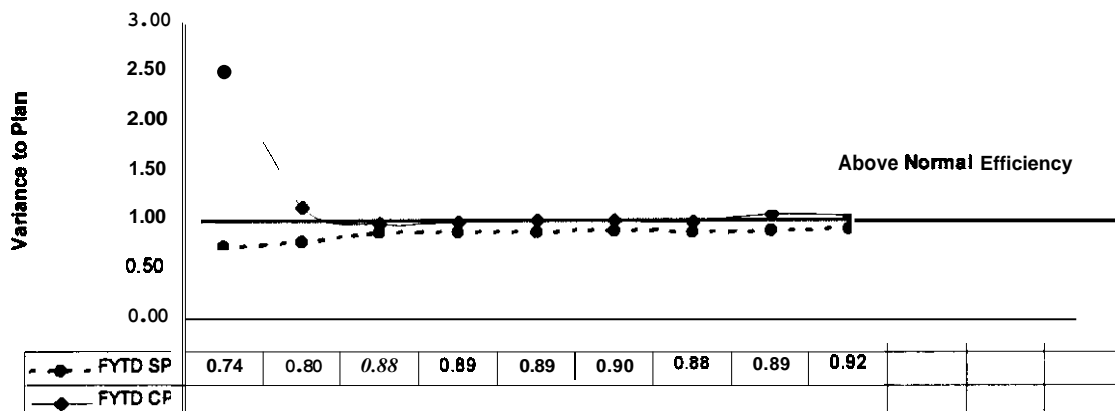
OT01's Schedule variance of 8% falls within established *Site* margins.

### **Cost Variance Analysis: (-\$2.5M)**

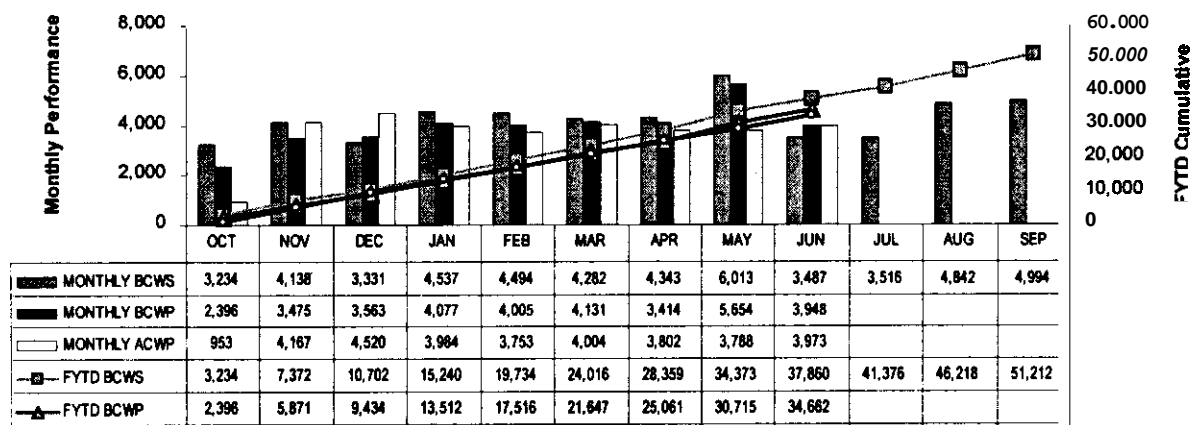
The \$2,487M (15.5 percent) unfavorable cost variance is driven by erroneously planning and accruing cost against the wrong cost account/B&R code. This condition was detected in May and efforts to correct it were undertaken. However, because budgeting protocol restrict the movement of budget between B&R codes, this condition is expected to persist for the balance of the year.

## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)

### Cost/Schedule Performance Indices (FYTD)



### Performance Analysis FYTD and Monthly (\$000s)



## FUNDS MANAGEMENT - FY 2001 TO DATE

### FUNDS VS SPENDING FORECAST (\$000)

	Funds	FYSF	Variance
<b>1.8 Mission Support</b>			
<b>OT01</b>			
Post 2006 - Operating	\$ 15,780	\$ 15,963	(183)
<b>Total</b>	\$ 15,780	\$ 15,963	? (183)

### ISSUES

#### Technical Issues

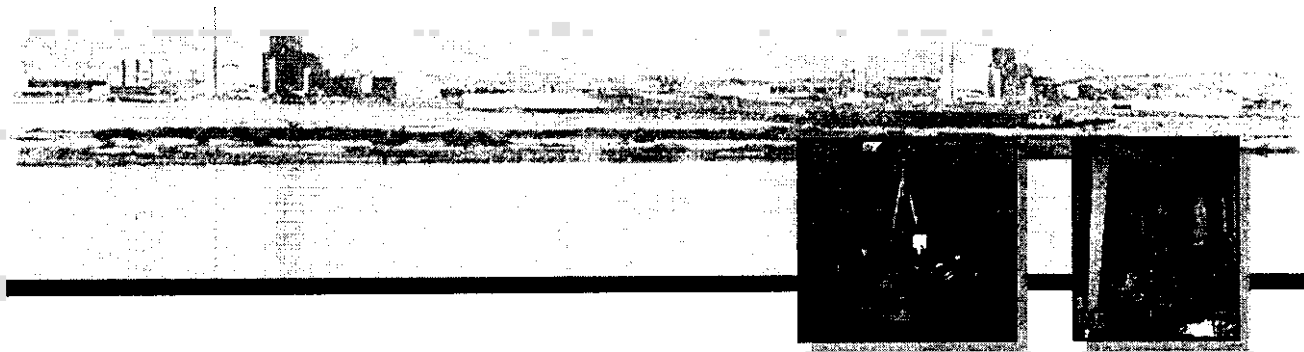
Nothing to report at this time.

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

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY01 COST IMPACT	S C H	T E C H	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
		Nothing to report							
ADVANCE WORK									
		Nothing to report							

### KEY INTEGRATION ACTIVITIES

Nothing to report.



# **Section J**

## ***National Programs***

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## 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 off-site 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.

NOTE: Unless otherwise noted, all other information is as of June 30, 2001.

## NOTABLE ACCOMPLISHMENTS

P2/WMin performed update of waste generation data. The FH routine MLLW increased by approximately 2 cubic meters, bringing the total to about 11 cubic meters. The goal is 44 cubic meters. Routine LLW and Hazardous waste did not change for FH. CHG had drastic increases in routine MLLW by about 20 cubic meters. They have been contacted to verify their designations.

P2/WMin participated in the National P2/WMin Conference in Albuquerque.

P2/WMin has been requested to put together site guidance for sustainable design criteria for RL. A meeting was scheduled with all Prime Contractors to clarify the request. The P2 EDGE program generated by PNNL over the course of many years for P2 in Design and the PNNL National Road Map to Sustainability were reviewed. It is recommended that a project to develop these criteria be established with specific scope, budget and time, in order to develop a viable set of criteria.

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

		FYTD								
	By PBS	BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
PBS OT02 WBS 1.11.1	Transportation & Packaging (RL 7601)	\$ 1,500	\$ 1,504	\$ 1,310	\$ 4	0%	\$ 194	13%	\$ 2,056	\$ 1,880
PBS WM07 WBS 1.11.2	Waste Minimization (RLHQ 7770)	\$ 2,087	\$ 2,087	\$ 1,438	\$ 0	0%	\$ 649	31%	\$ 3,474	\$ 3,082
Total		\$ 3,587	\$ 3,591	\$ 2,748	\$ 4	0%	\$ 843	23%	\$ 5,530	\$ 4,962

## FY TO DATE SCHEDULE / COST PERFORMANCE

The schedule variance is insignificant. The \$0.8 M (23 percent) favorable ~~cost~~ variance is mainly attributed to staffing shortfalls.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) ~~Cost~~ and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

### Schedule Variance Analysis: (-\$0.0M)

#### Transportation and Packaging — 1.11.1/OT02

**Description and Cause:** The schedule variance is insignificant.

**Impab.** None.

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

#### Pollution Prevention/Waste Minimization — 1.11.1/WM07

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

**Impact:** None.

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

### Cost Variance Analysis: (+\$0.8M)

#### Transportation and Packaging — 1.11.1/OT02

**Description and Cause:** The unfavorable ant variance is due to completing consolidation of computers.

**Impact:** None.

**Corrective Action:** Slow down ~~expected~~ in July timeframe.

#### Pollution Prevention/Waste Minimization — 1.11.1/WM07

**Description and Cause:** The favorable ~~cost~~ variance is due to staffing shortfalls and ROI projects behind due to plant priority work.

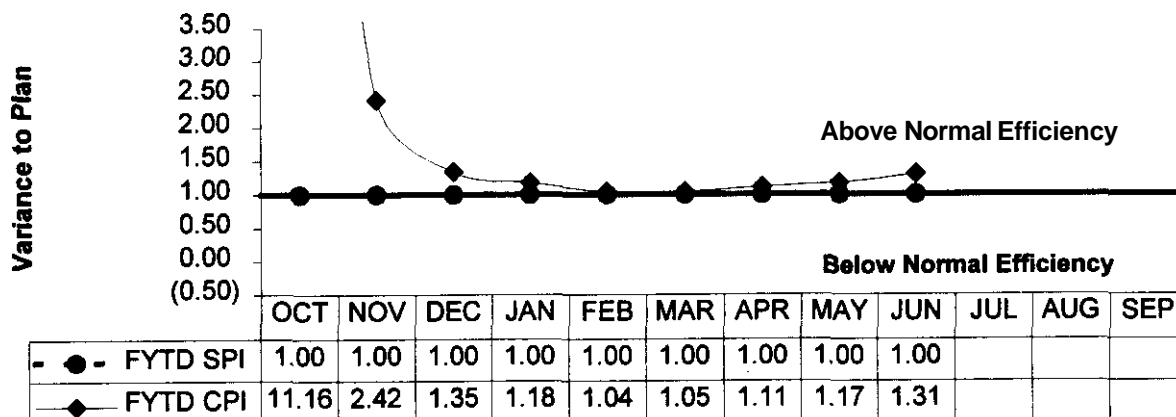
**Impact:** None.

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

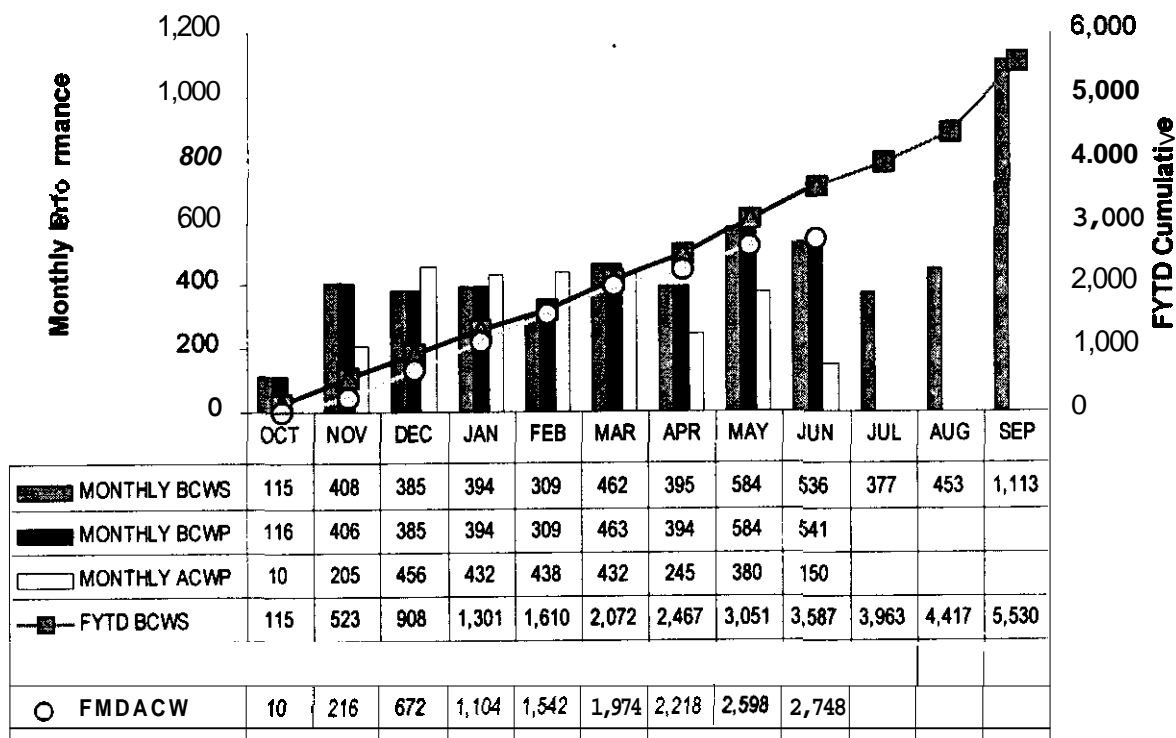


## SCHEDULE / C o n PERFORMANCE (MONTHLY AND FYTD)

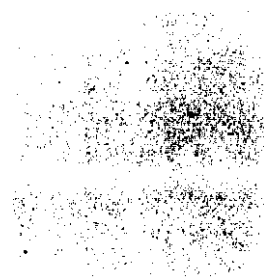
### Cost/Schedule Performance Indices (FYTD)



### Performance Analysis FYTD and Monthly (\$000s)



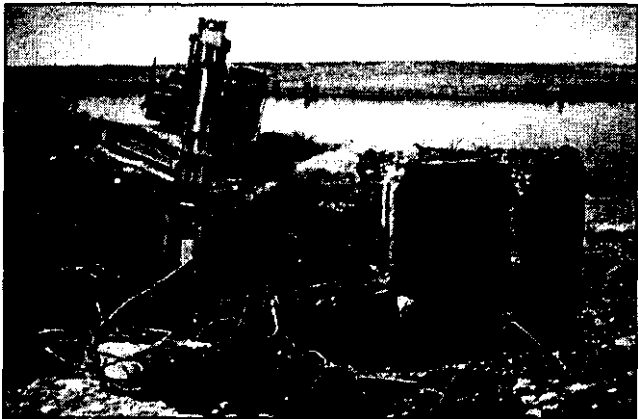
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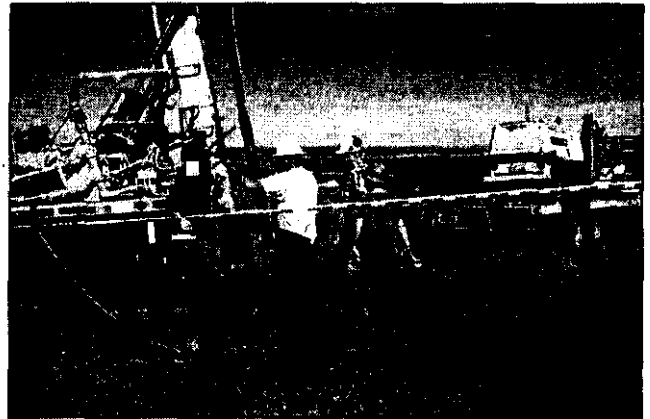
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# Environmental Management Performance Report

August 2001



Demolition and Size Reduction of Debris at the 116-N-3 Bypass Structure



Well Decommissioning



Vessel L-16 Removal at 233-S



200-ZP-2 Process Chiller Adjustment

***Focused on Progress...***  
***Focused on Outcomes!***

Financial/Performance Measures data as of month-end June.  
All other data as of July 27 (unless otherwise noted).



**Department of Energy**  
Richland Operations Office



**Bechtel Hanford, Inc.**  
Environmental Restoration Contractor

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**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
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# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 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 are current as of June 30. Accomplishments, Issues and Integration items are current as of July 27, 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 fiscal year 2001 (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 Environmental Restoration Contractor (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.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
AUGUST 2001**

# **Section A: Executive Summary**

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## **SECTION A – EXECUTIVE SUMMARY**

**Financial / Performance Measures data as of month-end June.**  
**All other data as of July 27, 2001 (unless otherwise noted).**

### **NOTABLE ACCOMPLISHMENTS:**

#### **RIVER CORRIDOR**

During June, Environmental Restoration Disposal Facility (ERDF) disposal operations began disposing contaminated waste into Cell #3. 414,092 metric tons (456,461 tons) of waste have been disposed in ERDF during fiscal year 2001 (FY01), which is about 8% ahead of the plan. To date, a total of 2,720,854 metric tons (2,999,244 tons) of material have been disposed in ERDF.

Pipeline removal continued on the concrete and steel pipelines in the 100 B/C Area. Excavation commenced for demolition of the river outfall structures. Concrete structure removal was completed at two of the three outfalls.

100 D Area subcontract closeout activities were completed on June 15. Excavation and backfill were completed in late February in the 100 D Area.

Soil sample results were received that had been taken in the 100 F Area southern ash pit. Results indicated that no further remediation is required. During FYW, the Small Diameter Geophysical Logging System technology was deployed to perform in situ characterization at the 126-F-1 ash pit remediation site. Use of this technology deployment will eliminate approximately nine months of excavation activity at the 100 F Operable Unit. 100 F Area excavation work is currently planned for completion in early FY03.

Backfill operations progressed at the 116-H-7 Retention Basin. This is the last and largest liquid waste disposal site at 100 H Area.

