

Environmental Management Performance Report

August 2003



EO009031.1



Department of Energy
Richland Operations Office



Bechtel Hanford, Inc.
Environmental Restoration Contractor

Data as of month-end August

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003

TABLE OF CONTENTS

INTRODUCTION 1

SECTION A – EXECUTIVE SUMMARY 3

 NOTABLE ACCOMPLISHMENTS 3

 SAFETY 4

 MAJOR COMMITMENTS 9

 PERFORMANCE OBJECTIVES.....10

 TOTAL ERC COST/SCHEDULE OVERVIEW11

 ISSUES (REGULATORY/EXTERNAL/DOE)14

 KEY INTEGRATION ACTIVITIES14

 UPCOMING PLANNED KEY EVENTS14

SECTION B – RIVER CORRIDOR RESTORATION 15

 ACCOMPLISHMENTS.....15

 MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS).....17

 PERFORMANCE OBJECTIVES.....18

 PERFORMANCE MEASURES/METRICS19

 COST/SCHEDULE STATUS.....21

 ISSUES (REGULATORY/EXTERNAL/DOE)24

 INTEGRATION ACTIVITIES24

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003

INTRODUCTION

The monthly Environmental Restoration (ER) Environmental Management Performance Report (EMPR) consists of two sections: Section A - Executive Summary, and Section B – River Corridor Restoration. All data are current as of August 31, 2003, unless otherwise noted.

Section A – Executive Summary. The Executive Summary begins with a description of notable accomplishments for the current reporting month that are considered to have made the greatest contribution toward safe, timely, and cost-effective Hanford Site cleanup. Safety statistics are also included. Major commitments are summarized that encompass Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones. Fiscal year 2003 (FY03) performance objectives and status are provided. Fiscal year-to-date ER Project cost and schedule variance analysis is summarized. Issues that require management and/or regulator attention are addressed along with resolution status. The Key Integration Activities section highlights site activities that cross contractor boundaries, supporting overall Hanford Site goals. The Executive Summary ends with a listing of major upcoming planned key events (90-day look ahead).

Section B – River Corridor Restoration. This section contains more detailed Environmental Restoration Contractor (ERC) monthly activity information and performance status for the three Project Baseline Summaries (PBSs) within the River Corridor Restoration outcome. These three PBSs consist of RC01 - 100 Area River Corridor Cleanup, RC02 - 300 Area Cleanup, and RC05 - River Corridor Waste Management.

PBS SC01 - Near-Term Stewardship is structured within the Site Stewardship outcome. Due to the minimal FY03 workscope identified for this PBS, SC01 performance data is included in the Executive Summary cost/schedule overview.

Performance Incentive and Safety 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 that require immediate corrective actions.

Section A - Executive Summary



300 Area 618-4/5 Burial Ground Before Excavation



300 Area 618-4/5 Burial Ground After Excavation



Sampling Drummed Uranium Oxide Waste Prior to Treatment



Concrete Block Repair at B Reactor

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003

SECTION A – EXECUTIVE SUMMARY

Data as of month-end August

NOTABLE ACCOMPLISHMENTS

River Corridor Restoration:

Excavation of contaminated material from the effluent pipelines around C Reactor was completed. Characterization work on seven remaining sites in 100 B/C Area was also initiated.

Disposal of the 618-4 and 618-5 Burial Grounds' contaminated stockpiles into the Environmental Restoration Disposal Facility (ERDF) was completed during August. Confirmatory sampling activities for the two burial grounds were initiated. Demobilization of all subcontractor equipment and facilities was completed on August 29.

The 300 Area Regrading Request For Proposal (RFP) was sent to potential bidders on August 29.

A subcontract was awarded for treatment of the drummed uranium chips-in-oil waste that is currently stored at the ERDF interim staging area.

A Notice to Proceed was given to the subcontractor on August 19 for mobilization and construction of ERDF Cells 5 and 6. A pre-construction meeting was held on August 26. The construction quality control subcontractor's mobilization is progressing and will be ready to support construction activities in September.

The draft DR Reactor cleanup verification package (CVP) was transmitted to the U.S. Department of Energy (DOE) Richland Operations Office (RL) and the Washington State Department of Ecology (Ecology) for review.

F Reactor safe storage enclosure (SSE) construction activities were completed on August 21. A few open items remain and also bat mitigation efforts required before the reactor is closed up.

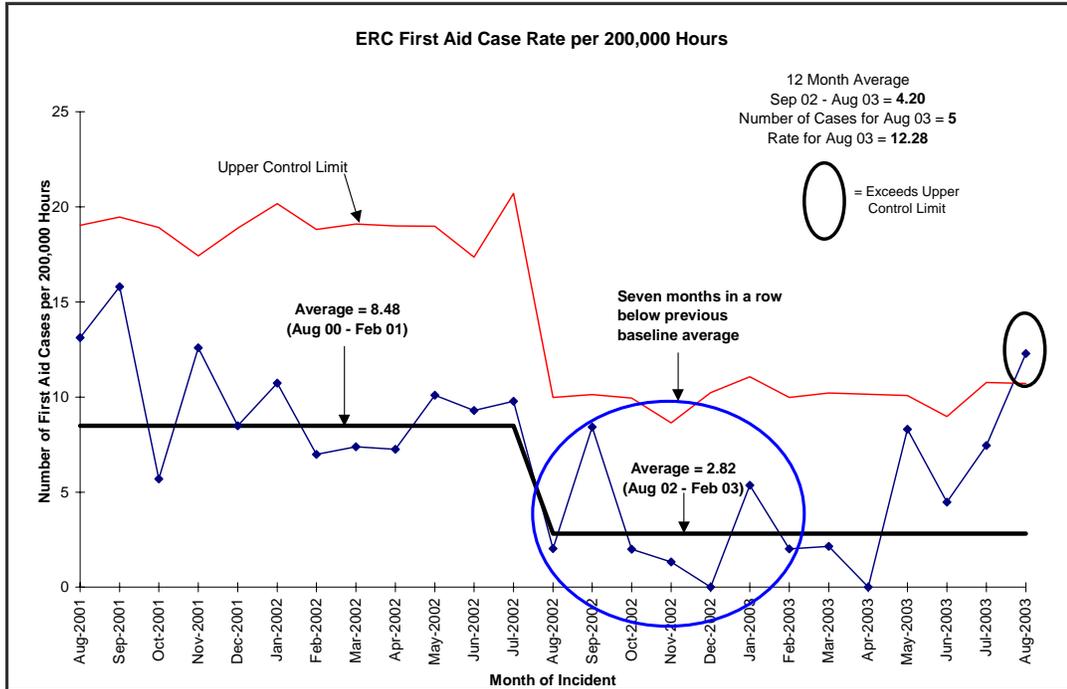
The KE Reactor roof repairs were completed during August.

B Reactor concrete block repairs were initiated.

