

Environmental Management Performance Report

November 2001



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Department of Energy
Richland Operations Office



Bechtel Hanford, Inc.
Environmental Restoration Contractor

Data as of month-end November

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INTRODUCTION

Beginning in fiscal year 2002 (FY02), a new Hanford Site Project Baseline Summary (PBS)/Work Breakdown Structure (WBS) was implemented by the U.S. Department of Energy (DOE) Richland Operations Office (RL). The new structure is based on "outcomes" with Environmental Restoration (ER) activities related to three key areas: River Corridor Restoration, Central Plateau Transition, and Site Integration and Infrastructure. FY02 ER reporting has also now been aligned to reflect the outcomes.

The monthly ER Environmental Management Performance Report (EMPR) consists of four sections: Section A - Executive Summary, Section B – River Corridor Restoration, Section C - Central Plateau Transition, and Section D – Site Integration and Infrastructure. All data is current as of November 30.

Section A – Executive Summary. This section provides an executive level summary of Environmental Restoration Contractor's (ERC) performance information for the current reporting month and is intended to bring to management's attention that information considered 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 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 and FY02 Environmental Management (EM) corporate performance measures and objectives. 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 ERC monthly activity information and performance status for the three 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.

Section C – Central Plateau Transition. This section contains more detailed ERC monthly activity information and performance status for the one PBS within the Central Plateau Transition outcome. This PBS consists of CP01 – 200 Area Remediation.

Section D – Site Integration & Infrastructure. This section contains more detailed ERC monthly activity information and performance status for the two PBSs within the Site Integration and Infrastructure outcome. These two PBSs consist of SS03 – Groundwater Management and Monitoring, and SS04 – Groundwater/Vadose Zone (GW/VZ) Integration.

PBS SC01 – Near Term Stewardship is structured within the Site Stewardship outcome. Due to the minimal FY02 workscope identified for this PBS, SC01 performance data will be 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



River Corridor Restoration



Central Plateau Transition



Site Integration & Infrastructure

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
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SECTION A – EXECUTIVE SUMMARY

Data as of month-end November

NOTABLE ACCOMPLISHMENTS:

River Corridor Restoration:

An Agreement in Principle (AIP) was signed by RL, EPA, and Ecology on October 31 outlining the 100/300 Area Tri-Party Agreement milestone negotiation process. Negotiations are currently proceeding to address M-16 and M-93 milestones for the 100/300 Areas. Target date for reaching agreement on the Tri-Party Agreement milestone draft change packages is December 31, 2001.

Removal of three more pipelines was completed in the 100 B/C Area during November. Contaminated soil excavation activities and pipe reduction/removal activities continued on two pipelines, and overburden removal was initiated on four additional pipelines. Preparations are underway to start the verification (confirmation) sampling at the three outfall structures.

In the 100 H Area, reseeding and revegetation were initiated. Approximately 80% of the remediated area has been seeded with native grasses.

In the 100 F Area, overburden material removal and demolition was completed on the discharge piping from the reactor building to the Lewis Canal.

In the 100 N Area, cover panel demolition and size reduction activities were initiated at the 116-N-1 Trench. Demolition and size reduction were completed in each girder bay, which was then covered with low-dose soil before moving to the next girder bay. Eight bays of cover panels were demolished and processed. The overburden material continues to be removed around the 116-N-1 Trench for the construction of haul roads. Haul roads were completed for approximately half of the trench.

Backfill activity was initiated at the JA Jones and 600-23 sites the last week of November. The U.S. Environmental Protection Agency (EPA) approved cleanup verification packages (CVPs) for the JA Jones and 600-23 waste sites. This completes Tri-Party Agreement Milestone M-16-41B (due March 31, 2002) four months ahead of schedule.

Geophysical investigations were completed for the 100 B/C burial grounds. The data, coupled with upcoming test pitting and trenching, are expected to significantly reduce the footprint of these waste sites. The geophysics team is continuing to survey the 100 F Area burial grounds.

During November, the Environmental Restoration Disposal Facility (ERDF) received 38,224 metric tons (42,135 tons) of contaminated waste, for a total of 90,298 metric tons (99,537 tons) in FY02. A total of 2,950,925 metric tons (3,252,838 tons) have been disposed in the ERDF since operations began in July 1996. ERDF Disposal personnel have worked 1,982 days without a lost time accident, and the ERDF Transportation team has driven 9,023,075 kilometers (5,606,679 miles) without an at-fault vehicle accident.

U.S. Department of Energy (DOE) Richland Operations Office (RL) requested a 233-S facility waste package (Box 39) be exhumed from ERDF to perform a nondestructive assay (NDA). It was successfully exhumed and was intact with only minimal deformations to the plywood lid. The box has been re-assayed, and the results are being evaluated.

At D Reactor, interim closure sampling was initiated to determine waste designation. Samples were also collected from the F Reactor fuel storage basin (FSB) for laboratory analysis.

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NOTABLE ACCOMPLISHMENTS continued:

Spent fuel packaging was completed at the F Reactor fuel storage basin (FSB), which included videotaping of the fuel elements along with other characterization activities. The cask containing the packaged spent fuel was shipped to K Basin on November 6. Work resumed on hot spot #10 on November 5, and was closed out on November 6. This completes closeout of all hot spots found in the first pass of the F Reactor FSB.

The remaining In Situ Redox Manipulation (ISRM) Project Phase II well extractions were completed on November 20, satisfying completion of Tri-Party Agreement Milestone M-16-27B (due December 31) more than five weeks ahead of schedule. ISRM Phase II extended the subterranean chemical barrier to approximately 479 meters (1,570 feet) to support the mitigation of chromium migration to the Columbia River.

The contracts were awarded for the 100-KR-4 well installation and the 100-HR-3 and 100-KR-4 groundwater pump and treat system upgrades.

River Corridor surveillance and maintenance (S&M) activities that were performed in November to ensure inactive facility integrity and safety included completion of the Long Range Plan (LRP) document and emergency work plan for the 100 Area facilities, completion of sampling tasks for the 100 Area asbestos abatement project, issuance of the River Corridor herbicide/pesticide subcontract, and completion of the passive vent work at N Reactor.

ER Project briefing materials were provided in support of the Secretary of Energy's visit to the Hanford Site.

Bechtel Hanford, Inc. (BHI) Procurement conducted an eAuction for the purchase of an excavator and related equipment, resulting in an estimated cost avoidance of \$50K. This method of procurement was initiated in fiscal year 2001 (FY01) and has proved to be very cost effective and timely in placing orders and contracts.

Central Plateau Transition:

A workshop was held with RL, EPA, and the Washington State Department of Ecology (Ecology) to define the assumptions and basis for negotiation of Tri-Party Agreement Milestones M-13, M-15, M-16, and M-20 for Central Plateau waste site assessment and remediation.