In the 100 N Area, excavation and loadout activities continued for the 116-N-3 Crib plumes and the 116-N-3 bypass structure. Demolition of the bypass structure is complete, except for the one section underneath the roadway.

The 618-4 Burial Ground (300 Area) barrel staging evaluation continued. Potential staging locations in the 200 and 300 Areas were identified and evaluated.

Data validation packages were received for the J.A. Jones and 600-23 waste sites on June 27. Backfill activities are planned for initiation in August, and reseeding will be completed later this fall.

A readiness assessment was conducted June 4-7 for the F Reactor Fuel Storage Basin (FSB) Phase II cleanout (bottom 1-meter [3-foot] fill/sludge removal and sample collection). Work packages were also completed for the FSB Phase II demolition. The Brokk™ excavator was mobilized in the FSB, and lower fill sampling was completed at the end of June.

Walkdowns were completed at F Reactor in support of the safe storage enclosure (SSE) design work.

Hazardous material and pipe/equipment removal activities proceeded at D and H Reactors.

During June, 233-S Plutonium Concentration Facility work activities included the completion of nondestructive assay for 67 waste packages. Knee braces were also installed in support of the upcoming L-3/L-12 vessel removal operations. Through June, five of the eight vessels planned for FY01 have been removed, on or ahead of schedule.

**Green**

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**NOTABLE ACCOMPLISHMENTS continued:**

Environmental Restoration Contractor (ERC) Safety and Health personnel participated in the 2001 Hanford Site emergency preparedness field exercise that was conducted in June.

At the 2001 U.S. Department of Energy (DOE) Pollution Prevention Conference in Albuquerque, New Mexico held on June 18-22, Bechtel Hanford, Inc. (BHI) received a national pollution prevention award for its work and implementation of the Small Diameter Geophysical Logging System. BHI also received a runner-up award for using value methodology in assessing waste minimization opportunities.

The FY02 Detailed Work Plan (DWP) kickoff meeting was held on June 27. Representatives from ERC, WVE Richland Operations Office (RL), regulators, and stakeholders were in attendance.

**CENTRAL PLATEAU**

The Groundwater/Vadose Zone (GW/VZ) Integration Project initiated biological fate and transport experiments. These experiments will help determine impacts of technetium-99 on aquatic species.

A drilling contract was awarded for the calendar year 2001 (CY01) Resource Conservation and Recovery Act (RCRA) well Installations. Eleven wells are planned for installation by December 31.

During June, well installation operations were completed for Phase II of the In Situ Redox Manipulation (ISRM) project. Barrier well injections are ongoing.

The final contract was awarded for FY01 well decommissioning operations. 90 wells are planned for decommissioning this fiscal year with 70 wells completed through June. Decommissioning of the remaining 20 wells is planned for completion by mid-August.

The sampling and analysis plan was approved by the regulators for the 618-11 Burial Ground tritium investigation. Sampling and well drilling activities are planned for initiation in early August.

All groundwater pump and treat systems operated above the planned 90% availability levels in June. Since system inception, the five pump and treat systems have processed over 5 billion liters of groundwater, removing approximately 5,549 kilograms of carbon tetrachloride, 248 kilograms of chromium, and 1.04 curies of strontium. Approximately 870 million liters of groundwater have been processed in FY01, removing approximately 967 Wlograms of carbon tetrachloride, 55 kilograms of chromium, and 0.151 curies of strontium.

The 200-ZP-2 soil vapor extraction system was successfully restarted in April, as planned. Approximately 426 million liters of vapor were processed during June, removing 75 kilograms of carbon tetrachloride. 1.4 billion liters have been processed in FY01, with 267 Wlograms of carbon tetrachloride removed.

Field mobilization and drilling pre-start activities were completed at the 216-T-26 Crib. In addition, 200 Area geophysical logging field operations were initiated during June. The first logging was performed at the 216-T-26 Crib which directly supports the 200-TW-1 Operable Unit field characterization work.

Site surveillance and maintenance (S&M) activities proceeded in June to ensure inactive facility integrity and safety. All 100 Area asbestos abatement was completed, and 200 Area asbestos abatement commenced at the 224-U facility. Phase II herbicide spraying was completed for all vegetated areas. Stabilization activities were also completed at the 216-A-42 Retention Basin.

Green

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

A public meeting was held on June 26 to solicit public comment on the B Reactor Engineering Evaluation/Cost Analysis (EE/CA) document.

The Canyon Disposition Initiative (CDI) feasibility study is nearing completion. The feasibility study will provide a detailed analysis of several alternatives to be considered for the final disposition of the defunct 221-U facility (U Plant) chemical processing canyon facility. This study is **also expected** to influence a final disposition determination for the four additional canyon facilities on the Hanford Site.

**Green**

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

#### MAJOR COMMITMENTS:

##### ***Tri-Party Agreement Milestones:***

Fifteen *Tri-Party Agreement* milestones are currently planned for completion during FY01. Through June, twelve milestones have been completed, all ahead of schedule.

One *Tri-Party Agreement* milestone is currently unrecoverable. Milestone **M-16-03E**, Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (Excluding the 618-4 Burial Ground), to Include Excavation, Verification, and Backfilling, will not be completed by September 30, 2001. Per regulator request, backfill/regrade in the 300 Area is being deferred until a Kd uranium leachability study is completed. A *Tri-Party Agreement change* request was transmitted to the U.S. Environmental Protection Agency (EPA) proposing the completion date be revised to September 30, 2003. EPA disapproved the change request on June 20. Negotiations are proceeding with resolution expected by August 31.

 **Green** 

<b>Total <i>Tri-Party Agreement</i> Milestones Due in FY01</b>	<b>15</b>
Total Planned Through June	10
Total Completed Through June	12

<b>Remaining <i>Tri-Party Agreement</i> Milestones to be Completed in FY01</b>	<b>3</b>
Forecast Ahead of Schedule	2
Forecast On Schedule	0
Forecast Unrecoverable	1

##### **EM Corporate Performance Measures:**

	<b>DWP FY01</b>	<b>FY01 Mgmt Commitments</b>	<b>Current Baseline</b>	<b>Completed YTD</b>
<b>Waste Site Excavations</b>	12	12	18	9
<b>Technology Deployments</b>	0	5	9	9

 **Green**

##### **EM Management Commitment:**

The Environmental Restoration (ER) **Project** had one FY01 management commitment milestone, which has been achieved. The management commitment, "Install Four Additional Wells at SST WMA" by September 30, was met on April 2, when installation of five wells was completed.

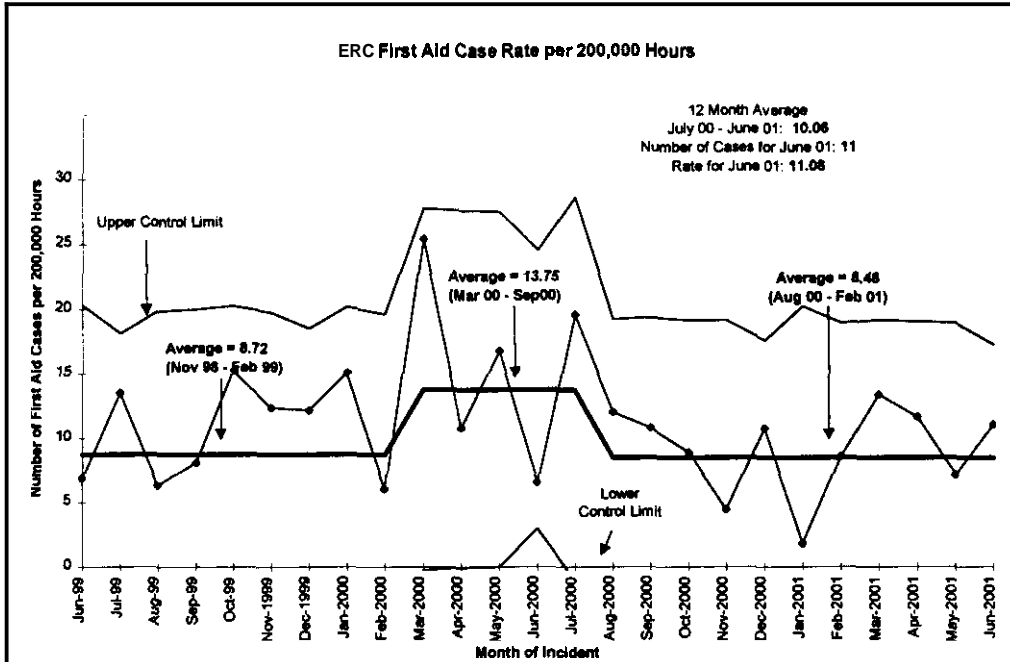
 **Green**

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

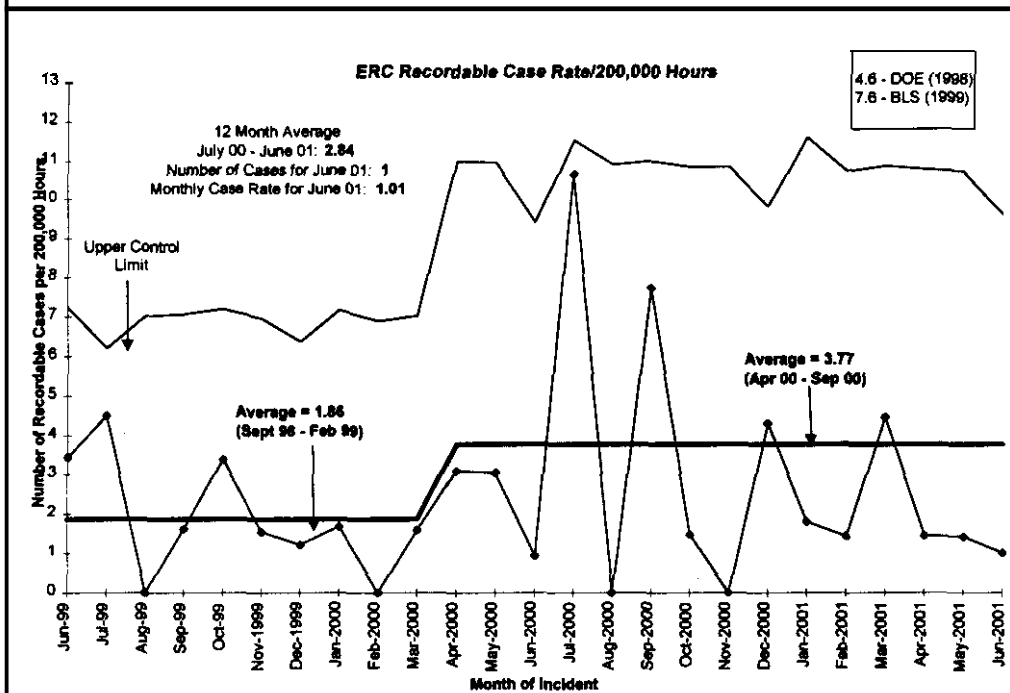
AUGUST 2001

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



The data has been stable since August 2000, as there have been no significant trends.

Green



The data has been stable since April 2000, as there have been no significant trends.

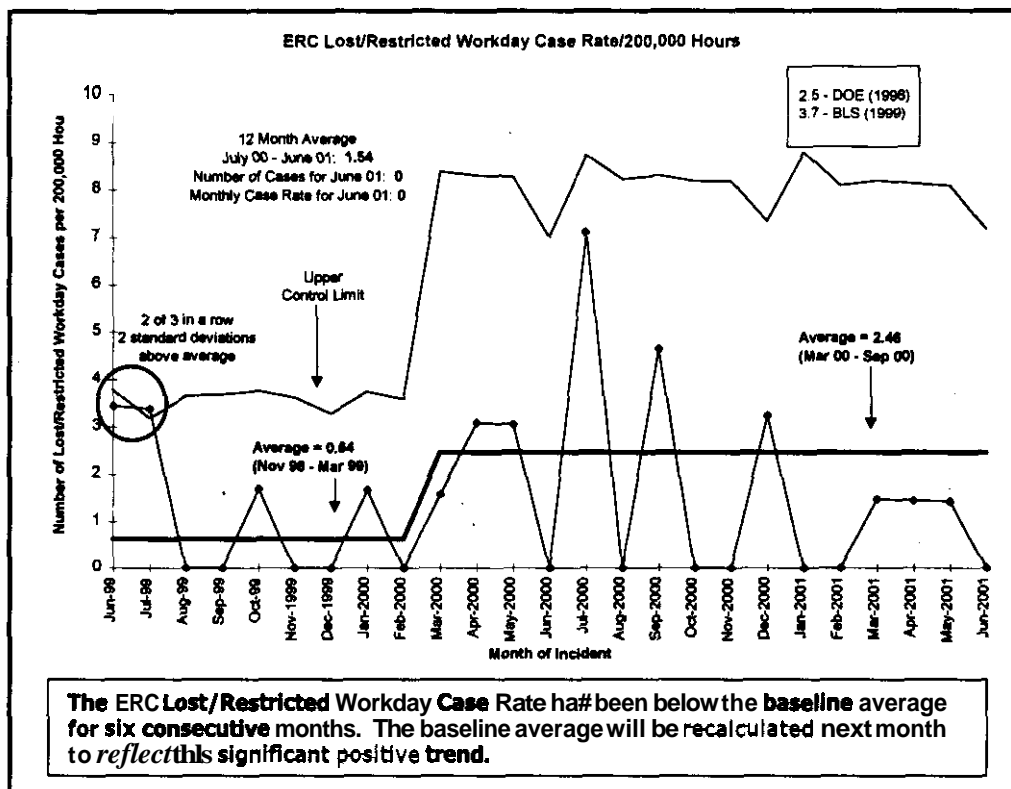
Green

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

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





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

The following actions have or are being taken by the ERC to focus on safety improvement:

**Green**

- BHI has developed a Medical Case Management, desktop instruction for ERC managers, supervisors, and safety representatives. The purpose is to provide consistent management of occupational and non-occupational injuries and illnesses. ERC managers, supervisors and safety representatives will receive a copy of the desktop instruction during training sessions.
- BHI has formed a Senior Incident Review Board chaired by the Vice President of Operations, which will meet monthly to review selected incidents. This review board will make sure that the ERC has correctly and thoroughly determined the cause of the incidents and identified correctable opportunities. In addition, lessons learned based on these incidents will be used to prevent future occurrences.
- All accidents are thoroughly investigated. Emphasis is placed on causes and corrective actions that can be implemented where applicable. Timely discussions are expected to take place in safety meetings and plan of the days (PODs). When investigations have been completed, the results of each investigation are sent to the Area Superintendents, Field Superintendents and Supervisors to review at the PODs.
- Continue to look for bends and consult with corporate and other Bechtel National, Inc. (BNI) contacts for ways to enhance performance.
- BHI has been working closely with the Hanford Atomic Metal Trades Council (HAMTC) Safety Representative to resolve safety issues as they arise.
- Senior management continues to meet with small groups of employees in the field to discuss safety and personal commitment.
- The Field Support General Superintendent and Project Safety Manager visit different projects on a regular basis, meet with project team members and conduct a safety walk around. Information from the walk around is shared with the team and other Field Support personnel. Safety conditions requiring corrective action are assigned to project personnel or support personnel for action and are tracked to closure. This activity is on-going.

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

	<b>FYTD</b>	<b>Current Period (5/14/01- 6/24/01)</b>	<b>Current Period Comments</b>
<b>First Aid</b>	64	16	(7) strain, (2) pain, (3) laceration, (1) abrasion, (2) insect sting, (1) foreign body to eye
<b>OSHA Recordable</b>	14	1	(1) back pain
<b>Restricted Workday Case</b>	2	0	N/A
<b>Lost Workday Case</b>	5	0	N/A

The ERC, as of July 21, 2001, reports approximately 240,775 hours since the last lost work day incident. The incident occurred on May 7, 2001 and became a lost time on May 31, 2001.