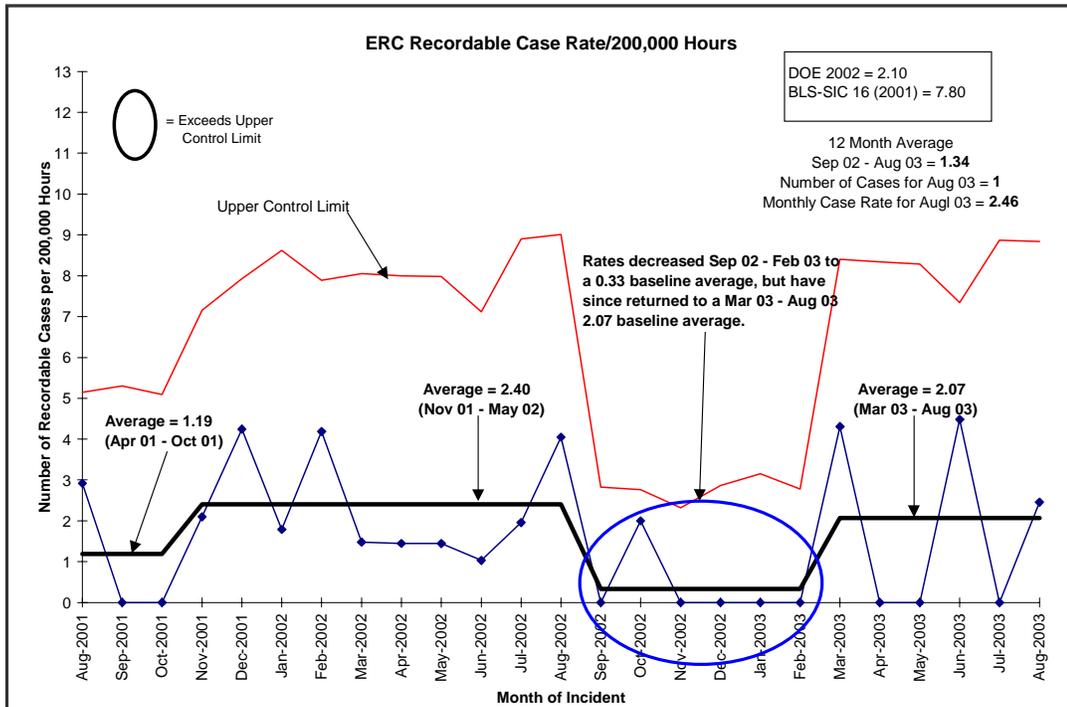
Fall post-emergent herbicide spraying for 618-2/618-3 Burial Grounds was completed.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

SAFETY



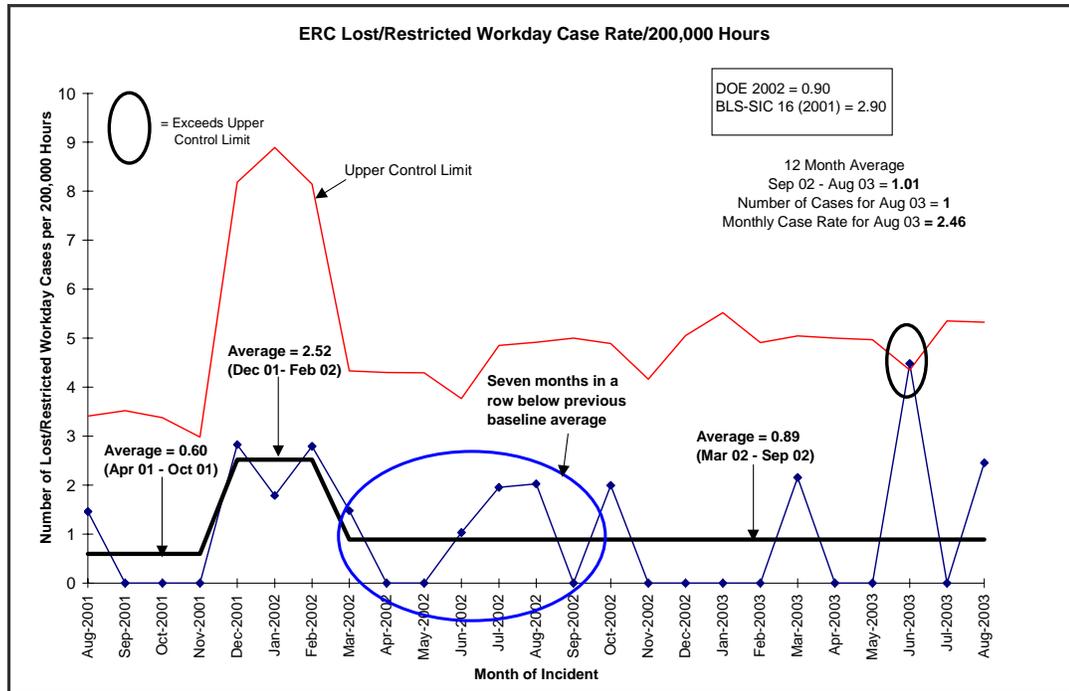
NOTE: The ERC has experienced four consecutive months with rates above the baseline average.



NOTE: Recordable case rates decreased September 2002 through February 2003 to a baseline average of 0.33. The baseline average has returned to 2.07 during March and August 2003.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

SAFETY continued:



NOTE: With the exception of June 2003, this data has been stable since March 2002.

Safety:

The following actions have or are being taken by the Environmental Restoration Contractor (ERC) to focus on safety improvements:

- The Subcontract Technical Representatives (STRs) continue to review and enhance "Exhibit G", Subcontractor Health and Safety Requirements.
- The STRs perform periodic self-assessments for subcontractor compliance to contract requirements.
- Bechtel Hanford, Inc. (BHI) continues to hold Incident Review Board meetings to ensure that the ERC has correctly and thoroughly determined the cause of any incidents and identified correctable opportunities. In addition, lessons learned based on these incidents are used to prevent future occurrences.
- All incidents are thoroughly investigated. Emphasis is placed on causes and corrective actions that can be implemented where applicable. Timely discussions take place in safety meetings and plan of the day (POD) meetings. When investigations are complete, the results are sent to the Area Superintendents, Field Superintendents, and Supervisors for review at the PODs.
- BHI continues to look for trends and consults with Corporate and other Bechtel National, Inc. (BNI) contacts for ways to enhance performance.
- The ERC continues to work closely with the Hanford Atomic Metal Trades Council (HAMTC) Safety Representative to resolve safety issues as they arise.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

SAFETY continued:

- Senior management continues to meet with small groups of employees in the field to discuss safety and personal commitment to safety.
- The Field Support General Superintendent, Subcontract Manager, and Project Safety Manager continue to visit different projects on a regular basis, meet with project team members, and conduct safety walkarounds. Area Superintendents for Decontamination and Decommissioning projects and Surveillance and Maintenance projects are included in these walkarounds. The walkaround participants visit projects other than those for which they are responsible. Information from the walkarounds 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 ongoing.
- Field Support personnel conduct weekly safety inspections. Findings are entered into a database and tracked to closure. Daily inspections are also performed and logged in the project's daily logbook or daily report.
- The Alliance has revised the Sharing for Success goals to reduce lost time accidents and OSHA recordable rates for FY03.
- Management continues to emphasize to all employees the importance to stay focused on their work and to continue with a questioning attitude.
- Field Support, Design Engineering, Environmental Engineering, Safety, and Radcon are working together to address Bio-Vector hazards on ERC projects.