Test pit sampling was completed at the 216-A-29 Ditch for the 200 Area Chemical Sewer Operable Unit (200-CS-1), including sampling for the vitrification plant design work.

Groundwater monitoring well drilling resumed on November 26 at an alternate location within the Plutonium Finishing Plant (PFP) protected area in support of the carbon tetrachloride investigation.

November decommissioning activities that were accomplished in the highly contaminated 233-S Plutonium Concentration Facility included removal of approximately 17 meters (55 feet) of vessel L-10. Removal of the L-10 vessel is approximately 50% complete. To date, 11 vessels have been removed from the process hood. A total of 15 vessels are planned for removal by June 2002. The original baseline identified removal of six vessels by June 2002.

Central Plateau S&M activities that were performed in November to ensure inactive facility integrity and safety included initiation of field work on the U Plant railroad cut Remedial Action Radiation Area (RARA) interim stabilization, completion of sampling tasks for the 200 Area asbestos abatement project, completion of enclosure design review for the B Plant filter changeout, and completion of the draft Notice of Completion (NOC) for hexone interim stabilization work. In addition, the Central Plateau herbicide/pesticide subcontract was issued.

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NOTABLE ACCOMPLISHMENTS continued:

Site Integration and Infrastructure:

The remainder of the calendar year 2001 (CY01) Resource Conservation and Recovery Act of 1976 (RCRA) groundwater well drilling was completed on November 8, satisfying Tri-Party Agreement Milestone M-24-00M (due December 31), seven weeks ahead of schedule. Eleven groundwater monitoring wells were installed supporting achievement of Tri-Party Agreement Milestone M-24-00M.

In the System Assessment Capability (SAC) area of the Groundwater/Vadose Zone (GW/VZ) Project, the third module (SAC Inventory) was added to the virtual library.

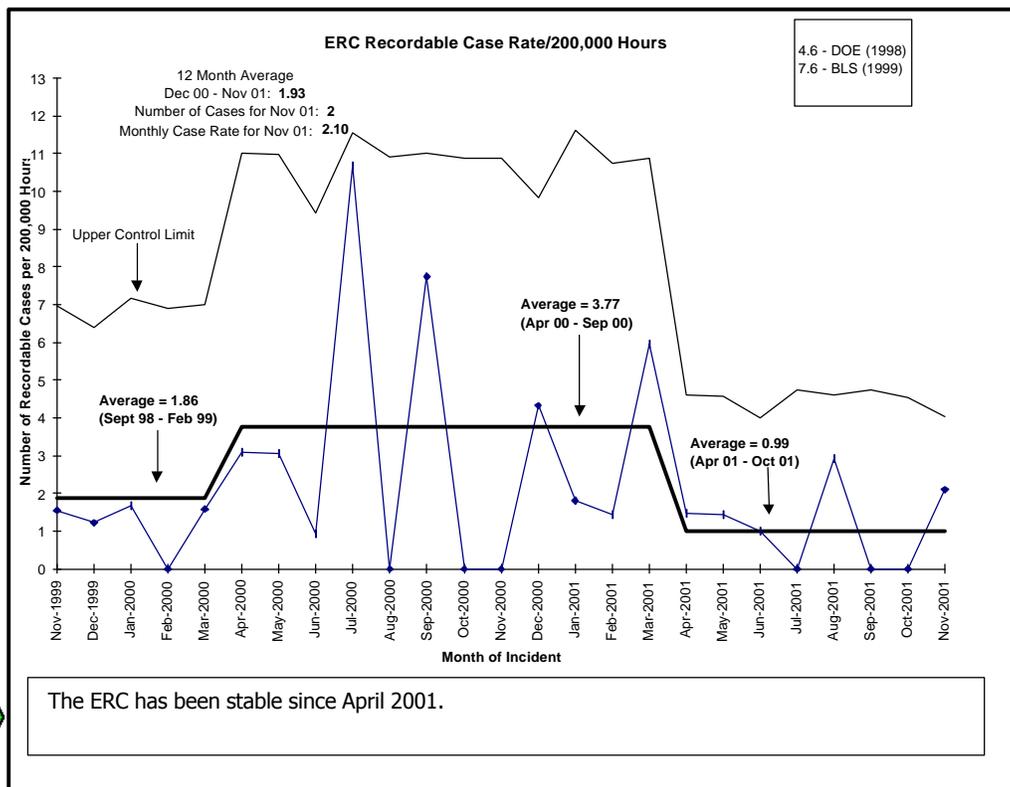
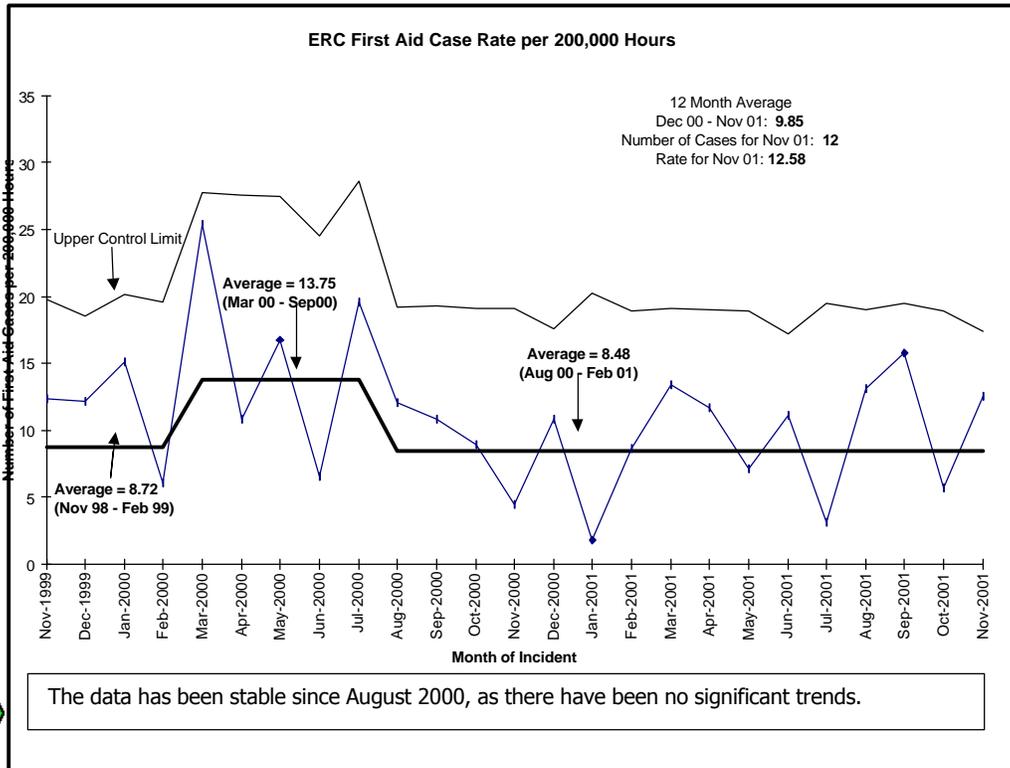
The FY00/01 Vadose Zone Transport Field Studies Report was published in November. The report summarizes results from the first two years of field experiments conducted in the 200 East Area.