**Green**

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
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**SAFETY/ISMS/CONDUCT OF OPERATIONS (Total ER Contract only) continued:**

**ISMS:**

**Green**

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

**status:**

- The Six Sigma Process Improvement Project (PIP) team reviewing the ERC procedure development/revision process continued. The PIP team is evaluating its data and recommendations should be implemented by August 1, 2001.
- Implementation of the new hazard identification and analysis process continued. The team continues to collect data and is assessing the workflow through the Job Hazards Analysis system.
- BHI-MA-02, Procedure 27, Rev. 3, Self-Assessment, was issued on June 4, 2001. BHI-MA-02, Procedure 2.1 Corrective Action Request (CAR) Rev. 6 (and associated forms) was issued with an effective date of 6/22/01. The changes were in response to BHI management's request to streamline the Corrective Action Request process.
- Revised the ERC Quality Assurance Program Plans, BHI-QA-03, Section 6.1, "Radiological Air Emissions Monitoring," to more accurately reflect referenced procedures and functional group responsibilities.
- Fire protection assessments were completed for the 271-U Building, WRM, REDOX, and B Plant complex.
- An Emergency Preparedness (EP) drill was conducted at the 233-S facility and EP drill coordinator training was provided.
- Participated with other Hanford contractors in the kick-off for the renewal of the State Waste Discharge Permit (ST 4508) coordinated by Fluor Hanford. The permit application is due to Ecology on December 1, 2001.
- Issued Assessment Report CQP-01-07, Emergency Management. The assessment concluded that the program is being effectively managed with the exception of a corrective action request concerning the lack of an annual drill by one project. The assessment also included eight observations and three best management practices.
- Completed the field portion of an independent assessment of radiological air emissions monitoring of four stacks and one passive emission point in the 200-West and 200-East Areas. Results of the assessment are pending completion of the records search.
- The draft ISMS Safety Performance Objectives/Performance Measures report was sent to RL for initial review prior to final submittal.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

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

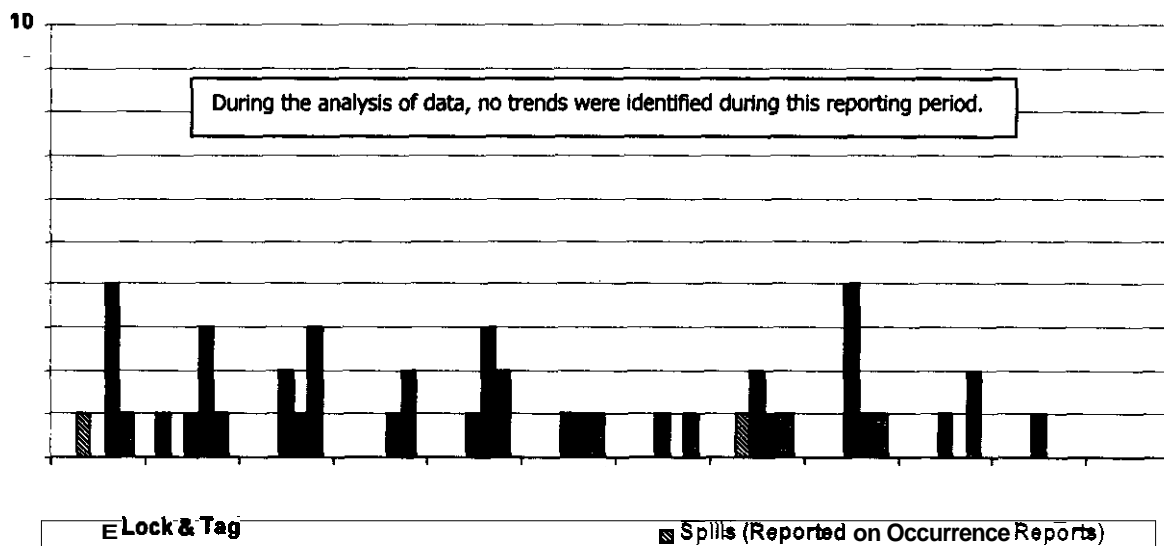
##### Conduct of Ops:

##### ERC-CATS (Corrective Action Tracking System) Trend Data 7/1/00 through 6/30/01

	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01
Lock & Tag	0	1	0	0	0	0	0	0	0	0	0	0
Spills (Reported on Occurrence Reports)	1	0	0	0	0	0	0	1	0	0	0	0
Procedure Violations	0	1	2	0	1	1	1	2	4	1	1	0
Inadequate/Lack of Procedure	4	3	1	1	3	1	0	**1	1	0	0	0
Management Problems	1	1	3	2	2	1	1	1	1	**2	0	0

\* Trend data not received until June 2001

\*\* Trend data not received for one item until June 2001



(Each potential trend is reviewed and evaluated for impact on the project, and then given the appropriate level of attention based on a graded approach.

#### June Conduct of Operations Issues:

None reported.

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

**Previous Conduct of Operations Issues Reported in June:**

**Procedure Problem:**

**Condition Description:**

- 1.) Field Support personnel have assigned Training Position Descriptions (TPDs) prepared by someone other than their functional manager. The requirement does not make allowances for issuance of TPDs by anyone other than the employee's functional manager.
- 2 Procedure revisions have not been entered into the required reading database in a timely fashion. In two instances **observed** during self-assessment, more than a month lapsed between issuance of the revision and entry into the database. The lapse prevented training **coordinators from** assigning them as required reading as specified in the requirements, and may have resulted in a violation of the required reading timelines **described** in the requirements.
- 3 The training database identifies employees who have not completed the current revision of a course functionally assigned as training. Not all course revisions require immediate retraining. However, the ERC does not track courses that require immediate retraining upon **issuance** of a revision to the course. The lack of this information can prevent an employee from positively determining that they have all of the current training required for their job assignment as specified in the requirements. The lack of this information in the training database can hinder the ability of the training coordinators to schedule employees for training contrary to the requirements.

**Corrective Action Plan:**

- 1 Environmental Restoration Contractor Training (ERCT) will revise BHI-HR-02, 1.1 to describe requirements for preparation, approval and maintenance of cross-functional and project TPDs (e.g., concurrence **by** the employee's functional manager).
- 2 Supplemental information submitted by Field Support suggests that a database problem, not a data entry project, resulted in the second deficiency. Automation Technology (AT) will correct the problem during resolution of the **Corrective** Action Requirement (CAR).
- 3 ERCT will revise BHI-HR-02, 1.1 to describe requirements for identifying courses that require retraining upon revision, and courses that do not. Second, the ERC Training database will be reprogrammed to include the ability to indicate when a revised course requires retraining. Third, the ERCTraining Cards will be modified to alert the employee when a revised **course** requires training. As courses are revised, course developers will determine which courses require retraining and **identify** this requirement on the **Course** Information Sheet.
- 4 A root cause analysis (**RCA**) was completed to determine the cause for the problem areas and **provide** opportunities for improvement. The **results** of the RCA have provided guidance for ensuring the prevention of recurring defiaencies which indudes revising EHI-HR-02, 1.1, ERC Training Procedure to document and provide guidance on items discussed above.

**Green**

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
**ENVIRONMENTAL RESTORATION**  
**AUGUST 2001**

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

Management Problem:

Condition Description: Training was deficient, considering that four lead workers involved with lead shot removal had not received the required annual training. The workers had received initial training, but the ~~most current~~ training received was in 1999. The Lead Shot Removal Plan, dated 2/5/01, indicates workers may exceed the Permissible Exposure Limit of 50 micrograms per cubic meter (pg/m3). The Action Level of 30 mg/m3 was exceeded on six of the seven ~~personal~~ air samples taken during the removal. The ERC Course Information Sheet, prepared by Safety and Health, states that recertification is not applicable for the Lead Worker Training Course.

Corrective Action **Plan:** The ERC Course Information Sheet for the Initial Lead Worker Training Course was updated to reflect the re-certification requirements found in BHI-HR-02, Procedure 1.4, "ERC Training Requirements", Section 3.2.2 Lead Hazard Training. Annual retraining is required for ~~those~~ workers subject to a d exposure at or above the action level on any given day.

The lag time between collecting samples to determine exposure and receipt of the sampling results ~~prohibits~~ timely notification and training of employees prior to exposure. In order to ensure timely retraining of the Lead Workers, "Lead Worker Retraining" will be included in the training database for those individuals identified by their management as having the potential for exposure at or above the action level.

Those personnel who complete the Initial Lead Worker Training Course and are ~~selected~~ by their Functional Managers as having the potential for lead exposure will be scheduled for the Annual Lead Retraining. The retraining course will have an expiration date to ensure notification of retraining occurs.

Green

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

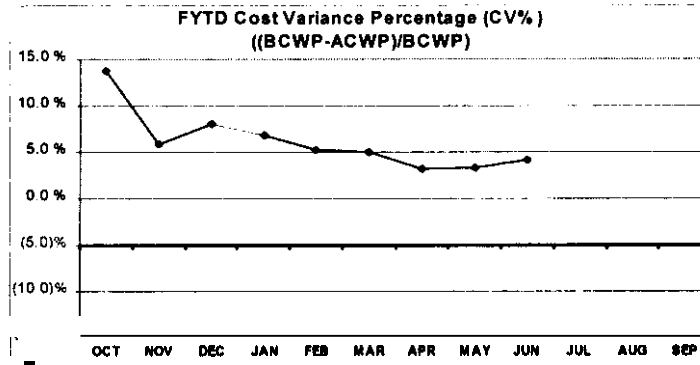
Refer to individual Project issues in the following Section B and Section C.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

#### TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract incl. RL/PNNL):

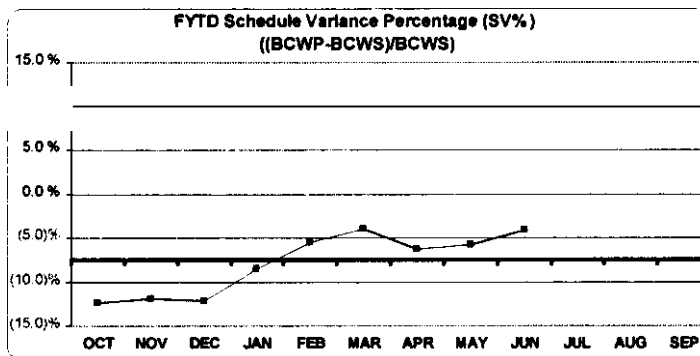


Green

Target performance is better than -5.0%.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Out-Year FCST
<b>CURRENT PERIOD</b>													
ACWP	9,656	10,998	11,610	12,274	13,040	12,559	14,963	13,102	12,815				
BCWP	11,195	10,749	13,140	12,755	12,916	13,101	14,098	13,660	14,262				
<b>FISCAL YEAR TO DATE</b>													
ACWP	9,656	20,654	32,264	44,538	57,578	70,137	85,100	98,202	111,017				
BCWP	11,195	21,944	35,085	47,839	60,755	73,856	87,955	101,614	115,876				
CV	1,539	1,290	2,820	3,301	3,177	3,720	2,855	3,412	4,860				
CV%	13.7%	5.9%	8.0%	6.9%	5.2%	5.0%	3.2%	3.4%	4.2%				
EAC (Cumulative)	9,656	20,654	32,264	44,538	57,578	70,137	85,100	98,202	111,017	128,988	143,822	161,466	162,805
Yr End Budget Variance	195	544	2,241	2,200	2,274	3,316	3,610	4,856	5,051				

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



Green

Target performance is better than -7.5%.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DWP	11,110	10,286	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	65,781	80,484	92,103	103,662	117,043	128,540	141,944
<b>CURRENT PERIOD</b>												
BCWS	12,782	12,103	15,015	12,418	12,003	12,656	16,859	13,957	13,038	16,829	14,248	15,948
BCWP	11,195	10,749	13,140	12,755	12,916	13,101	14,098	13,660	14,262			
<b>FISCAL YEAR TO DATE</b>												
BCWS	12,782	24,885	39,900	52,318	64,322	76,977	93,836	107,793	120,831	137,660	151,908	167,856
BCWP	11,195	21,944	35,085	47,839	60,755	73,856	87,955	101,614	115,876			
SV	(1,587)	(2,940)	(4,815)	(4,479)	(3,566)	(3,121)	(5,882)	(6,179)	(4,955)			
SV%	-12.4%	-11.8%	-12.1%	-8.6%	-5.5%	-4.1%	-6.3%	-5.7%	-4.1%			

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

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

**TOTAL COST/SCHEDULE OVERVIEW (Total ER Contract incl. RL/PNNL) continued:**

#### FY01 PERFORMANCE M D JUNE 2001 (\$K)

ER01 100 Area R/A	29817	30676	21794	22730	20573	938	4.3%	2157	9.1%	28414	Green
ER03 300 Area R/A	4127	2369	1807	1437	1321	-370	-20.5%	116	8.1%	2191	
ER04 ER Waste Disposal	17420	18666	13786	14055	13333	269	2.0%	722	5.1%	18073	
	51164	51741	37387	38222	35227	835	2.2%	2895	7.8%	48678	
ER02 200 Area R/A	443	4175	2605	1348	1450	-1257	-48.3%	-102	-7.6%	4194	
ER08 GW Management	24942	30668	21766	20410	20085	-1358	-2.1%	325	1.6%	30738	
VZ01 GW/VZ	10833	10908	8769	7673	7293	-1096	-12.5%	380	5.1%	10800	
	36218	46041	33140	29431	28828	-3709	-11.2%	603	2.0%	45532	
ER05 ISS	2065	12808	8718	8598	8383	-121	-1.4%	205	2.4%	12383	
ER06 233-S	5130	6363	4601	4360	4960	-241	-5.2%	-620	-14.2%	6821	
	71%	18971	13320	12968	13373	-362	-2.7%	415	-3.2%	18304	
ER06 S&M	13024	13684	10458	10086	9271	-362	-3.7%	785	7.9%	12631	
ER07 Long-Term S&M	58	58	25	41	9	16	64.0%	32	78.0%	25	
	13083	13743	10483	10107	9280	-376	-3.6%	11	8.2%	12656	
ER10 ERC PM&S	28984	31217	22123	21888	21039	-235	-1.1%	849	3.9%	30482	
ER10 RL PM&S	5300	8143	4379	3270	3270	-1109	-25.3%	0	0.0%	8143	
	34284	37360	26502	25158	24309	-1344	-5.1%	849	3.4%	38635	
	141944	167856	120832	115876	111017	-4956	-4.1%	4859	4.2%	162805	

#### Cost Variance Summary

At the end of June, the ER Project had performed \$115.9M worth of work, at a cost of \$111.0M. This results in a favorable cost variance of \$4.9M (+4.2%). The positive cost variance is attributed to less labor required due to sharing resources between 100 D and 100 B/C Area remediation efforts, less labor required to complete remediation cleanup verification packages (CVPs) due to the use of a streamlined format and consolidation of waste sites, ERDF transporting additional waste volumes utilizing existing resources, underruns in GW/VZ monitoring and sampling, 200 Area general S&M tasks and herbicide application costs less than planned, and program management support to field operations using fewer resources than planned.

#### Schedule Variance Summary

Through June, the ER Project is \$5.0M (-4.1%) behind schedule. The negative schedule variance is attributed to delays in 200-TW-1 and 200-TW-2 Operable Unit drive casing installation and borehole drilling activities, waste shipments from RCRA wells placed on hold pending disposition resolution, well decommissioning delays due to extended well document search/selection, delays in groundwater monitoring and maintenance activities, testing for SAC history matching taking longer than planned, GW/VZ soil inventory task delayed due to resource unavailability, and late billings for site-wide assessments.



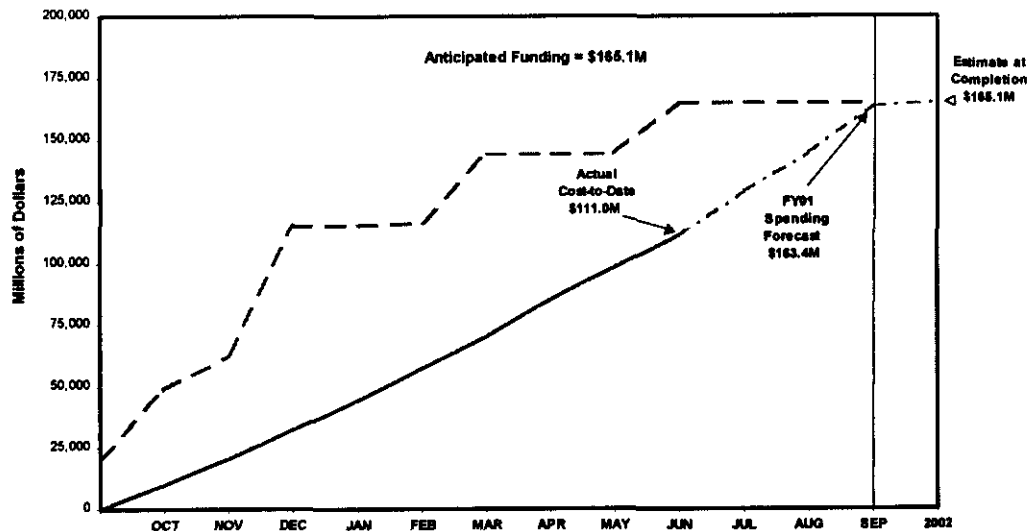
# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

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

#### FY2001 Funds Management



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	2002	
<b>ACTUAL/ANTICIPATED FUNDING</b>	20,500	46,800	62,800	115,100	115,486	116,236	144,126	144,126	144,126	165,087	165,087	165,087	Est. Comp. ETC	<b>EAC TOTAL</b>
<b>APPROVED SCOPE</b>														
1 Actual Cost	9,656	20,854	32,264	44,536	57,578	70,137	85,100	96,202	111,017					
2 Current Monthly EACs	9,656	10,896	11,610	12,274	13,040	12,559	14,963	13,102	12,815	17,970	14,836	17,623		
3 Cumulative EAC	9,656	20,854	32,264	44,536	57,578	70,137	85,100	96,202	111,017	128,987	143,823	161,446	1,355	162,805
<b>JULY FY2001 APPROVED BCPs (Through 07/24/01)</b>														
4 ER06 BCP-21191 ISRM Pond Enhancement										23	24	24	0	71
5 ER06 BCP-21190 Defer FY01 Pump & Treat Maintenance Costs										(29)	(29)	(30)	0	(85)
6 ER06 BCP-21173 Change in Nondestructive Assay Contractors for 233-S										81	81	81	0	243
7 ER10 FCP-21199 PMS-RL Grant Reduction										(500)			0	(500)
8 Subtotal Approved Scope Changes										(428)	76	75	0	(274)
<b>FY2001 PENDING BCPs</b>														
9 ER01 BCP-21197 Excavate Additional Tons @ 116-N-3, Increase ERDF Costs, Defer Water Line Bridge										(53)	40	53	0	24
10 ER03 BCP-21184 Add Close-Out Verification Package, Defer 818-4 Burial Ground Procurement										(233)	100	104	0	(29)
11 ER03 BCP-21186 Accelerate 818-4B Burial Ground											100	100	0	200
12 ER03 BCP-21201 300 Area Barrel Storage													300	300
13 ER02 BCP-21195 Defer Regulation & Cleanup Standards, Add Agreement in Principal Tests												13	0	13
14 ER06 BCP-21196 HR-3 Pump and Treat System Design Upgrades										37	36	36	0	113
15 ER06 BCP-21184 KR-4 Pump and Treat System Design Upgrades										56	59	60	0	175
16 ER05 Hexone Tank Stabilization												100	0	100
17 ER06 Treatment for Disposal of 42 Liters of Contaminated Nitric Acid @ 233-S											25	25	0	50
18 ER10 BCP-21183 Deferral of Environmental Mgmt Sys Scope into FY02											(12)	(12)	0	(24)
19 ALL Pending Scope										544	544	544	0	1,632
20 Subtotal Approved BCPs + Pending BCPs										(67)	879	1,196	366	2,283
<b>Current Monthly EAC + July FY2001 Approved BCPs &amp; Pending BCPs</b>														
21	9,656	10,896	11,610	12,274	13,040	12,559	14,963	13,102	12,815	17,983	14,896	17,233		-
22 Cumulative EAC + July FY2001 Approved BCPs + Pending BCPs	9,656	20,854	32,264	44,536	57,578	70,137	85,100	96,202	111,017	128,986	144,796	163,429	1,665	165,095

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
**ENVIRONMENTAL RESTORATION**  
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**PERFORMANCE OBJECTIVES:**

Refer to individual Project information in the following Section Band Section C.