	FYTD	Current Period (07/21/03- 08/17/03)	Current Period Comments
First Aid	22	5	Sprain/strain (3), sting (1), foreign body (1)
OSHA Recordable	7	1	Carpal tunnel surgery
Restricted Workday Case	4	0	
Lost Workday Case	2	1	Carpal tunnel surgery (same as above)

Status:

As of August 31, 2003, the ERC had worked approximately 55,500 hours without a lost workday case. The last incident occurred on August 8, 2003 and became lost time on August 13, 2003. Continuous employee involvement is being fostered by the Integrated Environmental Safety and Health Management System (ISMS), Voluntary Protection Program (VPP), labor alliance programs, e-mail communications, and one-on-one meetings with employees.

During the period October 1, 2002 through August 31, 2003, the ERC experienced 22 first aid incidents, 6 lost/restricted incidents, and 1 recordable-only incident, which equates to having **91% of our workdays injury free**. During this time period, the ERC experienced a string of 68 consecutive **injury-free** workdays.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

SAFETY continued:

The ERC continues to work diligently to provide accurate and timely reporting of occurrences, and to conduct followup fact-finding critiques to identify problems and improve safe field operations.

A BHI Work Injury Review Team, consisting of both craft and nonmanual employees, was formed under the sponsorship of the VPP Leadership Council to look at the increase in work-related injuries in June. The team presented their findings and offered recommendations to the Council at a special meeting in August. The recommendations centered around better hazard awareness, ergonomics, and appropriate response to work injuries, particularly muscular/skeletal injuries. A select group, consisting of members of the Council along with representatives from the Safety and Health and Field Support organizations, is following up on actions to address the recommendations.

The 618-4 and 618-5 Burial Ground remediation project marked 19 months without a first aid case. This is an excellent record performed by the staff working on this challenging project. Zero accidents are possible and are attainable.

Integrated Environmental Safety and Health Management System (ISMS):

Representatives from the Confederated Tribes of the Umatilla Indian Reservation, Nez Perce Tribe, Wanapum, and Yakama Nation met with representatives of the U.S. Department of Energy, Richland Operations Office (RL), the U.S. Environmental Protection Agency (EPA), and BHI on August 7 to continue discussions on how human remains, specifically contaminated human remains, would be treated during remediation of liquid waste sites within the 100 K Area. The need to conduct additional characterization testing outside the liquid waste sites, how to contain and transport human remains, and who would prepare the reburial site were the technical issues addressed at this workshop. Following this workshop, the initial draft "Procedures for the Treatment of Contaminated Human Remains" was written and given to RL to review prior to transmittal to the Tribes and EPA. Once approved, these procedures will be incorporated within the *Cultural Resources Mitigation Action Plan* for the 100 K Area remedial action project.

The second quarter chemical inventory update was completed on August 26. BHI used the new database to generate the quarterly inventory update forms, which were then faxed to each chemical custodian. Several modifications to the chemical inventory database (CID) were made based on feedback from the chemical custodians and the sample management group, who updated the CID.

Maps of the 100 H Area, identifying the location of the mud dauber wasps, were developed for Public Relations and radiological technicians. In addition to the usual roads and buildings, several new features were developed from the monthly aerial (oblique photos) flights. The additional features added included new telephone poles, the ERDF queue, the pump and treat facilities, and the mobile offices and CONEX boxes associated with H Reactor ISS.

An independent assessment was conducted on the ERC waste water and storm water management under the state waste discharge permit program. The criteria established for this independent assessment were derived from the Washington State Waste Discharge Permits, DOE/RL Pollution Prevention and Best Management Practices Plan for these discharge permits, and ERC environmental requirements and implementing procedures. The activities assessed included the Surveillance/Maintenance and Transition Project, and the Services, Field Support, and Engineering and Technology functional areas. This assessment resulted in no Corrective Action Requests (CARs) and no Unsatisfactory Corrected Immediately (UCI) deficiencies. Seven observations were submitted for consideration by the appropriate project and/or function.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

SAFETY continued:

Four surveillances were completed with satisfactory conclusions on the 100 B/C and 100 K Area remediation sites, ERDF Operations, and ERDF Transportation.

BHI continues to implement the ISMS metrics program. Data is collected on a monthly and quarterly basis. The ISMS metrics data for FY03 Quarter 4 (July, August, September) will be reported to RL in October.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

MAJOR COMMITMENTS

Tri-Party Agreement Milestones: Two (2) Tri-Party Agreement milestones were planned for completion during FY03. A total of three (3) Tri-Party Agreement milestones have been completed through August.

Total Tri-Party Agreement Milestones Due in FY03	2
Total Planned through August	1
Total Completed through August	3

Remaining Tri-Party Agreement Milestones to be Completed in FY03	0
Forecast Ahead of Schedule	0
Forecast On Schedule	0

Tri-Party Agreement Milestone M-16-10A, "Initiate Remedial Action in the 100-KR-1 Operable Unit", (due August 1, 2003) was completed on December 11, 2002 more than seven months ahead of schedule.

Tri-Party Agreement Milestone M-93-16, "Complete 105-DR Reactor Interim Safe Storage" (due September 30, 2003), was completed on January 29, 2003 eight months ahead of schedule.

Tri-Party Agreement Milestone M-16-13B, "Complete Remediation and Backfill of 16 Liquid Waste Sites and Process Effluent Pipelines in the 100-FR-1 and 100-FR-2 Operable Units as Defined in the Remedial Design Report/Remedial Action Work Plan for the 100 Area" (due October 29, 2004), was completed on May 20, 2003 more than 17 months ahead of schedule. An additional 14 waste sites were also backfilled, which made a total of 30 waste sites completed.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

PERFORMANCE OBJECTIVES

BHI focus area performance incentives are noted below. Specific River Corridor performance incentives are identified in Section B.

PIs - October through December 2002:

PI	Fee Allocation	Task	Status
 Execute Detailed Work Plan	Incentive fee shall not exceed 100%; if SPI is less than 75% at end of contract period, no fee shall be awarded.	Perform to approved DWP through contract period ending 12/31/02 in accordance with the SPI provision.	Through December, the SPI was 1.10, or 10% ahead of schedule. A Notice of Completion (NOC) was submitted to RL on February 21 for the October through December time frame. RL approved the NOC on May 6.
 Safety	Up to 50% of fee available for this PI may be forfeited if failure to satisfactorily meet PI in accordance with applicable requirements.	Protect worker safety and health, public safety and health, and the environment.	No issues or negative findings were identified with regard to the 14 applicable performance failure criteria associated with this PI through December. A NOC was submitted to RL on March 4 for the October through December time frame. RL approved the NOC on May 6.

PI - January through June 2003:

PI	Fee Allocation	Task	Status
 Safety	Up to 50% of fee available for this PI may be forfeited if failure to satisfactorily meet PI.	Protect worker safety and health, public safety and health, and the environment.	No significant issues or findings were identified January 1 through June 30, 2003, with regard to the 14 applicable performance failure criteria associated with this PI. During this time period, ERC experienced 13 first aid incidents, 4 lost/restricted incidents, and 1 recordable-only incident, which equates to having 91% of our workdays injury free. As of June 30, 2003, ERC worked approximately 60,500 hours since the last lost workday incident which occurred on June 4, and became lost time on June 11. NOC package was transmitted to RL on August 7.