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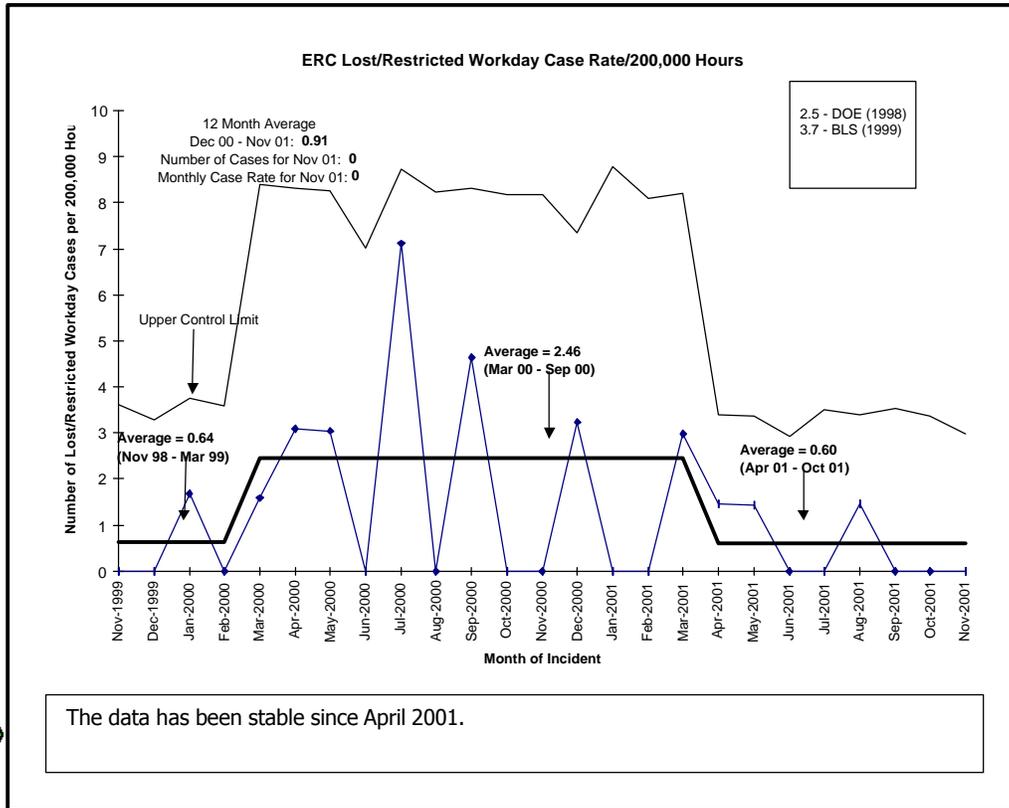
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SAFETY:



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SAFETY continued:



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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SAFETY continued:

	FYTD	Current Period (10/15/01- 11/25/01)	Current Period Comments
First Aid	16	12	(7) strain, (1) contusion, (2) bite/sting, (1) laceration, (1) pain
OSHA Recordable	2	2	(1) chipped teeth, (1) laceration
Restricted Workday Case	0	0	N/A
Lost Workday Case	0	0	N/A

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

- The ERC, as of November 24, 2001, has worked approximately 813,600 hours without a lost workday case. The last incident occurred on May 7, 2001 and became a lost time on May 31, 2001. 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.
- 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. Medical Case Management desktop instruction continues for ERC managers and supervisors. BHI Safety personnel visit the projects and provide the training to ERC managers and supervisors.
- 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 trends and consult with corporate and other Bechtel National, Inc. (BNI) contacts for ways to enhance performance.
- BHI continues to work 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 continue to visit different projects on a regular basis, meet with project team members, and conduct a safety walkaround. Information from the walkaround 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.

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SAFETY continued:

Integrated Environmental Safety and Health Management System (ISMS):

Status:

- The F Reactor FSB replanning was completed. The planning required extensive craft participation, and interface with RadCon, Shippers, Project Controls, Engineering, Field Support and other BHI groups, primarily ERDF.
- Involved all D/DR Reactor site personnel in an Emergency Response Drill and post drill discussion. Several lessons learned were discussed along with ideas for improvement, which were implemented.
- An employee concern regarding hazardous road conditions between H and DR Reactors was addressed and closed out in a very timely manner. This required management and Safety participation, and interface with other ERC groups and Hanford Site contractors to resolve.
- Safely completed packaging and shipment of spent fuel found at F Reactor FSB to K Basins. This required extensive planning and interfacing with ERC groups, Spent Nuclear Fuel (SNF) personnel, and Hanford Site Security.
- All scheduled Decommissioning Projects self-assessments were completed and documented. Lessons learned were issued as applicable.
- The ERC HAMTC Safety Representative was routinely included in the resolution of safety issues and employee concerns.
- Affected ERC staff and craft personnel were involved in the preparation of all job hazards analyses and work packages.
- BHI-DE-01 Procedure EDPI-4.37-01, Design Calculations, was updated to enhance maintenance of ISMS requirements through application of Guiding Principles, GP-2 for "Roles and Responsibilities", and GP-10 for "Continuous Improvement".
- BHI-MA-02 Procedure 3.3 for work order for "Obtaining Services from Other Hanford Site Contractors", is being updated to identify ISMS requirements.
- Completed the Integrated Chemical Management Program Self-Assessment. There were no findings as a result of the assessment. Observations for improvements to the program will be completed by the end of December.
- Provided efficient Hanford Site interface with subcontractors for the safe implementation of the revegetation project work in the 100 Areas.
- Provided Managing Uncertainty for Environmental Decision-Making and Systematic Planning for Environmental Decision-Making data quality objective (DQO) training classes to EPA Region 10, Seattle staff.
- Waste Management and Transportation personnel submitted two nominations for the National Pollution Prevention Awards. The Excellence in Management nomination was for the "Systematic Implementation and Management of Value Methodology Process Enhances Waste Minimization/Pollution Prevention Efforts at the Hanford Site." The Recycling nomination was for the "Trash to Green Energy."

Conduct of Operations:

Status: No significant issues were reported in the Corrective Action Tracking System (CATS) database for the current reporting period.