**KEY INTEGRATION ACTIVITIES:**

**RCRA Well Installation:** The drilling contract was awarded for the calendar year 2001 (CY01) RCRA well Installations. Eleven wells are planned for installation by December 31, 2001. The first six wells will be installed in support of the Office of River Protection (ORP) project.

Green

**UPCOMING PLANNED KEY EVENTS:**

*Tri-Party Agreement* Milestone M-15-41A, Complete 200-TW-1 Operable Unit Field Work Through Drilling and Sample Collection, due October 31.

Green

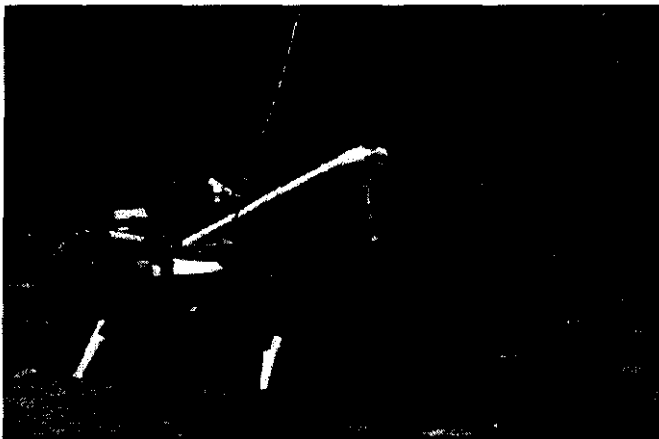
*Tri-Party Agreement* Milestone M-15-42A, Complete 200-TW-2 Operable Unit Field Work Through Drilling and Sample Collection, due October 31.

# Environmental Management Performance Report

August 2001

## Section B - River Corridor Information

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

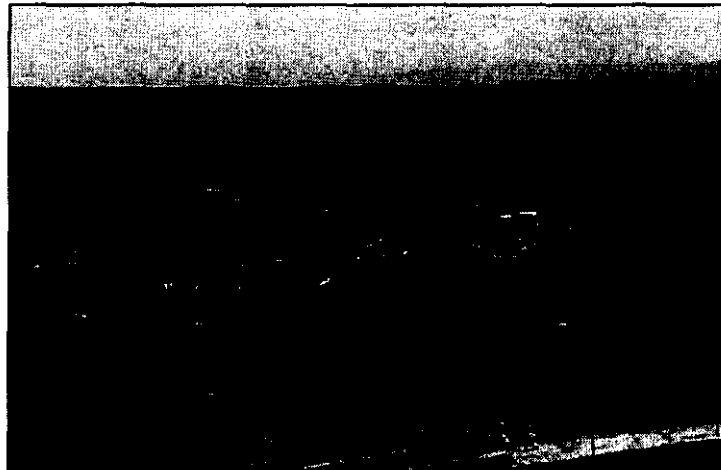


Brokk™ Used for Sampling Activities at F Reactor Fuel Storage Basin



Knee Brace Platform Support Installation in 233-S Facility

Disposal of Waste  
into ERDF Cell #3



***Focused on Progress ...  
Focused on Outcomes!***

Financial/Performance Measures data as of month-end June.  
All other data as of July 27 (unless otherwise noted).



Department of Energy  
Richland Operations Office



Bechtel Hanford, Inc.  
Environmental Restoration Contractor

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

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**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
**ENVIRONMENTAL RESTORATION**  
**AUGUST 2001**

## SECTION B – RESTORING THE RIVER CORRIDOR

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

All other data as of July 27, 2001 (unless otherwise noted).

### Remedial Action & Waste Disposal Project (RAWDP):

#### ACCOMPLISHMENTS: RAWDP

##### **Environmental Restoration Disposal Facility (ERDF) Transportation and Operations:**

During June, ERDF disposal operations began disposing waste in Cell #3. Crushed empty waste drums that were received from the 600-23 site were macroencapsulated within ERDF. Leachate sampling was also completed from Cells #1, #2, and #4.

The ERDF disposal team has worked 1,109 days (since project inception) without a lost-time accident.

During June, shipments totaling 50,500 metric tons (55,668 tons) of contaminated waste were transported to ERDF. 414,092 metric tons (456,461 tons) of waste have been disposed in fiscal year 2001 (FY01), which is about 8% ahead of the plan. To date, a total of 2,720,854 metric tons (2,999,244 tons) of material have been disposed in ERDF.

**100B/C Area Remediation:** Pipeline removal continued for pipeline #3 (1.2-meter [48-inch] concrete) and pipeline #4 (1.5-meter [60-inch] steel). Excavation commenced for demolition of the river outfall structures. Concrete structure removal was completed at two of the three outfalls. Permanent power installation to office trailers was completed.

**100D Area Remediation:** tract closer cl were c on June 15.  
100 D Area excavation and backfill le in late February.

**100F Area Remediation:** di tir a viti n ide excavation at R-100  
Basin Leak waste site and overburden removal at the 1.4-meter (5' discharge pipeli  
Excavati was also started o the large li as with the 116-F-2 Trench.

The southern ash pit impling r lb w e in Europium ii levels exceeded  
t R f d (ROD) cleanup levels. in the f levels will cay below the  
ROD cleanup l y O B, ti e g l i t d no further remediation is required. This  
will eliminate approximately nine months of excavation activity at the 100 F erat Unit.  
100 F Area cavati work is currently planned for completion in early FY03.

**100H Area Remediation:** Backfill operations progressed t th 116-H-7 Retention Basin  
which is the last and largest liquid disposal waste site at 100 H Area.

**100N Area Remediation:** Excavation and loadout activities continued for the 116 Gib  
es i the 116 yf s t Demolition of the bypass structure is complete with  
the ip of one section dt the roadway.

dic logical survey ig a ij gi il lical surveying at the 116-N-1 Crit and Trench were  
fo med to aid in pla for constructi f sit ss roads nd i activities.  
Site setup activities are scheduled to begin by the beginning of September.

Ex w line support rid viti iir on hold pending regulator review of  
alternatives for support lge ation.

**300 Area** v The t 4 Burial Ground ii l s k ex A list  
of potential sti s r the 200 and 300 Areas were identified and y l. ii ti was  
held with Fluor Hanford (FH) management from the C t il Was on tc li: waste  
ing and tagi ii t for the buried drums that contain uranium chips.

Green

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001





<b>ACCOMPLISHMENTS continued: RAWD</b>	
<p>Site maintenance work was initiated for the uranium oxide drums stored at the 618-4 Burial Ground. The planning phase was completed for sampling the drums. Sampling will occur after the drum maintenance activities have been completed. These sampling results will be used to determine which oxide drums can be shipped to ERDF for macroencapsulation.</p> <p><b>300/600 Area</b> Remediation: Data validation packages were received for the J.A. Jones and 600-23 waste sites on June 27. Backfill activities are planned to be initiated in August, and reseeded will be completed later this fall. Thirty drums of tar-like material were shipped offsite from the 600-23 site for treatment.</p>	<div style="border: 2px solid black; padding: 5px; display: inline-block;">Green</div>
<b>SAFETY/ISMS/CONDUCT OF OPERATIONS: RAWD</b>	
<b>BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: RAWD</b>	
None identified at this time.	
<b>LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: RAWD</b>	
None identified at this time.	
<b>MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): RAWD</b>	
<ul style="list-style-type: none"> <li>■ <b>DOE Site</b> None identified at this time.</li> </ul>	
<ul style="list-style-type: none"> <li>● <b>DOE EM Performance Agreement:</b> None identified at this time.</li> </ul>	



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
ENVIRONMENTAL RESTORATION  
AUGUST 2001**

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

■ **Tri-Party Agreement Milestones:**

Milestone	Description	Due Date	(F)/(A) Date	
<b>M-16-26D</b>	Begin Excavation Activities at 100 B/C Process Effluent Pipelines.	2/28/01	2/26/01 (A)	
<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	2/28/01 (A)	
<b>M-16-41A</b>	Complete Remedial Action Excavation for JA Jones 1 and 600-23 Waste Sites	7/31/01	7/25/01 (A)	
<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 the Remedial Design Report/Remedial Action Work Plan for the 100 Area	9/30/01	7/19/01 (A)	
<b>M-16-03E</b>	Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (excluding the 618-4 Burial Ground), to include Excavation, Verification, and Backfilling	9/30/01	9/30/03 (F)*	
<b>M-16-26G</b>	Remove filter boxes and complete verification sampling for 100-B-12 waste site	9/30/01	5/31/01 (A) 5/31/01 (A)	
<b>M-16-00F</b>	Establish Date for Completion of all 100 Area Remedial Actions	12/31/01	12/31/01 (F)**	
<b>M-16-41B</b>	Submit Cleanup Verification Package (CVP) for JA Jones 1 and 600-23 Waste Sites for EPA Approval	3/31/02	3/31/02 (F)	
<b>M-16-26B</b>	Complete Remediation and Backfill of 51 Liquid Waste Sites in the 100-BC-1/-2, 100-DR-1/-2, and 100-HR-1 OUs and Process Effluent Pipelines in the 100-DR-1/-2, and 100-HR-1 OUs. Complete revegetation of 36 Liquid Waste Sites in the 100-BC-1, 100-DR-1/-2, and 100-HR-1 OUs as defined in the RDR/RAWP for the 100 Area.	3/31/02	3/31/02 (F)	

\*Per regulator request, Kd (partitioning coefficient) study is being performed to determine uranium leachability in the 300 Area. 300-FF-1 backfill will be deferred until leachability concerns are resolved. A *Tri-Party Agreement* change request was forwarded to EPA on June 11 proposing the completion date be revised to 9/30/03. EPA disapproved the change request on June 20. Negotiations are proceeding with resolution expected by August 31.

\*\*Awaiting DOE direction prior to initiating discussions with regulators; 110-day notification required by September 12.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

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

- DNFSB Commitment:  
None identified at this time.

#### PERFORMANCE OBJECTIVES: RAWD

RAWD	<ul style="list-style-type: none"> <li>• 490,000 Tons by 9/30/01</li> </ul>	On schedule.	
	<ul style="list-style-type: none"> <li>• Backfill 16 Sites by 9/30/01</li> </ul>	On <b>schedule</b> .	
	<ul style="list-style-type: none"> <li>• 50,000 Additional Tons by 9/30/01 (Stretch)</li> </ul>	100% of Stretch undertaken as of 2/28/01.	<b>Green</b>
CV <5.0%; SV <7.5% for grouped PBS ER01, ER03, ER04 (Detail Section 6C)			

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

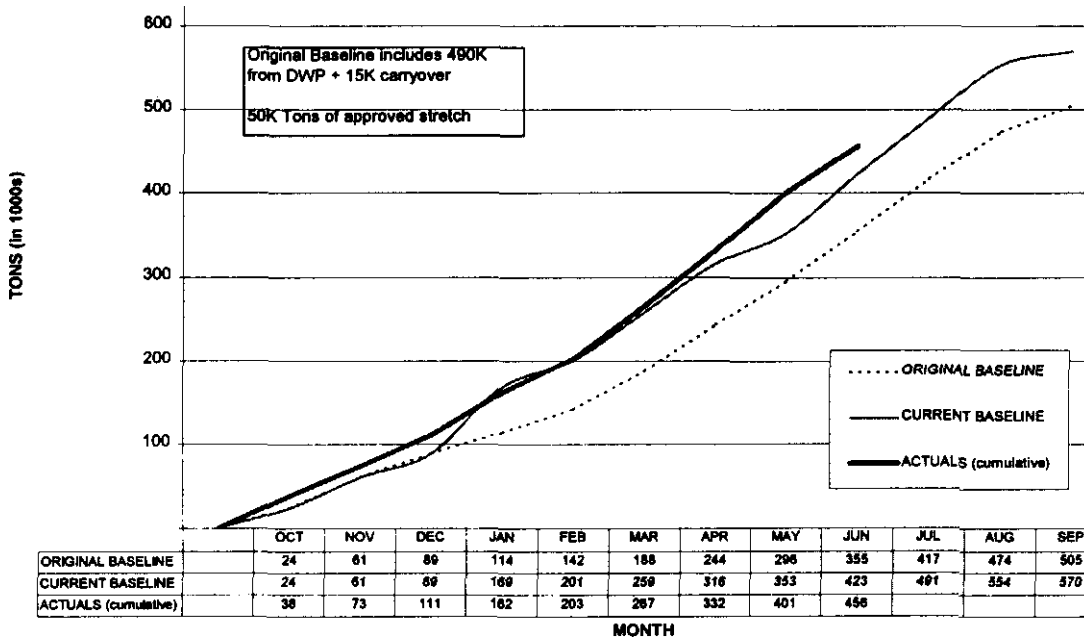
AUGUST 2001

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

	DWP FY01	FY01 Mgmt Commitments	Current Baseline (Incl. Baseline Changes)	Completed YTD
<b>Waste Sites Excavated</b>	12	12	18	9

Green

Remedial Action and Waste Disposal Project  
Cumulative Tons to ERDF



### STRETCH AND SUPERSTRETCH GOALS: RAWD

FY01 RAWD "Stretch" Goals	Approved Tons (K)
<b>Remediate Additional 50K Tons of Contaminated Material by 9/30/01</b>	
(1) Additional Contaminated Material at 100-F Pipelines (BCP 21013 approved 11/00)	8.0K
(2) Additional Contaminated Material at 100-H Sites (BCP 21014 approved 11/00)	7.5K
(3) (Additional Contaminated Material at 100-F Sites of 36.4 approved in February) (BCP 21043 approved 2/01)	34.5K
<b>S/Total Remedial Action Stretch Goals:</b>	<b>50.0K</b>

Green

(\*through June 30)

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

#### STRETCH AND SUPERSTRETCH GOALS continued: RAWD

FY01 RAWD "Superstretch" Goals	Approved BCPs (K)
*Complete Remediation of 60 Square Miles of Hanford Site: (1) Complete Remediation of J.A. Jones Pit #1 and 600-23	\$1640.9K
S/Total Remedial Action Superstretch Goals:	\$1640.9K

#### PROJECT STATUS (COST/SCHEDULE): RAWD

- Schedule:**

Remedial Action & Waste Disposal Project	BCWS \$K	BCWP \$K	Variance \$K
ER01 100 Area Remedial Actions	21,794	22,730	936
ER03 300 Area Remedial Actions	1,807	1,437	(370)
ER04 ER Waste Disposal	13,786	14,055	269
<b>TOTAL Remedial Actions</b>	<b>37,387</b>	<b>38,222</b>	<b>835</b>

Green

#### PBS-ER01 - 100 Area Remedial Action

Schedule Variance = **\$936K**; 4.3% [Last Month: (\$89K); (0.5%)]

**Cause:** Backfill activities at 100-HR-1 and excavation at 100-K-1 are ahead of schedule due to subcontractor maximizing equipment usage and coordination of resources between sites.

**Resolution:** None required; will monitor.

#### PBS-ER03 - 300 Area Remedial Action

Schedule Variance = **(\$370K)**; (20.5%) [Last Month: (\$373K); (22.9%)]

**Cause:** Delays in the 300-FF-1 remediation contract closeout; award of burial ground barrel removal contract delays pending resolution of waste disposition issues.

**Resolution:** Contractor is reviewing options and subcontract waste stream disposal is being studied; a BCP is in progress to defer procurement of barrel removal.