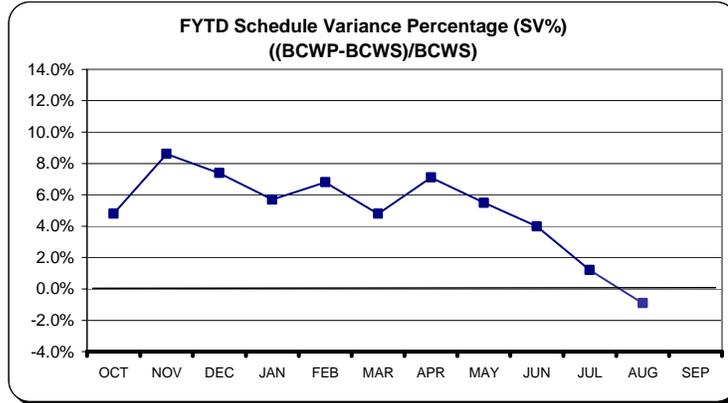
PI - July through October 2003:

PI	Fee Allocation	Task	Status
 Safety	Up to 50% of fee available for this PI may be forfeited if failure to satisfactorily meet PI.	Protect worker safety and health, public safety and health, and the environment.	No significant issues or findings were identified July 1 through August 31, 2003 with regard to the 14 applicable performance failure criteria associated with this PI. During this period, ERC experienced 9 first aid incidents and one recordable/lost away case. As of August 31, ERC worked approximately 55,500 hours since the last lost workday incident which occurred on August 8 and became lost time on August 13.

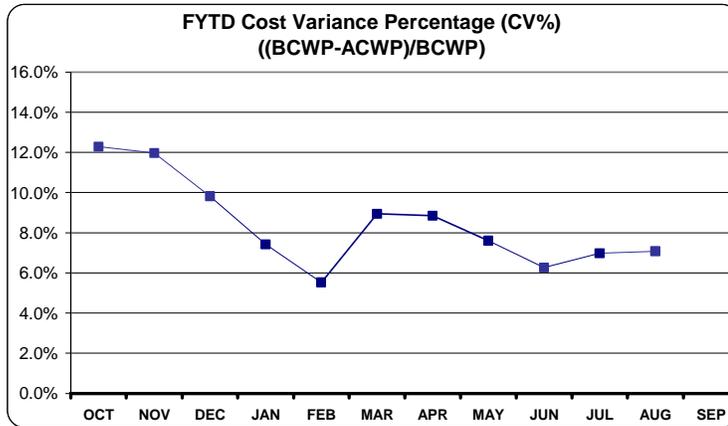
**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

TOTAL ERC COST/SCHEDULE OVERVIEW

**FY03 ERC PERFORMANCE SUMMARY
FYTD AUGUST 2003
(\$K)**



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DWP	8,451	8,521	9,154	8,467	8,304	10,768	8,608	8,797	10,797	8,997	10,602	9,997
DWP (Accum)	8,451	16,973	26,127	34,594	42,898	53,666	62,274	71,071	81,868	90,865	101,466	111,463
CURRENT PERIOD												
BCWS	8,898	8,767	10,438	8,556	8,531	10,764	9,164	10,223	11,423	8,257	12,478	13,481
BCWP	9,322	9,863	10,993	8,579	9,484	10,384	11,124	9,700	10,777	5,928	10,331	
FISCAL YEAR TO DATE												
BCWS	8,898	17,665	28,103	36,659	45,190	55,955	65,119	75,342	86,765	95,021	107,499	120,980
BCWP	9,322	19,185	30,178	38,757	48,241	58,625	69,749	79,449	90,226	96,153	106,485	
SV	424	1,520	2,075	2,098	3,051	2,670	4,630	4,107	3,461	1,132	(1,014)	
SV%	4.8%	8.6%	7.4%	5.7%	6.8%	4.8%	7.1%	5.5%	4.0%	1.2%	-0.9%	



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	EAC
CURRENT PERIOD													
ACWP	8,177	8,713	10,324	8,670	9,689	7,810	10,196	9,832	11,164	4,871	9,503		
BCWP	9,322	9,863	10,993	8,579	9,484	10,384	11,124	9,700	10,777	5,928	10,331		
FISCAL YEAR TO DATE													
ACWP	8,177	16,890	27,214	35,883	45,572	53,382	63,578	73,410	84,574	89,445	98,948		
BCWP	9,322	19,185	30,178	38,757	48,241	58,625	69,749	79,449	90,226	96,153	106,485		
CV	1,145	2,295	2,964	2,874	2,669	5,243	6,171	6,039	5,652	6,708	7,537		
CV%	12.3%	12.0%	9.8%	7.4%	5.5%	8.9%	8.8%	7.6%	6.3%	7.0%	7.1%		
EAC (Cumulative)	8,177	16,890	27,214	35,883	45,572	53,382	63,578	73,410	84,574	89,445	98,948	112,084	113,134

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

TOTAL ERC COST/SCHEDULE OVERVIEW (continued)

**FY03 ERC PBS PERFORMANCE SUMMARY
FYTD AUGUST 2003
(\$K)**

	FY03 DWP BCWS	CURRENT BCWS	FYTD			FYTD SCHEDULE VARIANCE			FYTD COST VARIANCE			EAC
			BCWS	BCWP	ACWP	\$	%	SPI	\$	%	CPI	
RC01	65,900	70,742	63,886	63,417	59,895	-469	-0.7%	0.99	3,522	5.6%	1.06	67,053
RC02	12,608	13,114	12,244	12,068	10,200	-176	-1.4%	0.99	1,868	15.5%	1.18	11,314
RC05	32,855	37,027	31,288	30,924	28,803	-364	-1.2%	0.99	2,121	6.9%	1.07	34,695
RCR-Subtotal	111,363	120,883	107,418	106,409	98,898	-1,009	-0.9%	0.99	7,511	7.1%	1.08	113,062
SC01	100	97	81	76	50	-5	-6.2%	0.94	26	34.2%	1.52	
SS-Subtotal	100	97	81	76	50	-5	-6.2%	0.94	26	34.2%	1.52	72
ERC TOTAL	111,463	120,980	107,499	106,485	98,948	-1,014	-0.9%	0.99	7,537	7.1%	1.08	113,134

Schedule Variance Summary:

Through August, the ER Project is \$1.0M (-0.9%) behind schedule. The negative schedule variance is attributed to the late mobilization for ERDF Cells 5 and 6 expansion due to a contract award challenge, delay in a supply fan shipment for the B Reactor ventilation upgrade, and mud contamination issues at H Reactor FSB caused by mud dauber wasps; offset by the early completion of F Reactor SSE roof installation. The ERDF cell expansion mobilization and B Reactor ventilation upgrade activities have been initiated. A night shift has been started at the H Reactor FSB demolition project.