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PROCESS IMPROVEMENTS:

Six Sigma:

Status:

- Implementation of Six Sigma program across the ERC continues.
- Developed and delivered a Six Sigma presentation to the RL Hanford Site Management Board (SMB).
- Held a follow-up meeting with RL on the Nevada Test Site/Hanford Site Virtual Waste Acceptance Process to identify short-term goals.
- Met with RL to discuss the development of a process improvement for the identification of Government Furnished Information (GFI) and Government Furnished Services (GFS).
- Met with all Bechtel National Inc. waste managers to discuss improvements across the DOE complex.
- Began development of the Six Sigma Program Implementation Plan.

Process Improvement Projects (PIPs) and status include:

- The Contaminated Concrete Demolition PIP (PIP #4) is in the "Analyze Phase" and is about 90% complete.
- The Radiological Work Control Process PIP (PIP #6) is in the "Measure Phase" and is about 15% complete.
- Identified two new PIPs; ERDF Database Improvements and Follow-on Waste Management Process Improvements.
- Assessments, Regulatory and Quality Programs (ARQP), in concert with Documentation and Information Services (DIS), initiated a cost avoidance of approximately \$1.06M by developing a controlled process for the notification of all users of ERC controlled manuals and procedures of organizational name changes within the ERC. This process provided the required notifications without requiring the immediate revision to approximately 450 procedures. The process was a direct result of applying the lessons learned in the Six Sigma Procedure Development Process PIP (PIP #2).

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MAJOR COMMITMENTS:

Tri -Party Agreement **Milestones:** Sixteen (16) Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones are planned for completion during FY02. Through November, six milestones have been completed, all ahead of schedule. Milestones completed during November include the following:

- M-24-53 "Install Two Additional Wells at SST WMA TX-TY" (due December 31), was completed on November 8, seven weeks ahead of schedule.
- M-24-55 "Install Two Additional Wells at SST WMA S-SX" (due December 31), was completed on November 8, seven weeks ahead of schedule.
- M-24-00M "Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in CY2001 if Required" (due December 31,) was completed on November 8, seven weeks ahead of schedule.
- M-16-27B "Complete 100-HR-3 Phase II, ISRM Barrier Emplacement" (due December 31), was completed on November 20, more than five weeks ahead of schedule.
- M-16-41B "Submit Closeout Verification Package for JA Jones and 600-23 Waste Sites for EPA Approval" (due March 31, 2002) was completed on November 30, four months ahead of schedule.

One milestone, M-16-27C "Complete 100-HR-3 Phase III ISRM Barrier Emplacement" (due September 30, 2002), is planned to be extended to December 31, 2002. This three-month extension is required to perform additional characterization at the treatability test area, and to also allow for additional construction time due to a thicker aquifer encountered. An Explanation of Significant Difference (ESD) and change request are being developed to extend the ISRM milestone completion date three months.

Total Tri -Party Agreement Milestones Due in FY02	16
Total Planned Through November	0
Total Completed Through November	6

Remaining Tri -Party Agreement Milestones to be Completed in FY02	10
Forecast Ahead of Schedule	3
Forecast On Schedule	6
Forecast Unrecoverable	1

EM Corporate Performance Measures:

	DWP FY02	FY02 Mgmt Commitments	Current Baseline	Completed YTD
Waste Site Excavations	13	13	12	0

PERFORMANCE OBJECTIVES:

RL has not formally transmitted final FY02 Performance Incentives (PIs) to BHI.

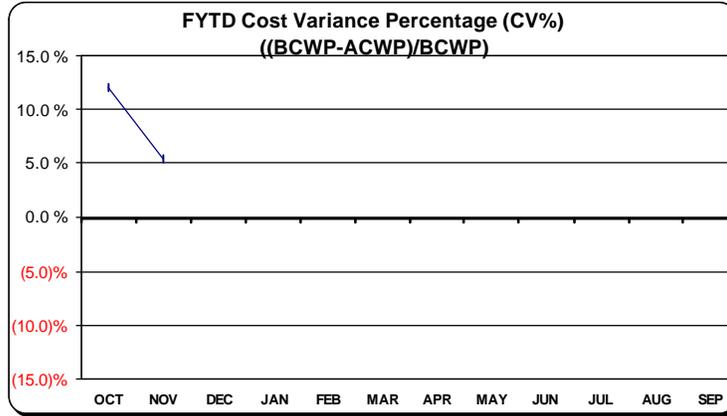
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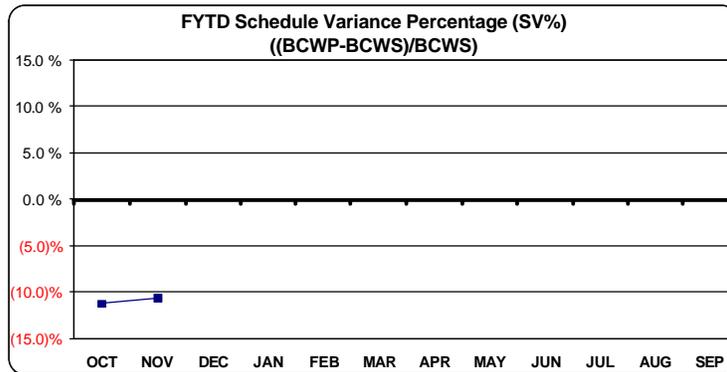
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TOTAL ERC COST/SCHEDULE OVERVIEW:

FY02 ER PERFORMANCE SUMMARY FYTD NOVEMBER 2001 (\$K)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	EAC
CURRENT PERIOD													
ACWP	10,237	12,390											
BCWP	11,635	12,270											
FISCAL YEAR TO DATE													
ACWP	10,237	22,627											
BCWP	11,635	23,905											
CV	1,398	1,278											
CV%	12.0%	5.3%											
EAC (Cumulative)	10,237	22,627	42,375	56,453	70,486	87,544	100,797	113,545	127,555	139,426	151,615	167,193	167,193
Yr End Budget Variance	(75)	(387)											



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DWP	10,994	11,433	14,984	13,383	12,125	15,162	12,865	12,486	13,558	11,837	12,074	14,835
DWP (Accum)	10,994	22,427	37,411	50,794	62,919	78,081	90,946	103,432	116,990	128,827	140,901	155,736
CURRENT PERIOD												
BCWS	13,121	13,631	18,100	14,428	13,510	17,011	13,072	12,388	13,325	11,833	11,899	14,487
BCWP	11,635	12,270										
FISCAL YEAR TO DATE												
BCWS	13,121	26,752	44,852	59,281	72,790	89,802	102,874	115,262	128,586	140,419	152,318	166,806
BCWP	11,635	23,905										
SV	(1,486)	(2,848)										
SV%	-11.3%	-10.6%										

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TOTAL ERC COST/SCHEDULE OVERVIEW continued:

**FY02 ER PBS PERFORMANCE SUMMARY
FYTD NOVEMBER 2001
(\$K)**

	FY02 DWP BCWS	CURRENT BCWS	FYTD			YTD SCHEDULE VARIANCE		YTD COST VARIANCE		EAC
			BCWS	BCWP	ACWP	\$	%	\$	%	
RC01	68,776	73,294	11,390	10,001	8,902	-1,389	-12.2%	1,099	11.0%	73,571
RC02	9,444	9,865	976	924	798	-52	-5.3%	126	13.6%	9,898
RC05	24,259	25,239	4,304	4,061	5,048	-243	-5.6%	-987	-24.3%	25,362
RCR-Subtotal	102,479	108,398	16,670	14,986	14,748	-1,684	-10.1%	238	1.6%	108,831
CP01	32,663	33,292	5,172	4,591	4,265	-581	-11.2%	326	7.1%	33,294
CPT-Subtotal	32,663	33,292	5,172	4,591	4,265	-581	-11.2%	326	7.1%	33,294
SS03	17,141	18,097	3,104	2,925	2,638	-179	-5.8%	287	9.8%	18,219
SS04	3,382	6,949	1,802	1,398	974	-404	-22.4%	424	30.3%	6,781
S&T-Subtotal	20,523	25,046	4,906	4,323	3,612	-583	-11.9%	711	16.4%	25,000
SC01	71	69	5	5	2	0	0.0%	3	60.0%	68
SS-Subtotal	71	69	5	5	2	0	0.0%	3	60.0%	68
ERCTOTAL	155,736	166,805	26,753	23,905	22,627	-2,848	-10.6%	1,278	5.3%	167,193

Schedule Variance Summary:

Through November, the ER Project is \$2.8M (-10.6%) behind schedule. The negative schedule variance is attributed to late contract award for system upgrade at two 100 Area groundwater pump and treat units, PFP well drilling relocation, rescheduling GW/VZ Science and Technology (S&T) workshops, weather delays in remedial actions, and work slow-downs due to higher than expected radiation readings at the F Reactor FSB. No significant impacts are expected to result.

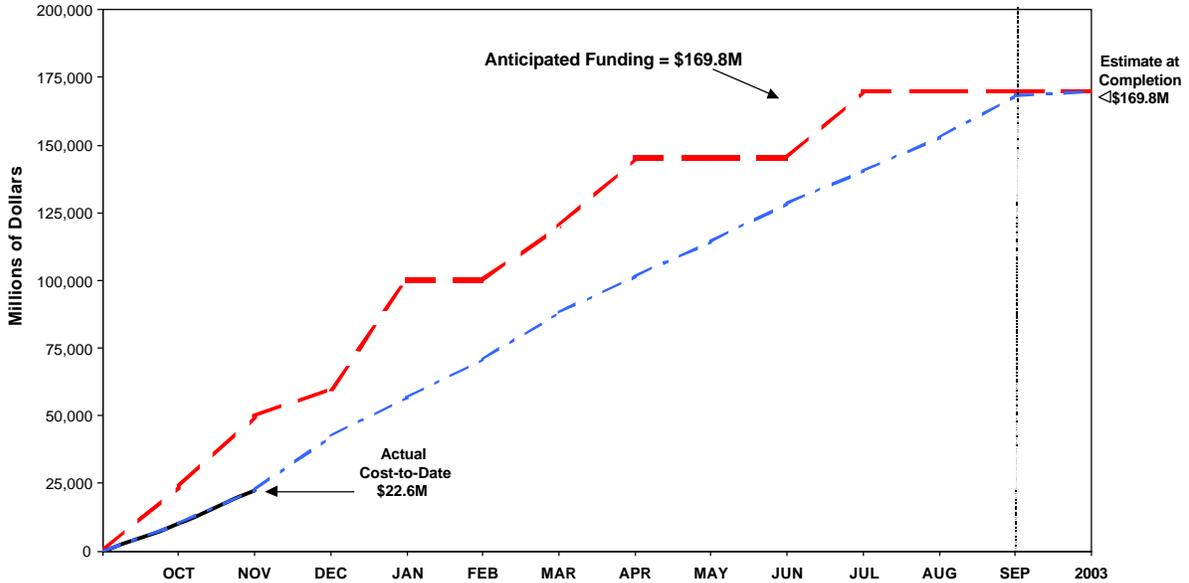
Cost Variance Summary:

At the end of November, the ER Project had performed \$23.9M worth of work, at a cost of \$22.6M. This results in a favorable cost variance of \$1.3M (+5.3%). The positive cost variance is attributed to 200-CS-1 test pit pre-job planning requiring less effort than planned, decrease in costs associated with the SAC computer purchase and software modification, and accrual system errors which will be corrected in December.

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TOTAL ERC COST/SCHEDULE OVERVIEW continued:

FY02 FUNDS MANAGEMENT



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	2003	EAC TOTAL
APPROVED FUNDING	24,017	50,000	60,000	100,000	100,000	120,000	145,000	145,000	145,000	169,753	169,753	169,753	Est. Outlyr. ETC	
APPROVED SCOPE														
1 Actual Cost	10,237	22,627												
2 Current Monthly EACs	10,237	12,390	19,748	14,079	14,032	17,059	13,253	12,748	14,009	11,871	12,189	15,578		
3 Cumulative EAC	10,237	22,627	42,375	56,454	70,486	87,545	100,798	113,546	127,555	139,426	151,615	167,193	-	167,193
DECEMBER FY2002 APPROVED BCPs (Through 12/20/02)														
4 RC01/05 BCP-22032 Added 100 BC/Waste Disposal Costs			88	88	88	88	88	88	88	88	89	89		882
5 RC01/05 BCP-22034 100-HR-3 Extraction Well Installation			31	32	32	32	32	32						191
6 CP01 BCP-22011 Accelerate 200-IS-1 RI/FS Work Plans			24	28	24	34	36	63	53	45	38	21		366
7 CP01 BCP-22023 Increased Funding Required for NDA @ 233-S			24	29	17	17	17	17	12	13	17	17		180
8 Subtotal Approved Scope Changes			24	29	17	17	17	17	12	13	17	17	0	1,619
FY2002 PENDING BCPs														
9 RC01/05 BCP-22035 Additional Plumes @ F Area			6	7										13
10 RC01/5 BCP22037 Additional Plumes @ N Area, Waste & Transportation			(4)											(4)
11 RC01 BCP-22038 Reduction in Routine Well Maintenance							(16)	(16)	(15)					(47)
12 RC01 BCP-22039 100-NR-2 RDR/RAWP Scope Reduction				(8)	(8)	(8)	(8)	(9)	(9)	(9)	(9)	(9)		(77)
13 CP01 BCP-22029 Accelerate 200-ST-1 and 200-SW-2 RI/FS Work Plans					33	40	63	86	51	39	28	13	10	363
14 CP01 BCP-22040 ZP-1 and ZP-2 Scope Reduction							(51)		(4)	(4)	(4)	(5)		(68)
15 CP01 BCP-22020 Remove East & South Wooden Weather Enclosures @ 233-S							(7)	(7)	(7)	(6)	(6)			(33)
16 ALL BCP-22008 Waste Management Phase III Process Improvements			25	25	25	25	25	25	25	25	25	25		250
17 ALL BCP-22033 Transition Planning			49	96	77	43	23							290
18 ALL BCP-22036 Additional Requirements for the Volunteer Protection Program			26	26	26	26	26	27	27	27	27	27		265
19 ALL Pending Scope Additions, Deletions, Etc.			(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(11)
20 Subtotal Approved BCPs + Pending BCPs			126	177	170	143	72	123	80	85	78	68	10	2,560
Summary Totals														
21 Current Monthly EAC + December FY2002 Approved BCPs & Pending BCPs	10,237	12,390	19,874	14,256	14,202	17,202	13,325	12,871	14,089	11,956	12,267	15,646		-
22 Cumulative EAC + December FY2002 Approved BCPs & Pending BCPs	10,237	22,627	42,501	56,757	70,959	88,161	101,486	114,357	128,446	140,402	152,669	168,315	10	169,753