#### PBS-ER04 - Environmental Restoration Waste Disposal

Schedule Variance = **\$269K**; 2.0% [Last Month: \$526K; 4.3%]

**Cause:** More ton miles of waste were transported and disposed than planned due to additional plume remediation at soil sites.

**Resolution:** None required.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

AUGUST 2001

### PROJECT STATUS (COST/SCHEDULE) continued: RAWD

■ **Cost:**

Remedial Action & Waste Disposal Project	FY01 EAC	BCWP \$K	ACWP \$K	Variance \$K
<b>ER01</b> <b>100 Area Remedial Actions</b>	<b>28,414</b>	<b>22,730</b>	<b>20,573</b>	<b>2,157</b>
<b>ER03</b> <b>300 Area Remedial Actions</b>	<b>2,191</b>	<b>1,437</b>	<b>1,321</b>	<b>116</b>
<b>ER04</b> <b>ER Waste Disposal</b>	<b>18,073</b>	<b>14,055</b>	<b>13,333</b>	<b>722</b>
<b>TOTAL Remedial Actions</b>	<b>48,678</b>	<b>38,222</b>	<b>35,227</b>	<b>2,995</b>

Green

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

Cost Variance = **\$2157K; 9.5%** [Last Month: \$1497K; 7.7%]

**Cause:** Less labor was required due to sharing DR site non-manual resources with the 100-BC work scope needs, shifting of personnel to other waste sites, less design and supervision required, and backfill completed six weeks early; material costs at 100-BC-1 have not been incurred as planned.

**Resolution:** Reflected in the EAC.

**Cause:** Cleanup Verification Packages (CVPs) continue to require less labor than anticipated to prepare due to the use of a "streamlined" format and the consolidation of waste sites. Estimated completion costs for the lead brick survey have been reduced to reflect actual charges.

**Resolution:** Reflected in the EAC.

**Cause:** 100 Area Burial Ground Design costs were less than planned due to fewer drawings being required; less effort required to prepare the SAP due to consorted efforts in the DQO process.

**Resolution:** Reflected in the EAC.

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

Cost Variance = **\$116K; 8.1%** [Last Month: \$57K; 4.5%]

**Cause:** Coordination of 300-ER-2 and 100 Area Burial Grounds design efforts has resulted in savings; Pacific Northwest National Laboratory (PNNL) staff and subject experts were utilized on the 618-10/11 Engineering Study Historical Research resulting in additional savings.

**Resolution:** Reflected in the EAC.

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

Cost Variance = **\$722K; 5.1%** [Last Month: \$890K; 7.0%]

**Cause:** Transported additional waste volumes utilizing existing resources.

**Resolution:** Reflected in the EAC.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

#### REGULATORY ISSUES: RAWD

**Tri-Party Agreement Milestone M-16-03E:** M-16-03E, "Complete Remediation of Waste Sites in 300-FF-1 Operable Unit (excluding the 618-4 Burial Ground), to Include Excavation, Verification, and Backfilling", due September 30, 2001 will be missed due to the U.S. Environmental Protection Agency (EPA) requirement to perform a partitioning coefficient ( $K_d$ ) study on uranium leachability. Regrading will not be completed until study results confirm that no further excavations will be required.



**Status:** EPA requested a  $K_d$  study be performed to address uranium mobility in the 300 Area. This study consists of obtaining uranium-contaminated samples, and performing leach rates with follow-on absorption tests, resulting in a  $K_d$  value. A data quality objective (DQO) was completed, and a baseline change proposal (BCP) was prepared to secure funding for the study. The study was initiated in March, and will be completed in FY02. A **Tri-Party Agreement** change package was transmitted to the regulators on June 11 proposing the date be revised to September 30, 2003. EPA disapproved the change package on June 20. Negotiations are proceeding to resolve this issue by August 31.

**Tri-Party Agreement Milestone M-16-03F- 618-4 Burial Ground:** It is unlikely that treatment of the 618-4 Burial Ground uranium metal/oil drummed waste can be performed this fiscal year. The treatment technology has been identified, however, the treatment facility startup process is proceeding slower than planned. Currently, it appears that the treatment facility may be unable to receive the uranium metal/oil drummed waste until early FY03. EPA has indicated a need to show continuous progress at 300-FF-1 in FY01, and is also requesting a milestone date be established for excavation of the 618-4 Burial Ground.



**Status:** A BCP was approved to treat and dispose of the 78 uranium oxide powder drums currently staged in the 618-4 Burial Ground. This workscope will be performed in lieu of Initiating treatment of the uranium metal/oil drums in FY01. Adding the 618-4 Burial Ground scope to the revised M-16-03E milestone will require further discussions among the Tri-Party participants. Negotiations are proceeding to resolve this issue by August 31.

**Tri-Party Agreement Milestone M-16-00F - Establish Date for Completion of All 100 Area Remedial Actions:** This milestone is due on December 31, 2001 and will develop the dates and workscope for any remaining remedial actions in the 100 Area. Currently, most of these remedial actions are in the 100 Area Long Range Plan (miscellaneous pipelines are still being developed). **Tri-Party Agreement Major Milestone M-16-00** compliance date is September 30, 2018. In addition, **Tri-Party Agreement** Milestones M-93-14/ M-93-15 (Initiate / Complete Negotiation of Remaining Surplus Reactor Disposition Schedules) and potentially M-16-03A (Establish Date for Completion of 300 Area Remedial Actions) will also be addressed in these negotiations.



**Status:** RL has initiated development of a strategy for negotiation of M-16-00F that includes the River Corridor outcome.

#### 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)

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

**Financial / Performance Measures data as of month-end June.  
All other data as of July 27, 2001 (unless otherwise noted).**

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

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

**F Reactor Interim Safe Storage (ISS):** The readiness assessment was conducted on June 4-7 for the F Reactor Fuel Storage Basin (FSB) Phase II cleanout (bottom 1-meter [3-foot] fill/sludge removal and sample collection). Work packages were also completed for the FSB Phase II demolition. The Brokk™ excavator was mobilized in the FSB, and lower fill sampling was completed the end of June. Samples will be shipped to an offsite laboratory for analysis. Transfer pit demolition was completed for approximately 5 meters (15 feet) below grade. Dewatering was discontinued in the FSB. The pump was disconnected from the holding tank, and the well was removed during transfer pit demolition.

Walkdowns were completed at F Reactor in support of the safe storage enclosure (SSE) design work.

**D and H Reactors ISS:** At D Reactor, liquid pipe checks and pipe/equipment removal were completed in the FSB (Area 4) during June. Hazardous material was also removed from the FSB. Asbestos was removed from piping in the accumulator/rod mom (Area 5). At H Reactor, work also proceeded in the removal of hazardous material and pipe/equipment.

**233-S Plutonium Concentration Facility Decommissioning Project:** June activities that were accomplished in the highly contaminated 233-S facility included the following:

- Completed nondestructive assay (NDA) for 67 waste packages.
- Completed hole drilling, hanger, and 233-SA transition installation for the ventilation modification.
- Completed drilling holes for L-3/L-12 vessel staging knee braces. Three braces were installed. Through June, five of the eight vessels planned for FY01 have been removed, on or ahead of schedule.
- Removed approximately 8 meters (25 feet) of process hood pipe.

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.



# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

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

- DOE EM Performance Agreement:  
None identified at this time.

- *Tri-Party Agreement* 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	*TBD

Green

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

- DNFSB Commitment:  
None identified at this time.

### PERFORMANCE OBJECTIVES: D&D

PI	Task	
<b>233-S</b>	<ul style="list-style-type: none"> <li>• 8 vessels by 6/30/02</li> <li>• 7 additional vessels by 6/30/02 (Stretch)</li> </ul> <p>CV &lt;5.0%; SV &lt;7.5% for PBS ER-06</p>	<p>Critical path activity on schedule. NDA issue is impacting cost. Currently being reviewed by RL, BHL, and FH.</p> <p>BCP-21023 approved. Stretch activities in progress and on schedule.</p> <p>(Detail Section 6C)</p>
<b>ISS</b>	<ul style="list-style-type: none"> <li>• D Reactor Major Tasks by 9/30/01</li> <li>• DR Reactor Major Tasks by 9/30/01</li> <li>• F Reactor Major Tasks by 9/30/01</li> <li>• H Reactor Major Tasks by 9/30/01</li> </ul> <p>CV &lt;5.0%; SV &lt;7.5% for PBS ER-06</p>	<p>Critical path activities on schedule; received authorization funding in December. F Reactor basin fill removal activities have been replanned to accommodate removal of fill in two 15" lifts vs. one 30" lift. Scheduled completion date is now 11/30/01. BCP 21187, with associated PI change justification, was submitted to VME on June 15. Awaiting formal PI change from K. Klein.</p>

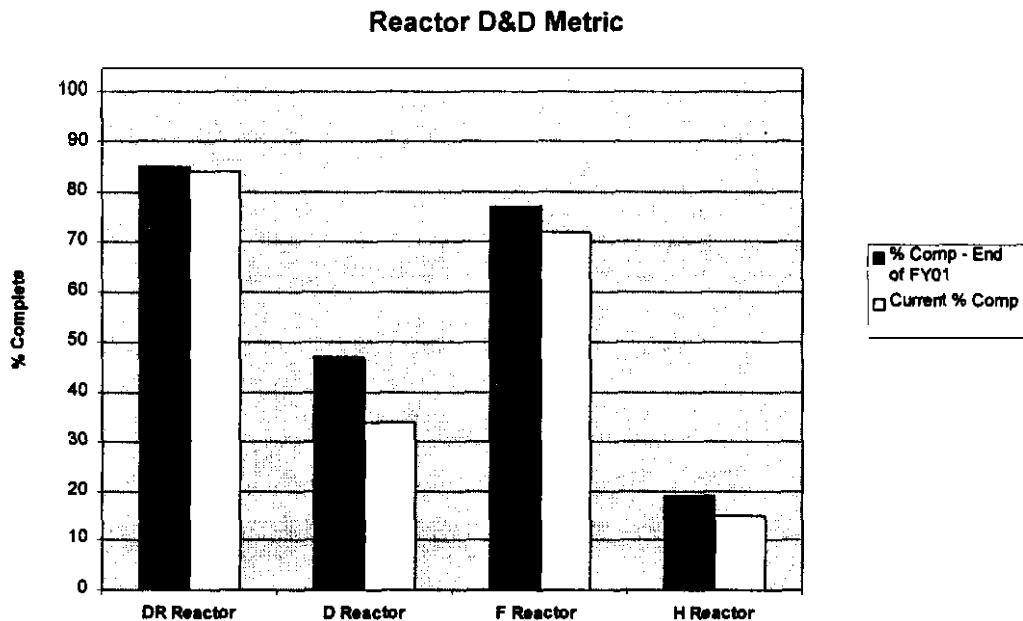
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# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

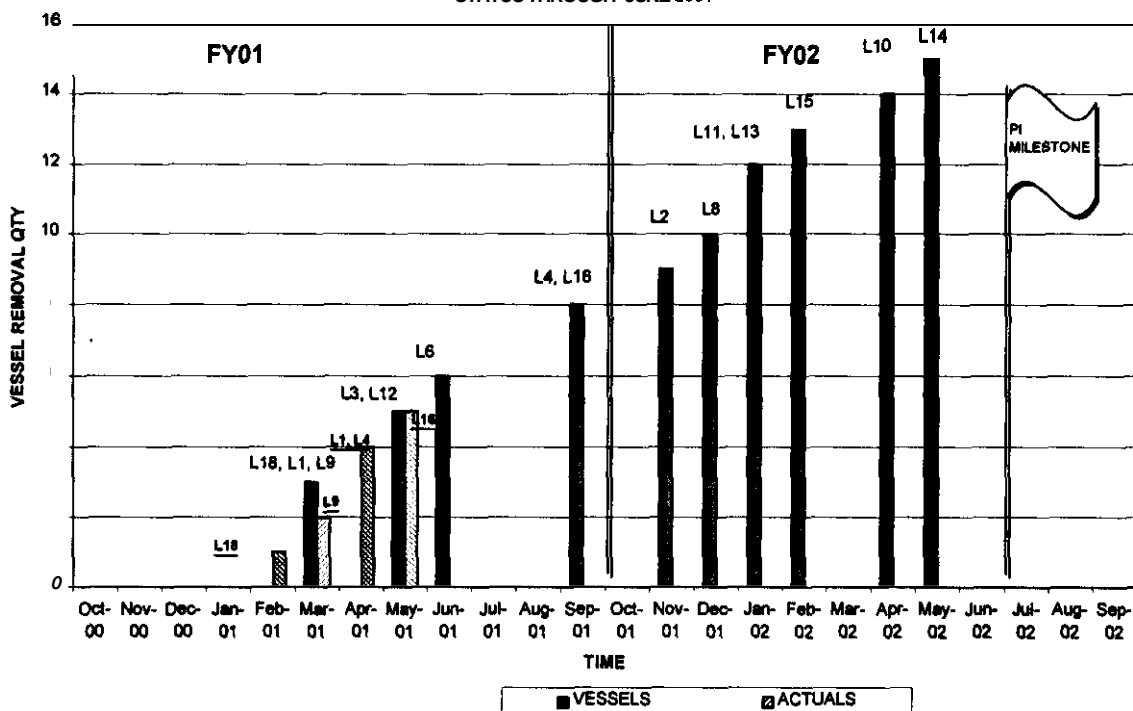
#### PERFORMANCE MEASURES/METRICS: D&D



Green

#### VESSEL REMOVAL BASELINE SCHEDULE

STATUS THROUGH JUNE 2001



# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

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### STRETCH AND SUPERSTRETCH GOALS. D&D

FY01 D&D "Stretch" Goals	Approved BCPs (K)
Remove 7 Additional Vessels by 6/30/02 for a total of 15 Vessels (Stretch Only) (BCP 21023 approved 11/00)	\$1,072.0K
<b>S/Total D&amp;D Stretch Goals:</b>	<b>\$1,072.0K</b>

Green

FY01 D&D "Superstretch" Goals	Approved BCPs (K)
*Continue F Reactor Interim Safe Storage	\$1372.4K
<b>S/Total D&amp;D Superstretch Goals:</b>	<b>\$1372.4K</b>

Green

### PROJECT STATUS (COST/SCHEDULE): D&D

- Schedule:**

Decommissioning Projects	BCWS \$K	BCWP \$K	Variance \$K
<b>ER06 ISS and Other D&amp;D Projects</b>	8,719	8,598	(121)
<b>ER06 233-S</b>	4,601	4,360	(241)
<b>TOTAL D&amp;D</b>	<b>13,320</b>	<b>12,958</b>	<b>(362)</b>

Green

#### PES-ER06 - Decontamination and Decommissioning

Schedule Variance = **(\$362K); (2.7%)** [Last Month: (\$628K); (5.1%)]

**Cause:** Demolition activities at D Reactor have been delayed due to equipment and resource availability; backfill has been delayed due to waiting for regulator approval.

**Resolution:** A detailed schedule has been developed, and equipment and resources have been assigned to complete above grade demolition by the end of September.

**Cause:** Process hood vessel removal at the 233-S facility is behind schedule due to difficulty in removing neutron monitors, stringent procedures slowed TRU waste shipments, nondestructive assay (NDA) labor support was not available, and late start of concrete drilling for ventilation modification.

**Resolution:** Selective overtime will continue to be used to recover the schedule; continue to look for better ways to accomplish work safely.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

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### AUGUST 2001

#### PROJECT STATUS (COST/SCHEDULE) continued: D&D

• **Cost:**

Decommissioning Projects	FY01 EAC	BCWP \$K	ACWP \$K	Variance \$K
ER06				
ISS and Other D&D Projects	12,383	8,598	8,393	205
ER06				
233-S	6,921	4,360	4,980	(620)
<b>TOTAL D&amp;D</b>	<b>19,304</b>	<b>12,956</b>	<b>13,373</b>	<b>(415)</b>

Green

**PBS-ER06 – Decontamination and Decommissioning**

Cost Variance = (\$415K); (3.2%) [Last Month: (\$613K); (5.3%)]

**Cause:** Overrun at the F Reactor Fuel Storage Basin (FSB) due to resolving work package issues while work was on hold; and procedural changes resulting in loss in efficiency in removing material from the FSB.

**Resolution:** Additional costs have been trended.

**Cause:** Overtun at the 233-S Facility due to purchase of Standard Waste Boxes (SWB) and additional tools needed for process hood pipe and vessel removal.

**Resolution:** Overtun has been partially reflected in the EAC.

#### REGULATORY ISSUES: D&D

**D and H Reactor Interim Agreement Milestones:** The acceleration of the D and H Reactor Interim Agreement milestones, specifically the competitive bid and the milestone (M-93-12) for DR Reactor.

Green

**Status:** Interim discussions with the contractors are begun. This will be completed as part of RL's 100 Area activities.

#### EXTERNAL ISSUES (i.e. HAB, Congress, etc.): D&D

None identified at this time.

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

**233S- ProcessHood:** 232 items of nondestructive assay (NDA) information previously provided by Fluor Hanford (FH) Plutonium Finishing Plant (PFP) in final data reports are invalid because of calibration errors that occurred in May 1999.



Status: FH PFP provided an initial report indicating the extent of the error. Subsequent to that report FH PFP has reported additional discrepancies which also affect the validity of the data.