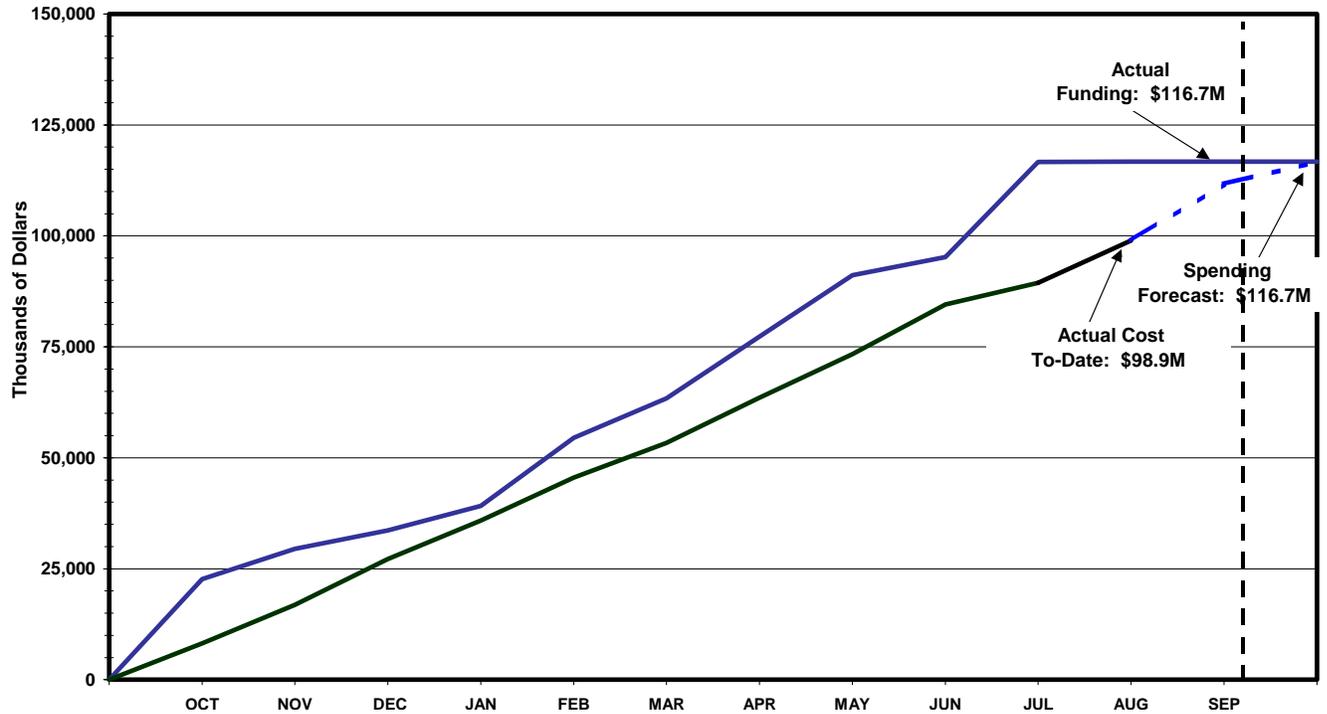
Cost Variance Summary:

At the end of August, the ER Project had performed \$106.5M worth of work, at a cost of \$98.9M. This results in a favorable cost variance of \$7.5M (+7.1%). The positive cost variance is attributed to consolidating common 618-4 and 618-5 Burial Ground remediation activities, less program management support to projects than planned, and prior-year rebill accounting adjustments that were realized in March.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

TOTAL ERC COST/SCHEDULE OVERVIEW (continued)

FY03 FUNDING VS. FORECAST EXPENDITURES (EAC)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Est Outyr ETC	TOTAL	
1 FY03 ERC FUNDING	22,717	29,506	33,639	39,169	54,469	63,381	77,303	91,111	95,232	116,650	116,690	116,690			
ACTUAL/EAC ON APPROVED SCOPE															
2 Actual Cost Cumulative Through August	8,177	16,890	27,214	35,884	45,573	53,383	63,579	73,410	84,574	89,445	98,948				
3 Current Monthly Actuals/EACs	8,177	8,713	10,324	8,670	9,689	7,810	10,196	9,832	11,164	4,871	9,503	11,436	2,750		
4 Cumulative Actuals/EACs on Approved Scope	8,177	16,890	27,214	35,884	45,573	53,382	63,578	73,410	84,574	89,445	98,948	110,384	2,750	113,134	
SEPTEMBER FY2003 APPROVED BCPs															
5													0	0	
6 Subtotal Approved Scope Changes													0	0	
PENDING/SCOPE CHANGES - SEPTEMBER FY2003															
7 RC01 BCP-23087 Accelerate Tonnage for 116-K-1 to Meet Performance Requirements (RC01: \$605K; RC05: \$537K)													756	756	
8 RC01 BCP-23092 Work Scope Adjustment Due to Mud Dauber Wasps at 105 H Reactor FSB													38	38	
9 RC01 BCP-23093 Accelerate 100 BC Burial Ground Request for Proposal													47	47	
10 RC01 BCP-23099 Accelerate Excavation of 100 BC													114	114	
11 RC02 BCP-23089 618-2 Inventory Reconciliation													40	40	
12 RC02 BCP-23095 618-5 Burial Ground Quantity Reduction - Waste Minimization													(485)	(485)	
13 RC05 BCP-23061 Increased Volumes of Waste Requiring Special Treatment (LDR Lead Solids & Bricks)													136	136	
14 RC05 BCP-23096 Additional Oil Contaminated Soil at 618-4 Burial Grounds													85	85	
15 ALL BCP-23098 Purchase Link Belt 70ton Crane													500	500	
16 ALL BCP-23X01 Central Plateau Closeout Costs													73	73	
17 ALL BCP-23X02 Implementation of the River Corridor Contract Transition														1,475	
18 ALL Pending Scope Additions, Deletions, etc. (Includes Central Plateau Accounting Adjusted Funding Allowance)													777	777	
19 Subtotal Pending BCPs													1,304	2,252	3,556
20 Subtotal Approved BCPs + Pending BCPs													1,304	2,252	3,556
21 Current Monthly Actuals/EACs + September FY03 Pending BCPs	8,177	8,713	10,324	8,670	9,689	7,810	10,196	9,832	11,164	4,871	9,503	12,739			
22 Cumulative Actuals/EACs + September FY03 Pending BCPs	8,177	16,890	27,214	35,884	45,573	53,382	63,578	73,410	84,574	89,445	98,948	111,687	5,002	116,690	

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003

ISSUES (REGULATORY/EXTERNAL/DOE)

See Section B issues.

KEY INTEGRATION ACTIVITIES

See Section B key integration activities.

UPCOMING PLANNED KEY EVENTS

Transition ER River Corridor workscope.

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003

SECTION B – RIVER CORRIDOR RESTORATION

Data as of month-end August

ACCOMPLISHMENTS

100 Area River Corridor Cleanup (RC01):

Excavation of contaminated material from the effluent pipelines around C Reactor was completed. Plumes in pipelines 28 and 29 on the northeast side of B Reactor were removed, and samples will be taken to verify cleanup criteria were met. Characterization work on seven remaining sites in 100 B/C Area was also initiated.

Soil remediation progressed at the 116-K-1 Crib and the 116-KW-3 Retention Basin in 100 K Area. A 13.8 kv power line was relocated to allow access to effluent pipelines.

The 100 N Area subcontractor completed equipment decontamination during August. Demobilization is scheduled to be completed by mid-September.

Work continued on the 116-N-1 Crib redesign effort. The revised crib remediation work is scheduled to be sent out for bid early in November.

The draft DR Reactor cleanup verification package (CVP) was transmitted to RL and Ecology for review. Variance samples were collected from both the shallow and deep zones of the 117-DR Filter Building demolition site on August 5-6.

F Reactor safe storage enclosure (SSE) construction activities were completed on August 21. A few open items remain and also bat mitigation efforts required before the reactor is closed up. Subcontractor demobilization is 90% complete.