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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ISSUES (REGULATORY/EXTERNAL/DOE):

See individual Outcome sections.

KEY INTEGRATION ACTIVITIES:

BHI and Fluor Hanford (FH) were directed by RL to prepare a schedule and preliminary cost estimate for the joint development of a Hanford Site Central Plateau/River Corridor Contract transition plan. The two-part transition plan will align the site's scope with RL's contracting strategy. A joint approach was developed in November and submitted to RL on November 29.

UPCOMING PLANNED KEY EVENTS:

River Corridor Restoration:

Tri-Party Agreement Milestone M-16-00F, Establish Date for Completion of All 100 Area Remedial Actions, due December 31, 2001.

Tri-Party Agreement Milestone M-93-12, Issue 105-DR Disposition Competitive Procurement Package, due February 28, 2002.

Central Plateau Transition:

Tri-Party Agreement Milestone M-13-26, Submit Plutonium/Organic-Rich Process Waste Group (200-PW-1) Work Plan, due December 31, 2001.

Tri-Party Agreement Milestone M-13-00L, Submit 3 200 NPL RI/FS (RFI/CMS) Work Plans, due December 31, 2001.

Section B - River Corridor Restoration

RC01 - 100 Area River Corridor Cleanup

RC02 - 300 Area Cleanup

RC05 - River Corridor Waste Management



Excavation in the Fuel Storage Basin at the F Reactor



Exhuming 233-S Waste Package from the ERDF



Cutting the Active Water Line at the Lewis Canal



Pipe Cutting at D Reactor

Data as of month-end November

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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SECTION B – RIVER CORRIDOR RESTORATION

Data as of month-end November

ACCOMPLISHMENTS:

100 Area River Corridor Cleanup (RC01):

Removal of pipelines 13, 14, and 24, and the clean overburden and associated contaminated soil was completed in the 100 B/C Area. Grading of side slopes was completed on pipeline 3. Contaminated soil excavation activities and pipe reduction/removal activities continued on pipelines 12 and 15, and overburden removal was initiated on pipelines 20 and 42. Preparations are underway to start the verification (confirmation) sampling at the three outfall structures (116-B-7, 132-B-6, and 132-C-2).

In the 100 H Area, reseeding and revegetation were initiated. Approximately 80% of the remediated area has been seeded with native grasses.

In the 100 F Area, overburden material removal and demolition was completed on the 1.4-meter (54-inch) discharge piping from the reactor building to the Lewis Canal. The piping closer to the reactor building contained higher levels of radiological contamination. The work area was posted as a high contamination area during the work activities.

A baseline change proposal (BCP) was approved to adjust the 100 F Area waste site remediation FY02 work scope. This change will allow the reactor security fence to remain intact until the 100 F Reactor interim safe storage (ISS) work associated with the FSB demolition is completed. The security fence is required to remain in place due to spent fuel elements being found in the storage basin. Remediation of waste sites near the reactor requires the removal of the reactor security fence.

In the 100 N Area, cover panel demolition and size reduction activities were initiated at the 116-N-1 Trench. Demolition and size reduction were completed in each girder bay, which was then covered with low-dose soil before moving to the next girder bay. Eight bays of cover panels were demolished and processed. The overburden material continues to be removed around the 116-N-1 Trench for the construction of haul roads. Haul roads were completed for approximately half of the trench.

Laser-Assisted Ranging and Data System (LARADs) surveying and final cleanup activities continued at the 116-N-3 Crib, Trench, Pipeline, and Bypass areas. Spotty contamination was removed as it was identified during the LARADs surveys. Three additional plumes were identified at the 116-N-3 Crib.

Backfill activity was initiated at the JA Jones and 600-23 sites the last week of November. EPA approved CVPs for the JA Jones and 600-23 waste sites. This completes Tri-Party Agreement Milestone M-16-41B (due March 31, 2002) four months ahead of schedule.

Geophysical investigations were completed for the 100 B/C burial grounds. The data, coupled with upcoming test pitting and trenching, are expected to significantly reduce the footprint of these waste sites as currently defined in Waste Information Data System (WIDS) and the existing design. The geophysics team is continuing to survey the 100 F Area burial grounds.

At D Reactor, interim closure sampling was initiated to determine waste designation. Samples were also collected from the F Reactor FSB for laboratory analysis.

All chemical and radiological data were received from the DR Reactor northwest decon area, and an informal verification analysis was completed. All data passed the analysis, and the DR Reactor decon area was determined to be clean.

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ACCOMPLISHMENTS continued:

Spent fuel packaging was completed at the F Reactor FSB, which included videotaping of the fuel elements along with other characterization activities that included weighing and measuring. The cask containing the packaged spent fuel was shipped to K Basin on November 6. Work resumed on hot spot #10 on November 5, and was closed out on November 6. This completes closeout of all hot spots found in the first pass of the F Reactor FSB.

The remaining ISRM Project Phase II well extractions were completed on November 20, satisfying completion of Tri-Party Agreement Milestone M-16-27B (due December 31) more than five weeks ahead of schedule. ISRM Phase II consisted of installing 32 wells (28 barrier wells and 4 compliance monitoring wells) parallel to the Columbia River. All 28 barrier wells were chemically injected, as planned. The well installations extended the subterranean chemical barrier to approximately 479 meters (1,570 feet) to support the mitigation of chromium migration to the Columbia River.