Based on preliminary and subsequent information, BHI determined that no authorization basis limits were impacted. Items shipped to ERDF will be assessed to assure proper waste classification. The additional discrepancies that PFP reported have resulted in delays in completing this review.

A BHI schedule identifying actions to address these issues has been provided to EPA. Low level waste (LLW) shipments to ERDF were halted and an approval process has been ~~set~~ up allowing shipments of LLW to be disposed of in ERDF after receiving EPA approval. BHI will complete the assessment of the impact on waste shipments once FH PFP provides a complete description of the magnitude and extent of the errors.

**INTEGRATION ACTIVITIES: D&D**

None identified at this time.

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

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT  
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## **SECTION B – RESTORING THE RIVER CORRIDOR**

**Financial / Performance Measures data as of month-end June.  
All other data as of July 27, 2001 (unless otherwise noted).**

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

#### **ACCOMPLISHMENTS: PM&S**

##### **COMPLIANCE QUALITY SAFETY AND HEALTH:**

**Safety and Health:** During June, annual fire protection assessments were performed at U Plant, B Plant, 224-B, REDOX, and Plant 111. U Plant Reduction Extraction (REX) building.

ERC Safety and Health personnel participated in the 2001 Fire Site Emergency Preparedness field exercise that was held in June.

##### **PROGRAM AND PROJECT SUPPORT:**

**Procurement and Property Management:** The ERC continues to meet or exceed socio-economic contracting goals for FY01. The FY01 socio-economic contractual goals versus actual percentages (through June) are as follows:

Total	Small Business	Goal: 50.0%	Actual: 50.5%
	Small Disadvantaged Business	Goal: 6.5%	Actual: 18.9%
	Women-Owned	Goal: 3.5%	Actual: 4%

##### **ENGINEERING AND TECHNOLOGY**

**Environmental Technologies:** At the 2001 DOE Pollution Prevention Conference in Albuquerque, New Mexico held on June 16-22, Bechtel Hanford, Inc. (BHI) received a national pollution prevention award for its work and implementation of the Small Diameter Geophysical Logging System. BHI also received a runner-up award for utilizing value methodology in assessing waste minimization opportunities.

**Technology Applications:** ERC Technology Applications personnel supported deployment of the Remote Soil Removal System. This system consists of a Brokk™ 330N excavator that is being used for remote characterization and material removal at the F Reactor Fuel Storage Basin (FSB).

##### **PLANNING AND CONTROLS:**

The FY02 Detailed Work Plan (DWP) kickoff meeting was held on June 27. Representatives from ERC, RL, regulators, and stakeholders were in attendance. The FY02 DWP Development Process Guidance document was also issued.

Potential impacts were transmitted to RL site management regarding the proposed site-wide change control procedure. Support was also provided in development of interfaces between the ERC change control process and the RL process.

Support continued for the FY03 budget development effort. Support also continued for various FY02 funding exercises as requested by RL and HQ.

Green

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

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<b>SAFETY/ISMS/CONDUCT OF OPERATIONS: PM&amp;S</b>	
See Executive Summary.	
<b>BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVMENT: PM&amp;S</b>	
None identified at this time.	
<b>LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: PM&amp;S</b>	
<p><b>Six Sigma:</b></p> <ul style="list-style-type: none"> <li>• Implementation of Six Sigma program across the ERC.</li> <li>• Phase II process improvements continue for the <u>Waste Management PIP</u> (PIP# 1) which was completed in April.</li> <li>• The <u>ERC Procedure Development PIP</u> (PIP#2) was completed in June.</li> <li>• The <u>Radiation Control Instrumentation PIP</u> (PIP#3) is in the "Improve Phase" and is about 60% complete.</li> <li>• The <u>Contaminated Concrete Demolition PIP</u> (PIP #4) Draft "Business Plan" has been developed.</li> <li>• BHI leads the effort on the <u>NV / RL Waste Management PIP</u>, which is currently in the "Measure" phase.</li> <li>• On June 21, The ERC Six Sigma Yellow Belts held their first report out session with ERC and DOE management.</li> </ul>	<div style="border: 3px double black; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <b>Green</b> </div>
<b>MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): PM&amp;S</b>	
<ul style="list-style-type: none"> <li>• <b>DOE Secretarial:</b> None identified at this time.</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>DOE EM Performance Agreement:</b> None identified at this time.</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Tri-Party Agreement Milestones:</b> None identified at this time.</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>DNFSB Commitment:</b> None identified at this time.</li> </ul>	



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
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**PERFORMANCE OBJECTIVES: PM&S**

Comprehensive Measures

Comprehensive Measure	Task	Status
<b>Safety</b>	<ul style="list-style-type: none"> <li>The Contractor shall protect worker safety and health, public safety and health, and the environment.</li> </ul>	<b>Reference the Safety</b> Section of the Cross-Cutting package.
<b>Operational Excellence</b>	<ul style="list-style-type: none"> <li>Migrate systems to facilitate PBS restructuring in FY02</li> <li>Rebaseline completed per Baseline Updating Guidance (BUG)</li> <li>Integrate technology into Projects</li> <li>Achieve pollution prevention/waste minimization</li> </ul>	Rebaseline activities completed on 1/10/01. All other activities on schedule for completion as planned, however DWP preparation activities are being compressed due to delayed receipt of formal planning guidance.
<b>Effective Leadership</b>	<ul style="list-style-type: none"> <li>Management Effectiveness</li> <li>Customer Satisfaction</li> <li>Effective Financial Management</li> <li>Cost/Price Analysis</li> </ul>	A concern was raised by the RL Faality Representative with regard to improving productivity at 233-S. BHI responded that work is being conducted in accordance with the DWP, which was validated by all parties.

Green

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

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### PERFORMANCE MEASURES/METRICS: PM&S

ERC identified five technologies to be deployed during FY01. Through June, nine technologies have been deployed.

Technology Deployment	PBS	(F)/(A) Date
Remote Retrieval System (Brokk™ 330N with appropriate attachments)	RL-ER06	6/01 (A)
3D Visual and Gamma Imaging System (Gamma Cam)	RL-ER06	2/01 (A)
In Situ Object Counting System (ISOCS)	RL-ER06	2/01 (A)
Polyshield SS-100 Fixative	RL-ER01	12/00 (A)
Surveillance and Measurement Model 935	RL-ER01	5/01 (A)
Ultrasonic Liquid Level Detection	RL-ER06	2/01 (A)
Guzzler Vacuum Truck	RL-ER03	2/01 (A)
Laser-Assisted Ranging and Data System	RL-ER06	3/01 (A)
Compact Remote Console	RL-ER06	6/01 (A)

Green

### STRETCH AND SUPERSTRETCH GOALS: PM&S

None identified at this time.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

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### PROJECT STATUS (COST/SCHEDULE): PM&S

• **Schedule:**

Program Management & Support	BCWS \$K	BCWP \$K	Variance \$K
ER10 ERC Program Management & Support	22,123	21,888	(235)
ER10 RL Program Management & Support	4,379	3,270	(1,109)
<b>TOTAL PM&amp;S</b>	<b>26,502</b>	<b>25,158</b>	<b>(1,344)</b>

Green

**PBS-ER10** - Program Management and Support

Schedule Variance = **(\$1344K)**; (5.1%) [Last Month: **(\$1569K)**; (6.6%)]

Cause: Hanford Environmental Information System (HEIS)/Hanford Geographic Information System (HGIS)/Waste Information Data System (WIDS), project specific databases **staffs**, and Regulatory Support staff are working on higher priority direct project scope.

**Resolution:** Temporary schedule delay; subcontractor/temporary labor and summer student on board.

Cause: Late billing to RL on site-wide assessments.

Resolution: RL is discussing billing/timing with other site contractors/government agencies.

• **Cost:**

Program Management & Support	FY01 EAC	BCWP \$K	AWP \$K	Variance \$K
ER10 ERC Program Management & Support	30,492	21,888	21,039	849
ER10 RL Program Management & Support	6,143	3,270	3,270	
<b>TOTAL PM&amp;S</b>	<b>36,635</b>	<b>25,158</b>	<b>24,309</b>	<b>849</b>

Green

**PBS-ER10** - Program Management and Support

Cost Variance = **\$849K**; 3.4% [Last Month: **\$423K**; 1.9%]

Cause: Records and Document Control, Procurement, Design Engineering, and Sample and Data Management support needs were less than anticipated.

Resolution: Underrun has been trended and is reflected in the EAC.

### REGULATORY ISSUES: PM&S

None identified at this time.

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**EXTERNAL ISSUES (i.e. HAB, Congress, etc.): PM&S**

None identified at this time.

**DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): PM&S**

None identified at this time.

**INTEGRATION ACTIVITIES: PM&S**

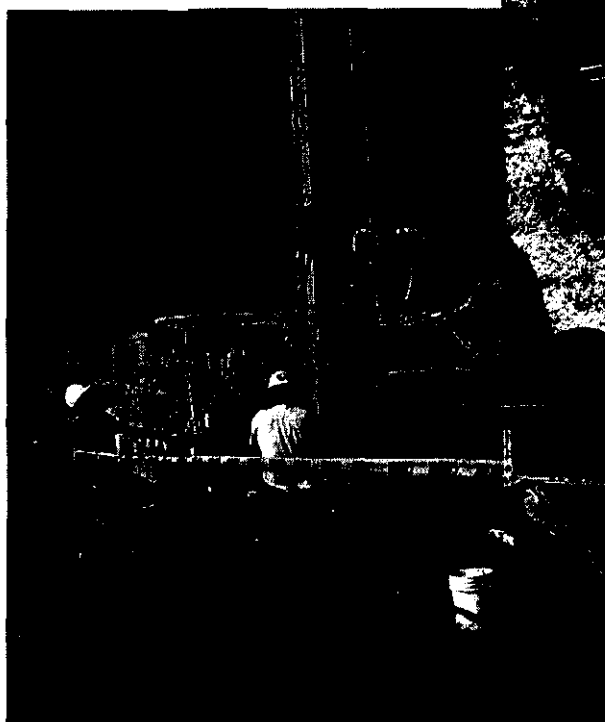
None identified at this time.

# Environmental

August 2001

## Section C - Central Plateau Information

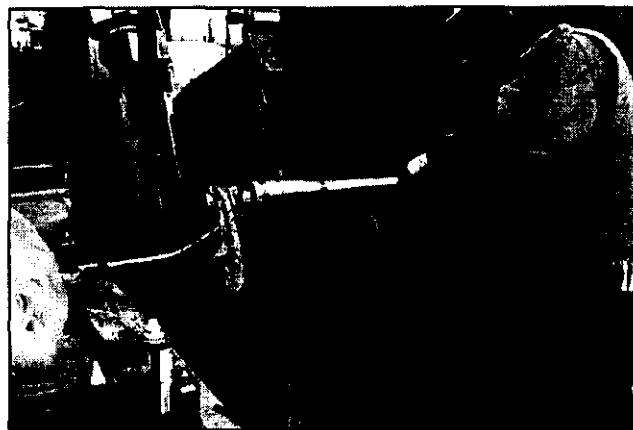
- Groundwater/Vadose Zone Integration Project
- Surveillance/Maintenance & Transition Projects



Well Decommissioning



A Downhole Well Casing Perforator  
Being Used In Decommissioning  
Activities



Exhaust Fan Repair at REDOX

***Focused on Progress...***  
***Focused on Outcomes!***

**r** Financial/Performance Measures data as of month-end June.  
All other data as of July 27 (unless otherwise noted).



**Department of Energy**  
Richland Operations Office



**Bechtel Hanford, Inc.**  
Environmental Restoration Contractor

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# **Groundwater/Vadose Zone Integration Project (GW/VZ)**

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## **SECTION C – TRANSITIONING THE CENTRAL PLATEAU**

**Financial / Performance Measures data as of month-end June.  
All other data as of July 27, 2001 (unless otherwise noted).**

### **Groundwater/Vadose Zone Integration Project(GW/VZ):**

#### **KCOMPUSHMENTS: GW/VZ**

##### **GW/VZ INTEGRATION PROJECT:**

**Science and Technology:** Biological fate and transport experiments were initiated. These experiments will help determine impacts of technetium-99 on aquatic species.

##### **GROUNDWATER MANAGEMENT:**

**Long-Term Groundwater Monitoring:** Colloidal borescope field investigations were completed for A-AX and C Single shell tank farm wells. Evaluation of the investigation results is underway.

**Remediation:** Well drilling was initiated at 200-UP-1.

**In Situ Redox Manipulation(ISRM) Project:** During June, well installation operations were completed for Phase II of the ISRM project. Barrier well injections are ongoing.

**Well Decommissioning:** The final contract was awarded for FY01 well decommissioning operations. 90 wells are planned for decommissioning this fiscal year with 70 wells completed through June. Decommissioning for the remaining 20 wells is planned to be completed by mid-August.

**Carbon Tetrachloride Investigation:** All characterization and drilling activities were completed at the Z-9 site.

**Tritium Investigation:** The sample analysis plan was approved by the regulators for the 618-11 Burial Ground tritium investigation. Sampling and well drilling activities are planned to be initiated in early August.

**Summary of five Pump and Treat Systems:** All groundwater pump and treat systems operated above the planned 90% availability levels in June. Since system inception, the five pump and treat systems have processed over 5 billion liters of groundwater, removing approximately 5,549 kilograms of carbon tetrachloride, 248 kilograms of chromium, and 1.04 curies of strontium. Approximately 870 million liters of groundwater have been processed in FY01, removing approximately 967 kilograms of carbon tetrachloride, 55 kilograms of chromium, and 0.151 curies of strontium.

The 200-ZP-2 soil vapor extraction system was successfully restarted in April, as planned. Approximately 426 million liters of vapor were processed during June, removing 75 kilograms of carbon tetrachloride. 1.4 billion liters have been processed in FY01, with 267 kilograms of carbon tetrachloride removed.

**Green**

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

<b>COMPUSHMENTS continued: GW/VZ</b>	
<p><b>200 AREA ASSESSMENT:</b></p> <p>Field mobilization and drilling pre-start activities were completed at the 216-T-26 Crib. In addition, 200 Area geophysical logging Field operations were initiated during June. The First logging was performed at the 216-T-26 Crib which directly supports the 200-Tw-1 Operable Unit field characterization work.</p> <p>Separate briefings were presented to the Yakima Tribal Nation, Washington State Department of Fish and Wildlife, and the Natural Resources Trustee Council on the strategy and current status of collecting and evaluating ecological resource Information for the Central Plateau.</p>	<div style="border: 2px solid black; padding: 5px; width: 60px; margin: 0 auto;">Green</div>
<b>SAFETY/ISMS/CONDUCT OF OPERATIONS: GW/VZ</b>	
See Executive Summary.	
<b>BREAKTHROUGHS/OPPORTUNITIES FOR IMPROVEMENT: GW/VZ</b>	
None identified at this time.	
<b>LONG-TERM (6 MONTHS PLUS) IMPORTANT ITEMS: GW/VZ</b>	
None identified at this time	
<b>MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS): GW/VZ</b>	
<ul style="list-style-type: none"> <li>• <b>DOE Secretarial:</b> None identified at this time.</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>DOE EM Performance Agreement</b> None identified at this time.</li> </ul>	

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

### AUGUST 2001

#### MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: GW/VZ

- Tri-Party *Agreement* Milestones:

Milestone	Description	Due Date	(F)/(A) Date
<b>M-13-00K</b>	Submit One 200 NPL RI/FS (RFI/CMS) Work Plan	12/31/00	12/21/00 (A)
<b>M-13-25</b>	Submit Uranium Rich Process Waste Group (200-PW-2) Work Plan	12/31/00	12/21/00 (A)
<b>M-24-46</b>	Install Three Additional Wells at SST WMA S-SX	12/31/00	12/27/00 (A)
<b>M-24-47</b>	Install Four Additional Wells at SST WMA T	12/31/00	12/27/00 (A)
<b>M-24-48</b>	Install Three Additional Wells at SST WMA TX-TY	12/31/00	12/27/00 (A)
<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	12/27/00 (A)
<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 Three Additional Wells at SST WMA S-SX	4/30/01	3/30/01 (A)
<b>M-24-50</b>	Install Two Additional Well at SST WMA TX-TY	4/30/01	4/02/01 (A)
<b>M-15-41A</b>	Complete 200-TW-1 OU Field Work through Drilling and Sample Collection	10/31/01	10/31/01 (F)
<b>M-15-42A</b>	Complete 200-TW-2 OU Field Work through Drilling and Sample Collection	10/31/01	10/31/01 (F)
<b>M-13-26</b>	Submit Plutonium/Organic-Rich (200-PW-1) Work Plan	12/31/01	12/31/01 (F)
<b>M-13-00L</b>	Submit Three 200 NPL RI/FS (RFC/CMS) Work Plans	12/31/01	12/31/01 (F)
<b>M-16-27B</b>	Complete 100-HR-3 Phase II, ISRM Barrier Emplacement (Planning, Well Installation, and Barrier Emplacement)	12/31/01	12/31/01 (F)
<b>M-24-51</b>	Install Three Additional Wells at SST WMA B-BX-BY	12/31/01	8/31/01 (F)
<b>M-24-52</b>	Install Three Additional Wells at SST WMA U	12/31/01	9/28/01 (F)
<b>M-24-53</b>	Install Two Additional Wells at SST WMA TX-TY	12/31/01	9/28/01 (F)
<b>M-24-54</b>	Install One Additional Well at SST WMA T	12/31/01	10/31/01 (F)
<b>M-24-55</b>	Install Two Additional Wells at SST WMA S-SX	12/31/01	10/31/01 (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	10/31/01 (F)

Green

Yellow

Green

\*M-13 series milestones will require renegotiation to reflect the revised 200 Area strategy. This issue has been discussed with the regulators at the last three *Tri-Party Agreement* Quarterly Reviews. A *Tri-Party Agreement* change request is being prepared to modify M-13-00L and will be forwarded to the regulators by August 31. Regulators have indicated they will address individual milestones on a case-by-case basis.