A night shift was initiated on August 24 at the H Reactor fuel storage basin (FSB). The shift was added to expedite cleanout of the FSB and to reduce the source of mud for mud dauber wasp nests. Fixative applications were completed in Sections 1 and 2 of the FSB. Lower fill was removed inside rows 18 and 22 in preparation for fixative applications. Hot spot removal was also completed in the west technical view pit and inside the FSB.

100 Area surveillance and maintenance (S&M) tasks performed during August include:

- Completed KE Reactor roof repairs.
- Completed fall post-emergent herbicide spraying for 618-2/618-3 Burial Grounds.
- Completed B Reactor outside hazards by sealing lead-based paint on fascia boards and doors.
- Completed contractor mobilization for B Reactor FSB heaters.
- Continued B Reactor ventilation upgrade with the fan installation.
- Initiated B Reactor concrete block repairs.

ERC cumulative socioeconomic contracting goals for small business, disadvantaged, and woman-owned small business have all been exceeded through August

The draft ERC FY04 Detailed Work Plan (DWP) was completed during August. Final authorization to implement the plan is expected in mid-September.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

ACCOMPLISHMENTS (continued)

300 Area Cleanup (RC02):

Disposal of the 618-4 and 618-5 Burial Grounds' contaminated stockpiles into ERDF was completed during August. Confirmatory sampling activities for the two burial grounds were initiated. Demobilization of all subcontractor equipment and facilities was completed on August 29.

The 300 Area Regrading Request For Proposal (RFP) was sent to potential bidders on August 29.

River Corridor Waste Management (RC05):

The ERDF Disposal team has worked 88 months (since project inception) without a lost time accident.

A subcontract was awarded for treatment of the drummed uranium chips-in-oil waste that is currently stored at the ERDF interim staging area. The drums will be shipped offsite for treatment. After the waste is treated, it will be returned and disposed of in ERDF.

Drums of uranium oxide waste (from the 618-4 Burial Ground) were sampled in preparation for treatment. Bench-scale testing of multiple treatment formulas is being conducted to determine the appropriate treatment mix that will effectively immobilize metal contaminants within the waste and satisfy land disposal restrictions.

During August, 51,206 metric tons (56,445 tons) of contaminated waste were disposed in ERDF, for a total of 589,117 metric tons (649,394 tons) disposed to date in FY03. A total of 4,064,427 metric tons (4,480,287 tons) of waste have been disposed in ERDF since operations began in July 1996.

A Notice to Proceed was given to the subcontractor on August 19 for mobilization and construction of ERDF Cells 5 and 6. A pre-construction meeting was held on August 26. The construction quality control subcontractor's mobilization is progressing and will be ready to support construction activities in September.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS)

TPA Milestone	Description	Due Date	(F)/(A) Date
M-16-10A	Initiate Remedial Action in the 100-KR-1 Operable Unit	08/01/03	12/11/02 (A)
M-93-16	Complete 105-DR Reactor Interim Safe Storage	09/30/03	01/29/03 (A)
M-16-63*	Submit a Schedule and TPA Milestones to Complete Interim Remedial Actions for the Following 300-FF-2 Waste Sites (300-259, 303-M SA, 303-M UOF, UPR-300-46, URP-300-17, and 618-1) and Confirmatory Sampling of the Following 300-FF-2 Candidate Sites (300-109, 300-110, and 333 ESHWSA)	11/30/03	At Risk*
M-94-01*	Submit a Schedule and TPA Milestones to Complete Disposition of the Following Surplus Facilities: 303M, 332, 333, 334, 334A, 3221, 3222, 3223, 324, 3225, 324, 324B, 327 (River Corridor scope currently maintained by FH)	11/30/03	At Risk*
M-16-13B	Complete Remediation and Backfill of 16 Liquid Waste Sites and Process Effluent Pipelines in the 100-FR-1 and 100-FR-2 Operable Units as Defined in the Remedial Design Report/ Remedial Action Work Plan for the 100 Area	10/29/04	05/20/03 (A)

*RL prepared and forwarded two Tri-Party Agreement change requests to the regulators on August 15 for approval. The change requests propose the two milestones be extended to 9/30/04 and that milestones M-16-65 and M-94-04 be combined with M-16-63 and M-94-01, respectively.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

PERFORMANCE OBJECTIVES

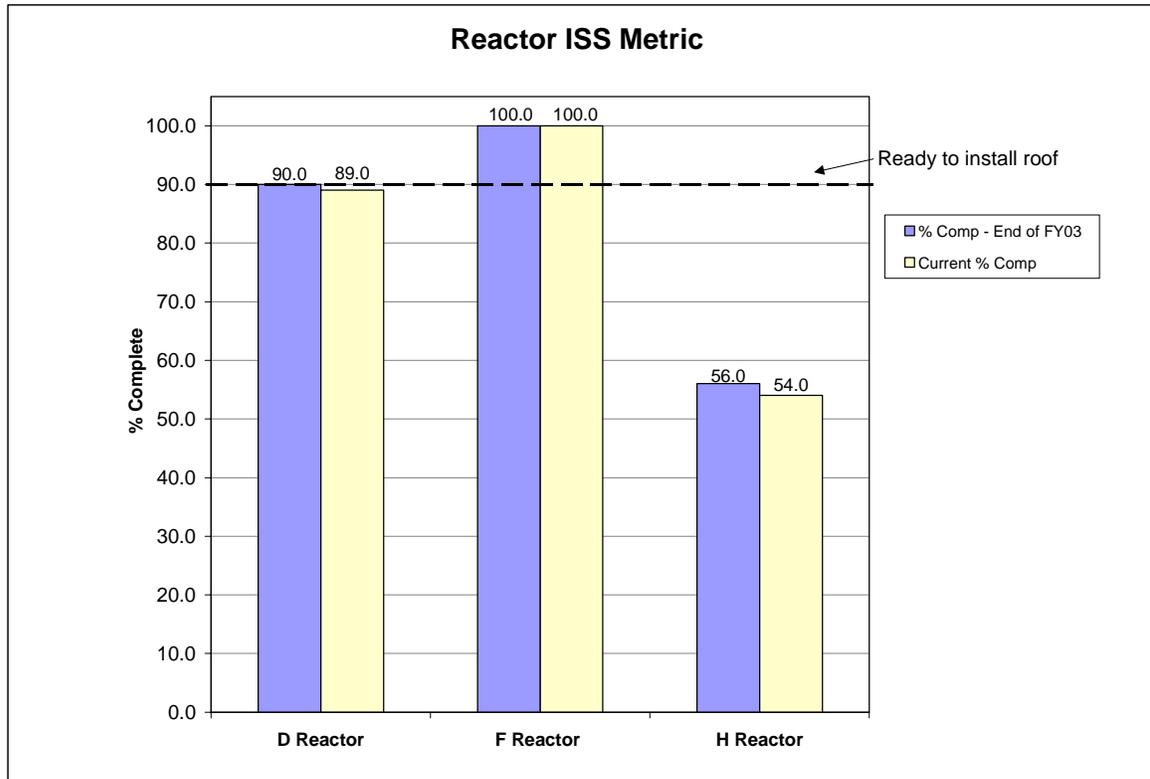
PI	Task
 F Reactor Interim Safe Storage	<p>Complete FY02 carryover ISS activities at F Reactor by November 20, 2002.</p> <p>Status: Completed on November 13, 2002. Notice of Completion package transmitted to RL on January 8, 2003. RL completed review and approved payment of full fee on January 30, 2003.</p>
 Accelerate River Corridor D&D and Remediation of Release Sites	<p>Complete 32 release sites (cleanup verification package [CVP] or waste site reclassification sheet [WRS]) and demolition of 2 facilities.</p> <p>Status: Complete. As of month-end June, 49 waste sites have been completed. Demolition and loadout have been completed for 2 facilities (1720-HA Arsenal Building [April 22] and 118-C-4 Horizontal Rod Storage Cave [June 4]); rods have also been disposed. NOC package was transmitted to RL on August 4, 2003.</p>
	<p>Exceed baseline disposal total (457K tons) up to a total of 65.5K additional tons. Complete 15 additional release sites (CVP or WRS). Complete demolition of a third facility.</p> <p>Status: Complete. Through June, 526.2K tons of waste have been disposed. Completion of additional release sites was also achieved (see above PI status). Demolition and loadout were completed for the 117-DR Filter Building on June 17. NOC package was transmitted to RL on August 4, 2003.</p>
	<p>Achieve ISS progress in accordance with DWP.</p> <p>Status: Complete. ISS planned activities for D, H, and F Reactors completed on schedule through June. NOC package was transmitted to RL on August 7, 2003.</p>

PIs - July through October 2003:

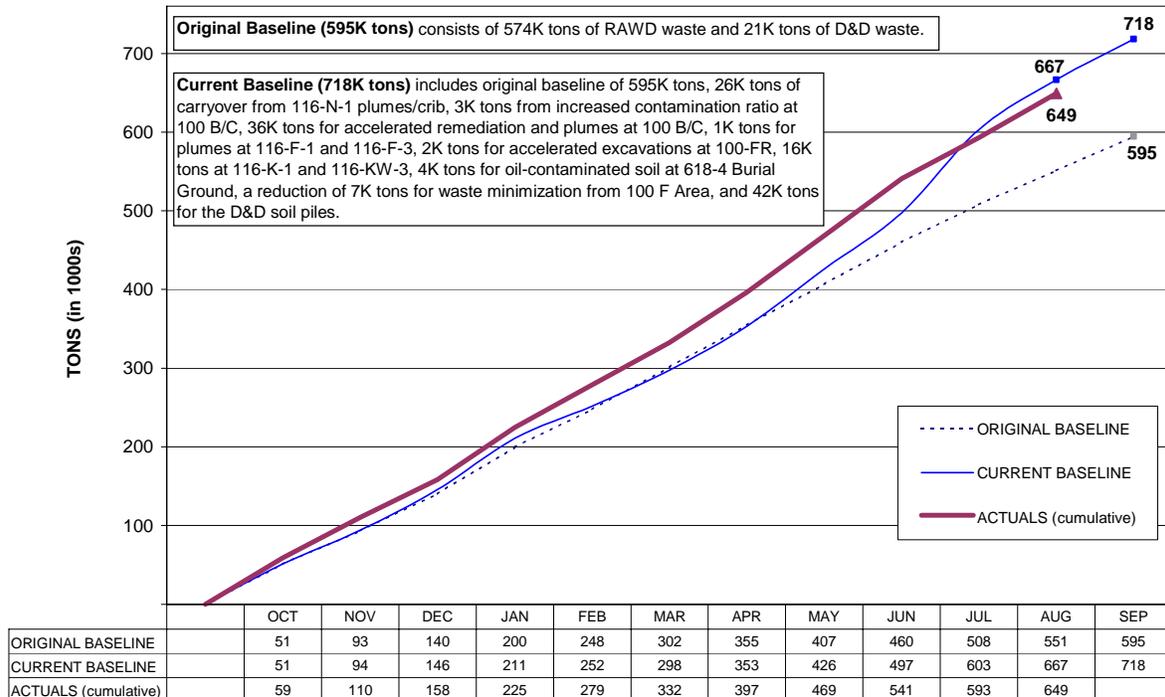
PI	Task
 F Reactor Interim Safe Storage	<p>Complete F Reactor ISS activities, including safe storage enclosure (SSE) installation, by September 30, 2003.</p> <p>Status: On schedule. The physical construction of the SSE is complete. Currently working with subcontractor to close out nonconformance reports (NCRs) and complete bat mitigation efforts.</p>
 H Reactor Interim Safe Storage	<p>Prepare H Reactor FSB for demolition -- Complete hot spot and associated fuel removal from the FSB by November 1, 2003. Fuel loadout and soil removal from the transfer pit and final cleanliness check of the basin are not included in this performance assessment.</p> <p>Status: On schedule. Approximately 80% of FSB has been addressed. Mud dauber activity is slowing down which will assist day shift activities.</p>
 618-4 Burial Ground CERCLA Actions	<p>Ship all pyrophoric uranium drums (~520) located on ERDF storage pad to a facility licensed and/or permitted to perform treatment that meets ERDF acceptance criteria by November 1, 2003.</p> <p>Status: On schedule. All required paperwork was approved to support initiation of drum shipments to Oak Ridge, TN on September 15.</p>
	<p>Dispose of all the uranium oxide drums located on ERDF storage pad by November 1, 2003.</p> <p>Status: On schedule to complete on or before November 1.</p>

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

PERFORMANCE MEASURES/METRICS



Remedial Action Metric Cumulative Tons to ERDF

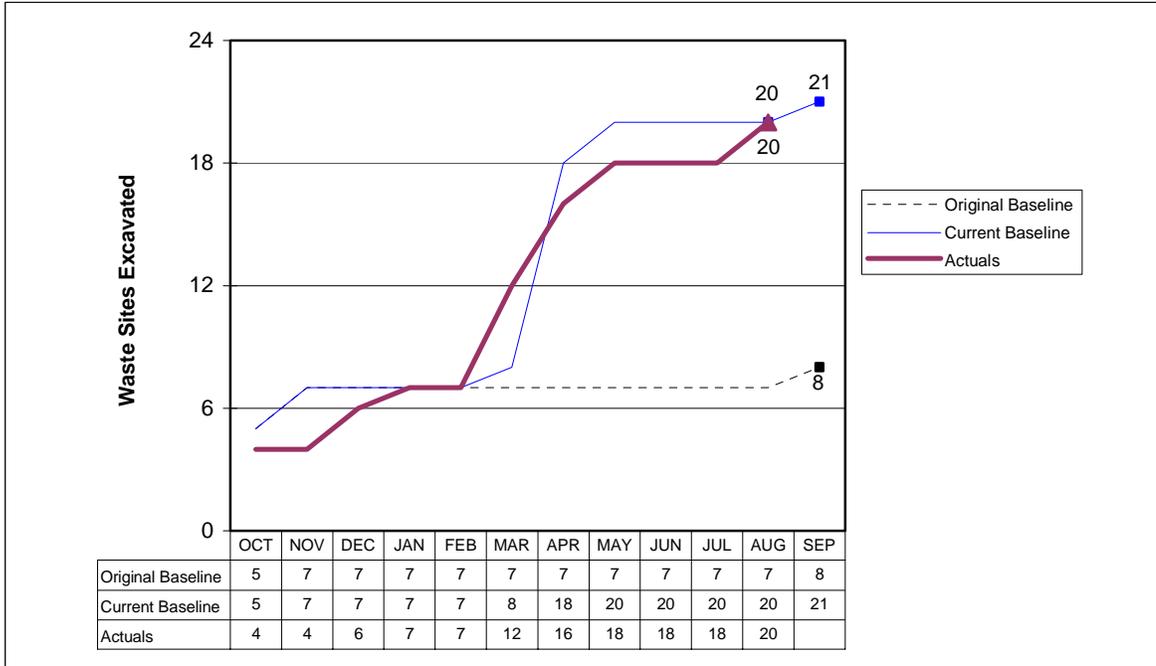


*Includes ERC RAWD, ERC Other and Other Hanford Contractor Wastes

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

PERFORMANCE MEASURES/METRICS (continued)