- DNFSB Commitment:  
None identified at this time.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT ENVIRONMENTAL RESTORATION

AUGUST 2001

## PERFORMANCE OBJECTIVES GW/VZ

### GW - ISRM Barrier

- Drill 24 wells and inject sodium dithionite by 9/30/01

Well drilling schedule has been recovered. Continuing to evaluate barrier performance.

CV <5.0%; SV <7.5% for BHI portion of ER-08

### GW - 618-11 Tritium Plume

- Drill wells to establish 20,000 pCi/L Contour, Collect Groundwater Samples by 9/30/01 (**Stretch**)

Four wells have been identified with a fifth in question. BHI is evaluating if all deferred work can be evaluated in FY01, due to late start when not under BHI control.

**Green**

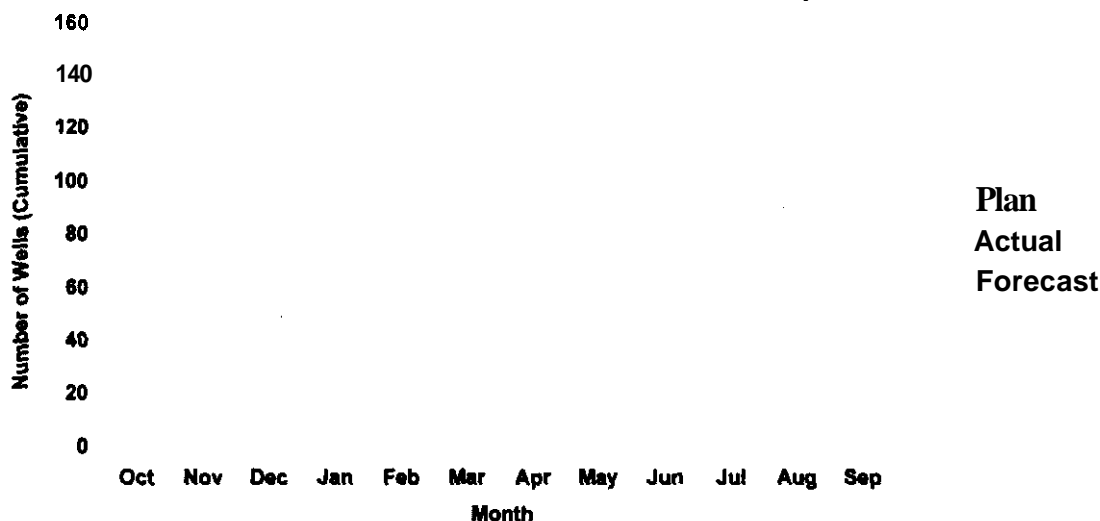
CV <5.0%; SV <7.5% for BHI portion of ER-08

(\*Detail Section 6C)

## PERFORMANCE MEASURES/METRICS: GW/VZ

### FY 2001 Routine Well Maintenance Completion

**Green**



Includes Site (P61202) - 88 Wells and CERCLA (P61202) - 46 Wells

Cumulative										Jul	Aug	Sep
Plan	12	24	38	51	64	73	87	110	118	128	134	
Actual	8	15	34	52	70	78	79	85	96			
Forecast									109	122	134	

Notes: Plan: Well Maintenance is planned on a quarterly basis and spread evenly by month for purposes of this graph.  
Forecast: When wells are "released" to the subcontractor for maintenance, he is given 90 days for completion. That is also spread evenly by month, for that 90-day period, for this graph.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

AUGUST 2001

### STRETCH AND SUPERSTRETCH GOALS: GW/VZ

FY01 GW/VZ "Stretch" Goals	Approved BCPs (K)
Tritium Plume at 618-11 Burial Ground – Collect GW Samples by 9/30/01 (BCP 21090 approved 1/01)	\$595.4K
S/Total GW – Vadose Zone Stretch Goals:	\$595.4K

Green

FY01 GW/VZ "Superstretch" Goals	Approved BCPs (K)
*Complete Remediation of 60 Square Miles of Hanford Site: (1) River Corridor Well Decommissioning (90 wells)	\$1581.3K
S/Total GW – Vadose Zone Superstretch Goals:	\$1581.3K

Green

\*Carried over from M00.

### PROJECT STATUS (COST/SCHEDULE): GW/VZ

- Schedule:**

GW/VZ Integration Project	BCWS \$K	BCWP \$K	Variance \$K
ER02 200 Area Remedial Actions	2,605	1,348	(1,257)
ER08 Groundwater Management	21,766	20,410	(1,356)
VZ01 Groundwater/Vadose Zone	8,769	7,673	(1,096)
<b>TOTAL Groundwater</b>	<b>33,140</b>	<b>29,431</b>	<b>(3,709)</b>

Green

#### PBS-ER02 – 200 Area Remedial Action (Assessment)

Schedule Variance = (\$125710; **(48.3%)**) [Last Month: (\$1004K); (47.5%)]

**Cause:** Delay in TW-2 start of drive casing installation and borehole drilling; difficulties in coordinating the many cross-project field activities slowing progress.

**Resolution:** Subcontract has been awarded and drilling activities began June 22; schedule supports completion of drilling activities by the end of September. Field closeout and demobilization will carry over to FY02.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT**  
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**PROJECT STATUS (COST/SCHEDULE) continued: GW/VZ**

**PBS-ER08 - Groundwater Management**

Schedule Variance = **(\$1356K); (6.2%)** [Last Month: (\$1389K); (7.3%)]

**Cause:** RCRA well drilling delayed due to radiation contaminated soil discovery, waste shipments being placed on hold to pursue regulator recommended approach, and relocation of three wells.

**Resolution:** Aggressive schedule in place; some schedule recovery identified. Three drill rigs will be used rather than two; waste disposal will carry over to FY02.

**Cause:** Routine well maintenance delayed to support non-routine sampling. Well decommissioning delays caused by extended well documentation search and selection.

**Resolution:** Contractor is developing a recovery schedule for well maintenance. Documentation was updated to accurately account for Hanford wells. Well D&D contractor mobilized on May 2; second contract awarded June 15; scheduled for completion by the end of August.

**Cause:** Pacific Northwest National Laboratory (PNNL) groundwater modeling and monitoring on Hydrogeologic Framework and Uncertainty Analysis tasks are behind schedule due to resources deployed to higher priority work. Monitoring Network Design awaiting decisions on Low Level Burial Grounds RCRA boundary.

**Resolution:** Decisions on site boundaries outside of project influence; Hydrogeologic Framework tasks have been accelerated with completion expected in August. Ecology has transmitted a letter allowing proposals for alternate monitoring approaches; work will begin on these approaches for interim status sites.

**PBS-VZ01 - Groundwater/Vadose Zone**

Schedule Variance = **(\$1096K); (12.5%)** [Last Month: (\$955K); (12.1%)]

**Cause:** Shakedown runs for historical matching took longer than anticipated, delaying the start of the model runs and preparation of the assessment report.

**Resolution:** Several software and data problems have been identified, and are being addressed. Delay will not impact completion of work scheduled this year.

**Cause:** The Soil Inventory S&T Task study did not start as scheduled due to key staff on medical leave.

**Resolution:** A plan has been developed to recover a portion of the schedule; partial carryover has been identified.

**Cause:** Experimental work on B-BX-BY tank farm samples delayed due to Office of River Protection (ORP) stand down.

**Resolution:** A plan has been developed to recover a portion of the schedule; partial carryover has been identified.

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

AUGUST 2001

### PROJECT STATUS (COST/SCHEDULE) continued: GW/VZ

■ cost:

GW/VZ Integration Project	FY01 EAC	BCWP	ACWP	Variance
		\$K	\$K	\$K
ER02 200 Area Remedial Actions	4,194	1,348	1,450	(102)
ER08 Groundwater Management	30,738	20,410	20,085	325
VZ01 Groundwater/Vadose Zone	10,600	7,673	7,293	380
<b>TOTAL Groundwater</b>	<b>45,532</b>	<b>29,431</b>	<b>28,828</b>	<b>603</b>

Green

**PBS-ER02 - 200 Area Remedial Action (Assessment)**

Cost Variance = **(\$102K); (7.6%)** [Last Month: (\$118K); (10.6%)]

**Cause:** Overrun due to additional pre-job planning and field work preparatory activities at 200-TW-1 Operable Unit (OU), and the identification of additional potential sources of contamination at 200-PW-1 OU.

**Resolution:** Overrun has been trended and reflected in the EAC.

**PBS-ER08 - Groundwater Management**

Cost Variance = **\$325K; 1.6%** [Last Month: \$346K; 1.9%]

**Cause:** Sample collection and analysis underruns due to efficiencies in planning well trips and analyses, and other Hanford contractors' costs being less than planned. Underrun offset by an overrun in 100-HR-3 chemical treatment upgrades.

**Resolution:** Underrun has been trended. Overrun has been trended. Both have been reflected in the EAC.

**PBS-VZ01 - Groundwater/Vadose Zone**

Cost Variance = **\$380K; 5.0%** [Last Month: \$242K; 3.5%]

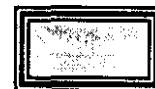
**Cause:** Phase I Features, Events, and Processes (FEP) review by Characterization of Systems (COS) required fewer resources than planned; offsetting overrun in System Assessment Capability (SAC) historical matching related to system enhancements. S&T is underrunning due to a credit from a FY 2000 accrual reversal and efficiencies.

**Resolution:** Underrun will be trended and reflected in the EAC. Work on individual technical element history matching is complete and no additional variances are anticipated. Runtime reductions have been implemented and the project continues to seek ways to streamline the overall history matching and Initial assessment runs.

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**REGULATORY ISSUES** GW/VZ

**Tri-Party Agreement M-13-00x** and M-20-xx Milestones: *Tri-Party Agreement* Milestone M-13-00L requires the submittal of three 200 National Priorities List (NPL) Remedial Investigation/Feasibility Study (RI/FS) work plans by December 31, **2001**. One work plan is in process (200-PW-1). A change request addressing the other two work plans is being prepared and will be submitted to the Washington State Department of Ecology (Ecology). RL management, in consultation with the U.S. Environmental Protection Agency (EPA), Ecology, and the Hanford Advisory Board (HAB), developed an alternate approach for completing the assessment of the **200 Area** non-tank farm operable units on the Hanford Site. The alternate approach calls for completion of the characterization of **12** representative analogous waste site operable units by **2008**.



**status:** RL's long range plan is based on the alternate assessment approach for the **200 Area**. This approach would require modification of several *Tri-Party Agreement* milestones including the **M-13** and **M-20** major milestones. *Tri-Party Agreement* change requests are being prepared and will be forwarded for regulatory review and approval. It is RL's intent to formally transmit the change requests to Ecology no later than August 31, **2001**. Since these change requests affect *Tri-Party Agreement* major milestones, a public review will be required. The regulatory agencies have previously expressed interest in negotiating the **200 Area** changes in conjunction with negotiation of the **M-16-00F** (Establish Date for Completion of All 100 Area Remedial Actions) and **M-16-03A** (Establish Date for Completion of **300 Area** Remedial Actions).

**EXTERNAL ISSUES (i.e. HAB, Congress, etc.):** GW/VZ

None identified at this time.

**DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere):** GW/VZ

None identified at this time.

**INTEGRATION ACTIVITIES:** GW/VZ

**RCRA Well Installation:** The drilling contract was awarded for the calendar year 2001 (CY01) RCRA well installations. Eleven wells are planned for installation by December 31, **2001**. The first six wells will be installed in support of the Office of River Protection (ORP) project.

Yellow



# **Surveillance/ Maintenance and Transition Projects (SM&T)**

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ENVIRONMENTAL RESTORATION  
AUGUST 2001

## SECTION C – TRANSITIONING THE CENTRAL PLATEAU

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

All other data as of July 27, 2001 (unless otherwise noted).

### Surveillance/Maintenance & Transition Projects (SM&T):

#### ACCOMPLISHMENTS: SM&T

**Surveillance and Maintenance:** S&M activities that were performed in June to ensure inactive facility integrity and safety included the following:

- Completed the stabilization of the 216-A42 Retention Basin.
- Completed Phase II herbicide spraying of all vegetated areas.
- Completed asbestos abatement in the 100 N Area.
- Commenced asbestos abatement at the 224-U facility in the 200 Area.
- Commenced roof repairs at 212-N and 212-R facilities.
- Completed exhaust fan #1 repair at Reduction Oxidation (REDOX) facility.
- Continued developing rough order of magnitude (ROM) cost estimate/schedule for hexone tank removal.
- Supported a public meeting held on June 26 that solicited public comment on the B Reactor Engineering Evaluation/Cost Analysis (EE/CA). The Hanford Advisory Board (HAB) provided consensus support for the preferred alternative of the EE/CA (hazard mitigation for public access for a ten-year period).

**Canyon Disposition Initiative (CDI):** The feasibility study is nearing completion in support of the CDI. The feasibility study will provide a detailed analysis of several alternatives to be considered for the final disposition of the defunct 221-U facility (U Plant) chemical processing canyon facility. This study is also expected to influence final disposition determination for the four additional canyon facilities on the Hanford Site.

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

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

AUGUST 2001

### MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS) continued: SM&T

- **Tri-Party Agreement** 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): SM&T

- **Schedule:**

Surveillance/Maintenance & Transition Project	BCWS \$K	BCWP \$K	Variance \$K
<b>ER05 Surveillance &amp; Maintenance</b>	10,458	10,066	(392)
<b>ER07 Long-Term Surveillance &amp; Maintenance</b>	25	41	16
<b>TOTAL SM&amp;T</b>	<b>10,483</b>	<b>10,107</b>	<b>(376)</b>

Green

#### PBS-ER05 – Surveillance and Maintenance

Schedule Variance = **(\$392K); (3.7%)** [Last Month: (\$708K); (7.4%)]

**Cause:** In the Detailed Work Plan (DWP), the assumption was that the asbestos abatement subcontract would be awarded and expended in November 2000. Combining 100 and 200 Area asbestos work subsequently resulted in a subcontract where work will commence in April 2001 and still finish this fiscal year, causing a temporary negative schedule variance.

**Resolution:** A subcontract has been placed to execute work scope activities. Work is planned from April through August 2001. Full schedule recovery is expected.

**Cause:** REDOX Plant canyon roof repair subcontract bid/evaluation took longer than planned. The contract was awarded in May.

**Resolution:** Work is anticipated to **start** in July and be completed by September.

#### PBS-ER07 – Long-Term Surveillance and Maintenance (BCWS \$59K for FY01)

Schedule Variance = N/A

# ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

## ENVIRONMENTAL RESTORATION

AUGUST 2001

### PROJECT STATUS (COST/SCHEDULE) continued: SM&T

■ **Cost:**

Surveillance/Maintenance & Transition Project	FY01 EAC	BCWPS \$K	ACWP \$K	Variance \$K
<b>ER05 Surveillance &amp; Maintenance</b>	12,631	10,066	9,271	795
<b>ER07 Long-Term Surveillance &amp; Maintenance</b>	25	41	9	32
<b>TOTAL SM&amp;T</b>	<b>12,656</b>	<b>10,107</b>	<b>9,280</b>	<b>827</b>

Green

**PBS-ER05 - Surveillance and Maintenance**

Cost Variance = \$795K; 7.9% [Last Month: \$668K; 7.5%]

Cause: Underruns in 200 Area S&M work, herbicide application, subcontract costs and RARA interim stabilization; underruns are offset by hexone tank sampling cost overruns from additional engineering, additional job hazard analysis, and higher mobilization costs.

Resolution: Overall underrun has been trended and is reflected in the EAC. Sampling costs will continue to overrun and have also been trended and reflected in the EAC.

**PBS-ER07 - Long-Term Surveillance and Maintenance (BCWS \$59K for FY01)**

Cost Variance = N/A

### REGULATORY ISSUES: SM&T

None identified at this time

### EXTERNAL ISSUES (i.e. HAB, Congress, etc.): SM&T

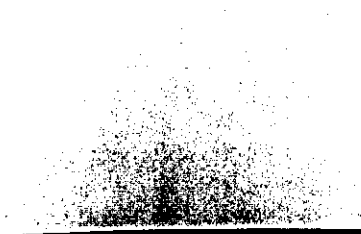
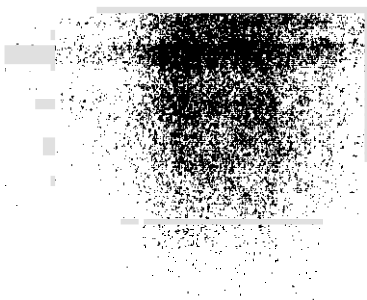
None identified at this time

### DOE-RL & HQ ISSUES/REQUESTS (not covered elsewhere): SM&T

None identified at this time

### INTEGRATION ACTIVITIES: SM&T

None identified at this time



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# Pacific Northwest National Laboratory Environmental Management Performance Report

**August 2001**

**PREPARED FOR THE U.S. DEPARTMENT OF ENERGY, RICHLAND C  
OFFICE OF ENVIRONMENTAL MANAGEMENT**

**OFFICE**

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**Pacific Northwest National Laboratory  
Operated for the U.S. Department of Energy  
by Battelle Memorial Institute**

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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.