**Waste Site Metric
Excavations Completed (cumulative)**



Technology Deployments

Technology Deployment	PBS	Date Deployed	First-Time Deployment
Enhanced Site Characterization System (deployed at 618-5 Burial Ground)	RC02	10/02	No
RF Camera System for Brokk™ (deployed at H Reactor FSB)	RC01	10/02	Yes
IPIX 360-Degree Photography (deployed at C Reactor)	RC01	11/02	Yes
Mobile Access Control (Dolphin platform) (deployed at 100 K Area)	RC01	12/02	Yes
Ultra Lift (deployed at 100 N Area)	RC01	01/03	Yes
ISO-CART (deployed at 190-DR Facility)	RC01	02/03	Yes
Dust Bond (surface contamination fixative) (deployed at 116-N-1 Crib)	RC01	06/03	Yes
Core Body Temperature Monitor (deployed at H Reactor FSB)	RC01	07/03	Yes
Pre-Prime (deployed at H Reactor FSB)	RC01	08/03	Yes
Dust Bond (dust suppression) (deployed at D and H Reactor areas)	RC01	08/03	Yes

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

COST/SCHEDULE STATUS

ERC - SCHEDULE VARIANCE	BCWS	BCWP	Variance
	\$K	\$K	\$K
RC01 - 100 Area River Corridor Cleanup	63,886	63,417	(469)
RC02 - 300 Area Cleanup	12,244	12,068	(176)
RC05 - River Corridor Waste Management	31,288	30,924	(364)
SC01 - Near-Term Stewardship	81	76	(5)
TOTAL ERC	107,499	106,485	(1,014)

PBS-RC01 – 100 Area River Corridor Cleanup

Schedule Variance = **(\$469K) (0.7%)**

Cause: Due to resolution of contamination issues caused by mud dauber wasp nesting areas, H Reactor FSB demolition and 1304-N demolition are behind schedule; offset by early completion (approximately one month) of F Reactor SSE roof installation.

Resolution: 1304-N resources are working a night shift at H Reactor while the wasps are dormant; 1304-N scope is being deferred to FY04.

Cause: B Reactor ventilation upgrade started late due to delay in supply fan shipment.

Resolution: Upgrade is expected to be completed in September.

PBS-RC02 – 300 Area Cleanup

Schedule Variance = **(\$176K); (1.4%)**

Cause: Waste minimization was realized at the 618-5 Burial Ground.

Resolution: A BCP is being processed that will reconcile the variance.

PBS-RC05 – River Corridor Waste Management

Schedule Variance = **(\$364K); (1.2%)**

Cause: The ERDF construction subcontractor mobilization for Cells 5 and 6 expansion was on hold pending resolution of a contract award challenge.

Resolution: The contract award challenge was resolved, and mobilization has been initiated.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

COST/SCHEDULE STATUS (continued)

ERC - COST VARIANCE	FY03 EAC	BCWP	ACWP	Variance
	\$K	\$K	\$K	\$K
RC01 - 100 Area River Corridor Cleanup	67,053	63,417	59,895	3,522
RC02 - 300 Area Cleanup	11,314	12,068	10,200	1,868
RC05 - River Corridor Waste Management	34,695	30,924	28,803	2,121
SC01 - Near-Term Stewardship	72	76	50	26
TOTAL ERC	113,134	106,485	98,948	7,537

PBS-RC01 – 100 Area River Corridor Cleanup

Cost Variance = **\$3,522K; 5.6%**

Cause: Less program management support to projects required than planned.

Resolution: Underrun reflected in EAC.

Cause: Prior-year provisional rate rebill accounting adjustments were realized in March.

Resolution: Underrun reflected in EAC.

Cause: Fewer resources required for 100 B/C pipeline remediation than planned due to lower contamination levels and fewer pipelines encountered.

Resolution: Underrun reflected in EAC.

Cause: D Reactor FSB contaminated side slope issues and equipment decontamination efforts more than planned; additional demolition and loadout required for 117-DR facility than planned.

Resolution: Overruns reflected in EAC.

PBS-RC02 – 300 Area Cleanup

Cost Variance = **\$1,868K; 15.5%**

Cause: Cost savings resulted from efficiencies realized in 618-4 Burial Ground sorting, sampling, and loadout of contaminated soils; savings from consolidation of common 618-4 and 618-5 Burial Ground remediation activities.

Resolution: Underrun reflected in EAC.

Cause: Prior-year provisional rate rebill accounting adjustments were realized in March.

Resolution: Underrun reflected in EAC.

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003

COST/SCHEDULE STATUS (continued)

PBS-RC05 – River Corridor Waste Management

Cost Variance = \$2,121K; 6.9%

Cause: Development of both the uranium chips-in-oil and uranium oxide treatment plans were simplified resulting in cost underruns; streamlined design and procurement approach for ERDF Cells 5 and 6 construction resulted in lower costs than planned; underruns were partially offset by increased transportation requirements from waste sites.

Resolution: Underrun reflected in EAC.

Cause: Prior-year provisional rate rebill accounting adjustments were realized in March.

Resolution: Underrun reflected in EAC.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
AUGUST 2003**

ISSUES (REGULATORY/EXTERNAL/DOE)

- **M-16-63 and M-94-01:** Tri-Party Agreement Milestone M-16-63, "Submit a Schedule and TPA Milestones to Complete Interim Remedial Actions for the Following 300-FF-2 Waste Sites (300-259, 303-M SA, 303-M UOF, UPR-300-46, UPR-300-17, and 618-1) and Confirmatory Sampling of the Following 300-FF-2 Candidate Sites (300-109, 300-110, and 333 ESHWSA)"; and Milestone M-94-01, "Submit a Schedule and TPA Milestones to Complete Disposition of the Following Surplus Facilities: 303M, 332, 333, 334, 334A, 3221, 3222, 3223, 3224, 3225, 324, 324B, 327" (both due November 30, 2003), are at risk due to the delay in awarding the River Corridor contract.

Strategy/Status: RL prepared two draft change requests and forwarded to the regulators on August 15 for review and approval. The change requests propose the two milestones be extended to September 30, 2004. Workslope will also be accelerated by 11 months for Milestones M-16-65 and M-94-04 by combining them with M-16-63 and M-94-01, respectively.

INTEGRATION ACTIVITIES

Regulatory Support group worked with Fluor Hanford, Inc. (FH) on the Hanford Site Annual Resource Conservation and Recovery Act (RCRA) Permit Mapping and Marking Report for Calendar Year 2003. The RCRA permit conditions require an annual update of mapping and marking of pipelines carrying dangerous waste. The 1301-N map is being updated to include additional pipelines that were found to have carried dangerous waste while the treatment, storage, and disposal unit was in operation. The annual report is due to Ecology on September 30.