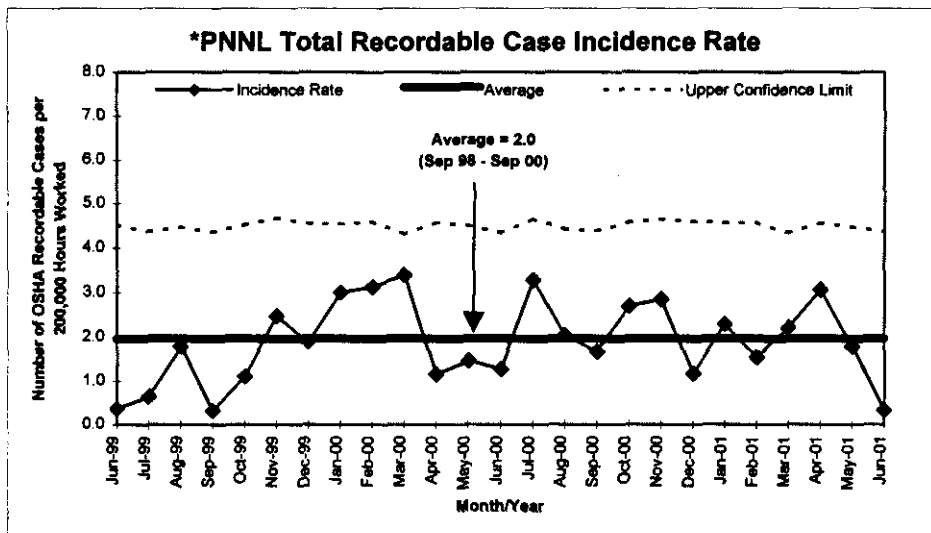
Section B, Project Performance *Summary*, provides a brief *summary* of the month's performance for the PNNL lead activity, PNNL Waste Management (PBS RL-STOI). More detailed information can be found within PNNL-7911-117a, PNNL's Project Status Report for June 2001. *Summary* analyses pertaining to PNNL's 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 June 24, 2001

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, followed by a spotlight 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 FY 2001 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). PNNL received the formal acknowledgement of VPP Gold Star Flag Status on June 25, 2001, and will receive the flag and certificate formally July 25, 2001. The program status is reviewed annually. The workers commitment to safety and health excellence has been demonstrated in that PNNL has established a very strong safety and health culture, wherein both managers and workers share a common belief that all employees are responsible and accountable for safety and health in the workplace.



**FY 01 Rate Overview:**  
Cumulative To Date = 2.0  
Lab Specified Level  $\leq 2.2$

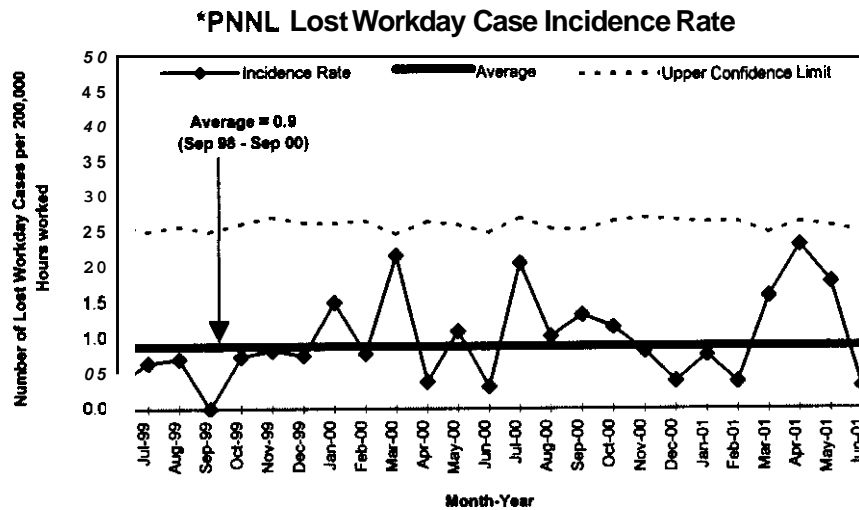
This indicator has been generally stable over the long term. The data for FY 2001 continue to randomly fluctuate within the anticipated control limits

\*Includes all Pacific Northwest National Laboratory Operations.

Green: Satisfactory

Yellow: Significant improvement required

Red: Unsatisfactory



**FY 01Rate Overview:**  
 Cumulative To Date = 1.1  
 Lab Specified Level  $\leq 1.1$

This indicator has been generally stable over the long term. The data for FY 2001 continue to randomly fluctuate within the anticipated control limits.

\*Includes all Pacific Northwest National Laboratory Operations.

Green: Satisfactory

Yellow: Significant improvement required

Red: Unsatisfactory

This section provides cost and schedule performance, any significant issues, and upcoming baseline change requests, if any, for the period covered, and quarterly status on baseline performance outcomes, objectives, and measures.. 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 multiprogramming 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 June 2001.

- Scheduled Radiochemical Processing Laboratory (RPL) radiological surveys and nuclear control inspections were performed. Eight facilities and sites were scheduled for inspection. ~~Staff~~ members completed inspections for 331-B, 331 Kennels, 314,314-B, 3708,303-C, 306-W Powder Lab, and 3745. No issues of significance were noted. Removal of sanitary and fire water lines from the shutdown facilities in the 300 Area have now been completed at 303-J, 3731-A, 3745,3745-B, 331-A, 331-B, 331-B Kennel, 3762, and 3708.
- Scheduled routine waste management activities were performed during the period. All air and water samples required during the month of June 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.
- One-hundred-thirty-nine 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.
- Fuel batching allotments on special case waste (SCW) fragments continue to be evaluated so packaging configurations can be determined. Disposition of SCW is scheduled to be completed this fiscal year. All legacy waste associated with the High-Dose Waste Disposal Task has been loaded into the 11 shipping drums. Six of the drums shipped in June, the first-ever shipment using the specially designed drums. This shipment satisfied a portion of TPA Milestone M-92-16.

**PNNL Environmental Management Performance Report - Fiscal Year 2001**  
**Section A - Executive Summary**

## Performance Data and Analysis

As of June 24, 2001 the cumulative costs are \$9.2M with a positive cost variance of \$0.38M and a cumulative schedule variance of negative \$1.1M. The cost and schedule variances are within the 10 % reporting threshold.

Cost Performance (\$M):			
	BCWP	ACWP	Variance
PNNL Waste Management	\$9.6	\$9.2	\$0.38

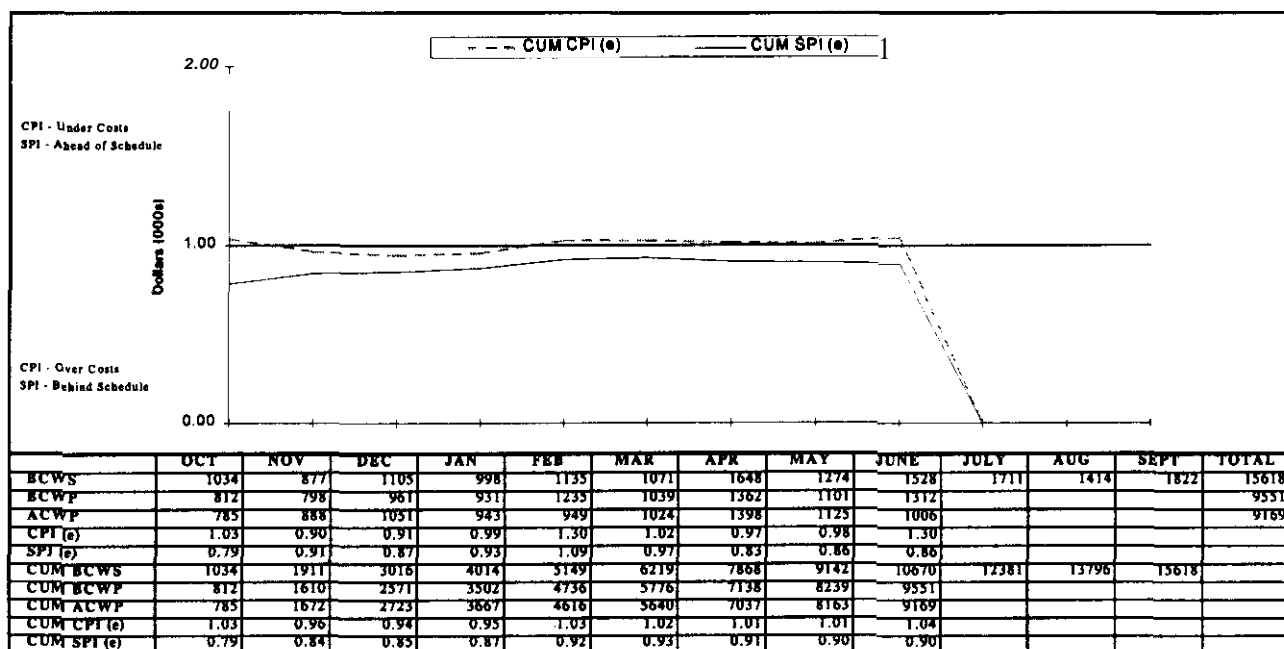
Schedule Performance (\$M):			
	BCWP	BCWS	Variance
PNNL Waste Management	\$9.6	\$10.7	(\$1.1)

### FY 2001 Cost/Schedule Performance - All Fund Types Cumulative to Date Status - (\$000)

WBS	PBS	BCWS	BCWP	ACWP	CV	%	SV	%
1.7.1	RL-STOI	\$10,670	\$9,551	\$9,168*	\$382	4	(\$1,118)	-10
Total		\$10,670	\$9,551	\$9,168*	\$382	4	(\$1,118)	-10

\*Numbers reflect PNNL system; per DISCAS actuals, including \$ expended by Fluor for S&M of 242B/BL, are \$9284.8. PNNL has \$1,573.0K carryover, is expecting \$14,076.0K B/A in FY 2001 for a total of \$15,649.0K. Current new B/A authorization is \$12,366.9K

Cum CPI / Cum SPI  
FY 2001 Cum to Date Status



## Cost/Schedule Performance Stoplight

The following rating reflects overall cost and schedule performance for activities conducted by PNNL. The cumulative costs are \$9.2M with a positive cost variance of \$0.38M and a cumulative schedule variance of negative \$1.1M. The cost and schedule variances are within the 10 % reporting threshold. *(Narrative not required when rating is green.)*



Green: Satisfactory

Yellow: Significant improvement required

Red Unsatisfactory



## Baseline Performance Outcomes, Objectives, and Measures

The baseline performance outcomes, objectives, and measures for **PNNL** Waste Management address "what are we doing." These measures are tied directly to the baseline and are maintained within baseline documentation. The information in the following table reflects the status against the measures through the third quarter of FY 2001.

RL Objective	RL Multi-Year Performance Measure	Performance Measure	Proposed FY 2001 EM Commitment: Y/N	TPA # CMM#	IN 2001
<b>RL Outcome: Put DOE assets to work for the future</b>					
Operational Excellence	Operate in a manner conducive to excellence and quality	Conduct routine operational activities to comply with statutory and regulatory requirements. specifically number of non-compliances (NOVs) related to environmental permit requirements	No		<2
	<b>Status:</b>	There were no Notice of Violations issued to PNNL during the third quarter of FY-2001.			
Operational Excellence	Operate in a manner conducive to excellence and quality	Maintain fiscal yearend cost and schedule variances within established thresholds	No		+/- 10%
	<b>Status:</b>	The WMOC Program cost variance for the third quarter is \$382K (4%) and is well within established thresholds. The schedule variance is -\$1.118K (-10%) and is within established thresholds.			
Safety	Protect workers, the public and the environment	Initiate appropriate response to any unsafe condition identified during surveillance and self assessments of EM facilities assigned to PNNL within x days of discovery (as shown to the right)	No		1
	<b>status:</b>	To date surveillances have not identified an) unsafe conditions in shutdown facilities. Only minor maintenance items have been noted and they have been appropriately addressed with service requests.  No unsafe conditions have been discovered in RPL that have resulted in an appropriate response initiation greater than one day. Any unsafe condition discovered in RPL is addressed immediately.			
Safety	Protect workers, the public and the environment	Quantity of HAZ waste (MT) shipped for storage or disposal	No		81,000
	<b>Status:</b>	During the third quarters of IN 2001, 4,314 Kgs of non-radioactive hazardous wastes were shipped. A total of 19,167 Kgs have been shipped for offsite treatment and disposal this fiscal year. This is in line with expected generation rates for IN 2001.			

**PNNL Environmental Management Performance Report  
Section B - Project Performance Summary**

Safety	Protect workers, the public and the environment	Quantity of LLMW (m <sup>3</sup> ) shipped for storage or disposal	No		22
	Status:	During the third quarter of FY 2001, .37 cubic meters of LLMW (Mixed Waste) were shipped for a total of 3.3 cubic meters for the fiscal year.			
Safety	Protect workers, the public and the environment	Quantity of LLW (m <sup>3</sup> ) shipped for storage or disposal	No		150
	status:	During the third quarter of FY 2001, 4.15 cubic meters of LLW (Low Level Waste) were shipped for a total of 23.3 cubic meters for the fiscal year.			
Safety	Protect workers, the public and the environment	Quantity of TRU waste (m <sup>3</sup> ) shipped for storage or disposal	No		6
	Status:	During the third quarter of FY 2001, 1.68 cubic meters of TRU (Transuranic waste) was shipped for a total of 4.8 cubic meters for the fiscal year.			
safety	Protect workers, the public and the environment	Radiochemical Processing Lab (RPL) Authorization Basis maintained current per scheduled milestone	No	RLST013104	7/31/01
	status:	Currently no safety issues exist in the RPL. As issues are identified, they are immediately addressed and mitigated.			

**RL Outcome: Restore the river corridor for multiple uses**

Disposition Surplus Buildings	Number of buildings dispositioned	Dispose remaining PNNL legacy waste by completing x% (shown to the right) of the Legacy Waste Project lifecycle baseline	No		7%
	status	Progress continues on the items in the baseline including significant progress on Special Case Waste. The first shipment of SCW has been completed. All of the Uranium fuel stored at 2718-E has been removed. Several drums of LLW have also been shipped. Glovebox remediation is continuing. A recent effort was completed to identify a streamlined means of accelerating backlog workoff, and this has been very successful to date.			
Disposition Surplus Buildings	Number of buildings dispositioned	Number of excess buildings/facilities transferred or torn down	No		2
	Status	A MOA was drafted, reviewed, and approved by RL for the transfer of 24 facilities to Fluor. Transfer of these facilities is anticipated by the end of this fiscal year.			
Disposition Surplus Buildings	Number of buildings dispositioned	Percentage completion of annually scheduled legacy waste and contamination milestones	No		>95%
	Status	No milestones due until later in the year			
Disposition Surplus Buildings	Number of buildings dispositioned	Support timely completion of TPA M-92-14: Complete disposition of - 6 kgs of PNNL SNF legacy waste by x date (9/30/2001)	No	RLST014103	
	Status			M-92-14	

**PNNL Environmental Management Performance Report**  
**Section B - Project Performance Summary**

Disposition Surplus Buildings	Number of buildings dispositioned	The completion of the design documents, <i>SARP</i> , was completed, procurement of the drums is 99% complete. Gathering the necessary information for disposition of the material is underway.	No	RLST014003 M-92-14	6/30/01
status:		Support timely completion of TPA M-92-14: Complete disposition of legacy HD-LLW and RH-TRU waste from PNNL Radiochemical Processing Laboratory hot cells by x date (shown at the right)			
Reduce risks to the Columbia River from ground water contamination	Number of soil sites addressed	The completion of the design documents, <i>SARP</i> , was completed. procurement of the drums is complete, the material is packaged, and the majority of the work scope associated with the shipment authorization of the material is completed.	No		0
Status:		Number of Waste Identification Data System Sites assigned to PNNL dispositioned (rejected, transferred or closed)  The 200-W-16 WIDS site was exchanged for the 323 Tanks WIDS site. This exchange brings a better operational alignment that will enable more efficient management of the sites. Accelerated remediation of the 323 site was initiated and should be completed in August. Three new WIDS sites are assigned to PNNL, one is being proposed for rejection under TPA-MP-14, one will be evaluated at a later date under TPA-MP-14, and the remaining will be evaluated using a process established in the associated Record of Decision.			
Reduce risks to the Columbia River from ground water contamination	Number of soil sites addressed	Percentage of Waste Identification Data System sites characterized and associated surveillance/ maintenance established	No		100%
Status:		All waste sites have basic characterization data, and identified S&M is being accomplished.			

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## 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 Workscope:** The estimated dollar amount of the workscope 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 workscope 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 (FYSF):** 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.