The contracts were awarded for the 100-KR-4 well installation and the 100-HR-3 and 100-KR-4 groundwater pump and treat system upgrades.

In the 100 Area, three groundwater pump and treat systems (100-HR-3, 100-KR-4, and 100-NR-2) operated above the planned 90% availability levels in November, processing approximately 52.7 million liters of groundwater and removing approximately 3 kilograms of chromium and .01 curie of strontium. Since system inception, these three pump and treat systems have processed over 3 billion liters of groundwater, removing approximately 273 kilograms of chromium and 1.12 curies of strontium.

River Corridor S&M activities that were performed in November to ensure inactive facility integrity and safety included completion of the Long Range Plan (LRP) document and emergency work plan for the 100 Area facilities, completion of sampling tasks for the 100 Area asbestos abatement project, issuance of the River Corridor herbicide/pesticide subcontract, and completion of the passive vent work at N Reactor.

ER Project briefing materials were provided in support of the Secretary of Energy's visit to the Hanford Site.

BHI Procurement conducted an eAuction for the purchase of an excavator and related equipment, resulting in an estimated cost avoidance of \$50K. This method of procurement was initiated in FY01 and has proved to be very cost effective and timely in placing orders and contracts.

300 Area Cleanup (RC02):

A technical evaluation of bid packages was completed for the remediation of the 618-4 and 618-5 Burial Grounds located in the 300 Area. Award of this subcontract is scheduled for the end of December. The 618-4 Management of Change (MOC) document was also transmitted to RL. To accommodate the current remediation schedule, a revision to the RL safety evaluation report is required in December.

An independent technical expert from Sandia National Laboratory, funded by the EM-50 technical assistance program, reviewed and commented on the 300 Area Kd leachability study preliminary results. Results of the laboratory study will provide a better understanding of uranium mobility in 300 Area soils. This laboratory data will help address groundwater protection at remediated 300 Area waste sites based on the 300 Area uranium cleanup standard of 350 pCi/g.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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ACCOMPLISHMENTS continued:

River Corridor Waste Management (RC05):

During November, ERDF received 38,224 metric tons (42,135 tons) of contaminated waste, for a total of 90,298 metric tons (99,537 tons) in FY02. A total of 2,950,925 metric tons (3,252,838 tons) have been disposed in ERDF since operations began in July 1996. ERDF Disposal personnel have worked 1,982 days without a lost time accident, and the ERDF Transportation team has driven 9,023,075 kilometers (5,606,679 miles) without an at-fault vehicle accident.

RL requested a 233-S facility waste package (Box 39) be exhumed from ERDF to perform an NDA. Box 39 was successfully exhumed intact with only minimal deformations to the plywood lid. The box has been re-assayed, and the results are being evaluated.

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MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS):

TPA Milestone	Description	Due Date	(F)/(A) Date
M-16-00F*	Establish Date for Completion of All 100 Area Remedial Actions	12/31/01	
M-16-27B	Complete 100-HR-3 Phase II, ISRM Barrier Emplacement (Planning, Well Installation, and Barrier Emplacement)	12/31/01	11/20/01 (A)
M-93-12*	Issue 105-DR Disposition Competitive Procurement Package for Ascertaining the Most Effective and Efficient Approach to FEIS ROD Selected Alternative Implementation (....)	2/28/02	
M-16-26B	Complete Remediation and Backfill of 51 Liquid Waste Sites in the 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, and 100-HR-1 Operable Units and Process Effluent Pipelines in the 100-DR-1, 100-DR-2, and 100-HR-1 OUs. Complete Revegetation of 36 Liquid Waste Sites in the 100-BC-1, 100-DR-1, 100-DR-2, and 100-HR-1 OUs as Defined in RDR/RAWP for the 100 Area	3/31/02	1/09/02 (F)
M16-41B	Submit Closeout Verification Package for JA Jones 1 and 600-23 Waste Sites for EPA Approval	3/31/02	11/30/01 (A)
M-16-03A*	Establish Date for Completion of 300 Area Remedial Actions	6/30/02	
M-16-03G	Establish an Environmental Restoration Disposal Facility (ERDF) Staging Area that is Ready to Receive Drummed Waste from the 618-4 Burial Ground in Accordance with an ERDF Record of Decision Amendment	9/30/02	2/15/02 (F)
M-16-27C**	Complete 100-HR-3 Phase III, ISRM Barrier Emplacement (Planning, Well Installation, and Barrier Emplacement)	9/30/02	12/31/02 (F)
M-16-41C	Complete Backfill and Regrading of JA Jones 1 and 600-23. Revegetation will occur during the following planting season	TBD	12/17/01 (F)

*Negotiations are currently in progress to address M-16 and M-93 milestones for the 100/300 Areas with a target date of December 31 for reaching agreement.

**An Explanation of Significant Difference (ESD) and change request are being developed to extend milestone completion date three months. RL and Ecology are in agreement with path forward.

PERFORMANCE OBJECTIVES:

RL has not formally transmitted final FY02 PIs to BHI.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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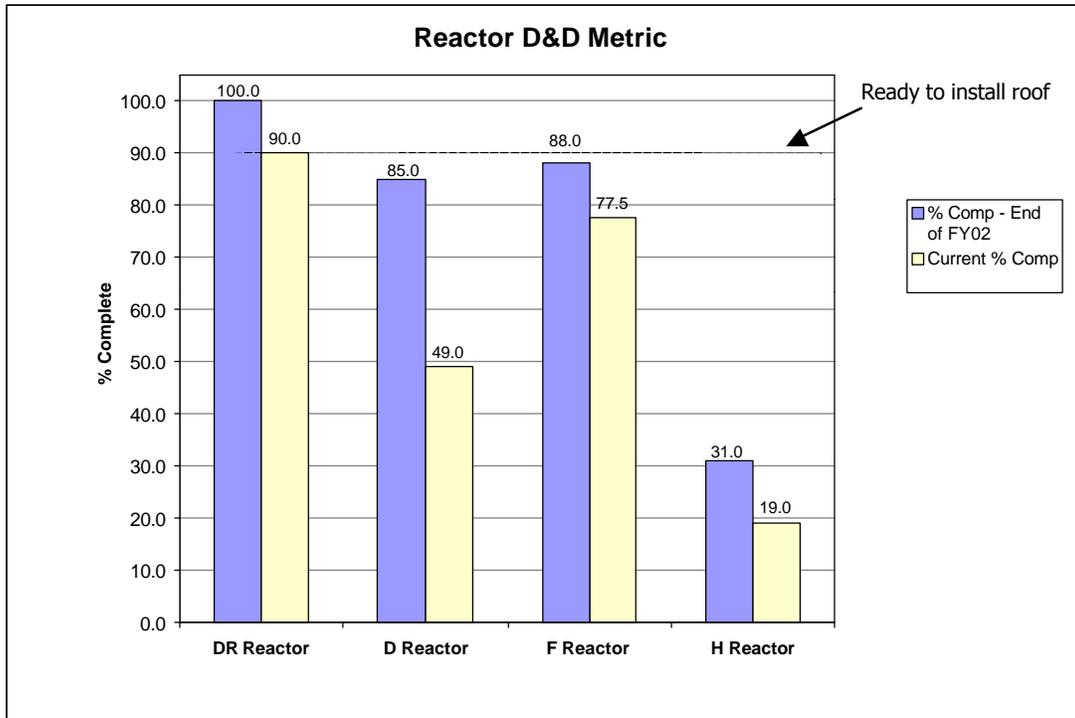
PERFORMANCE MEASURES/METRICS:

FY02 Performance Measures Summary:

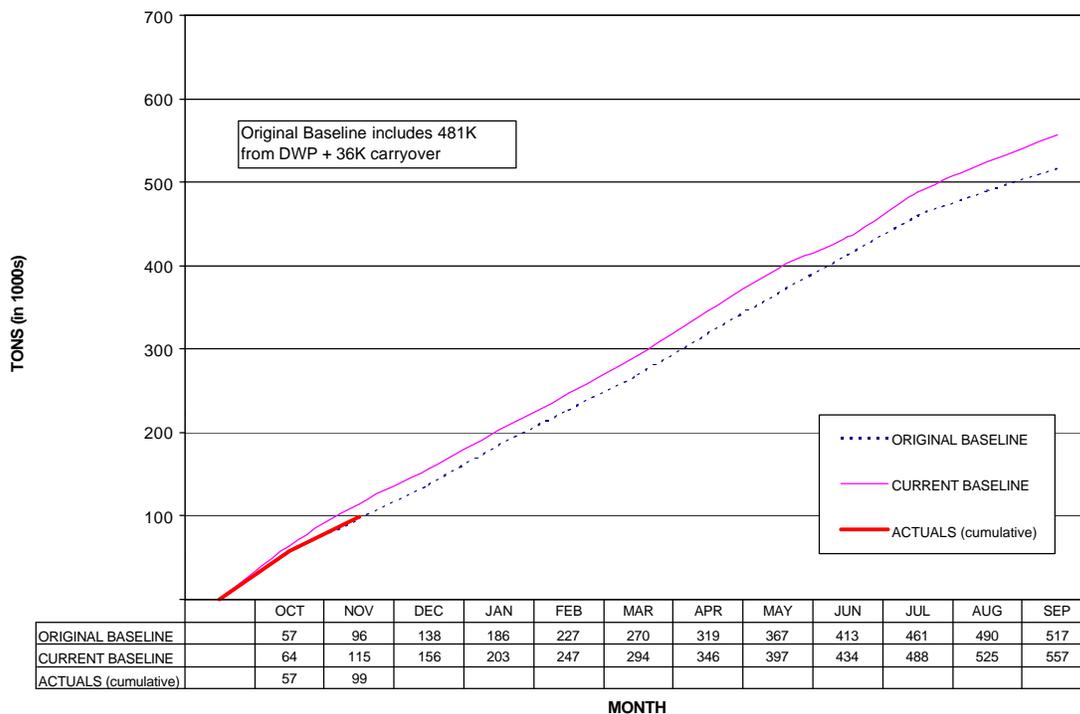
PBS	Description	FY02 Mgmt Commit	Current Baseline Due Date	Forecast (F) Actual (A) Date
RC01	Complete Excavation – 100-F-2	X	11/30/01	12/11/01 (F)
RC01	Complete Excavation – 100-F-15	X	5/1/02	4/29/02 (F)
RC01	Complete Excavation – 100-F-19	X	8/12/02	8/12/02 (F)
RC01	Complete Excavation – 100-F-35	X	Deferred	Deferred
RC01	Complete Excavation – 116-F-1	X	9/30/02	9/30/02 (F)
RC01	Complete Excavation – 116-F-2	X	10/12/01	12/18/01 (F)
RC01	Complete Excavation – 116-F-3	X	Deferred	Deferred
RC01	Complete Excavation – 116-F-6	X	Deferred	Deferred
RC01	Complete Excavation – 116-F-10	X	Deferred	Deferred
RC01	Complete Excavation – 116-F-11	X	Deferred	Deferred
RC01	Complete Excavation – 116-N-1	X	7/18/02	7/26/02 (F)
RC01	Complete Excavation – UPR-100-N-31	X	5/9/02	6/7/02 (F)
RC01	Complete Excavation – 126-F-1		6/5/02	6/3/02 (F)
RC01	Complete Excavation - 116-F-14		11/30/01	12/7/01 (F)
RC01	Complete Excavation - 116-F-9		11/26/01	12/4/01 (F)
RC01	Complete Excavation - 1607-F2		7/30/02	7/24/02 (F)
RC02	Complete Excavation – 618-4	X	8/15/02	8/15/02 (F)
Total		13	12	12 (F) 0 (A)

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT ENVIRONMENTAL RESTORATION NOVEMBER 2001

PERFORMANCE MEASURES/METRICS:



**Remedial Action and Waste Disposal Project
Cumulative Tons to ERDF**



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STRETCH AND SUPERSTRETCH GOALS:

RL has not formally transmitted final FY02 goals to BHI.

OUTCOME STATUS (COST/SCHEDULE):

Schedule:

River Corridor Restoration	BCWS	BCWP	Variance
	\$K	\$K	\$K
RC01 100 Area River Corridor Cleanup	11,390	10,001	(1,389)
RC02 300 Area Cleanup	976	924	(52)
RC05 River Corridor Waste Management	4,304	4,061	(243)
TOTAL River Corridor Restoration	16,670	14,986	(1,684)

PBS-RC01 – 100 Area River Corridor Cleanup

Schedule Variance = **(\$1389K)**; **(12.2%)** [Last Month: (\$823K); (15.5%)]

Cause: System upgrade delays at 100-KR-4 and 100-HR-3 groundwater pump and treat units due to change in performance approach from construction forces to subcontract. Also, delay in resin regeneration and material procurement.

Resolution: Baseline is being revised to incorporate new subcontract approach with full recovery expected. Delay in resin regeneration is not anticipated to impact FY02 activities.

Cause: F Reactor FSB demolition and loadout activities took more time than planned due to increased dose rates.

Resolution: Negotiations are in progress to increase ERDF's acceptable dose rate. Schedule expected to be recovered.

Cause: Soil sampling delays due to increased contaminated soil volumes in the 100 B/C Area.

Resolution: A BCP is being prepared to incorporate the plume growth.

PBS-RC02 – 300 Area Cleanup

Schedule Variance = **(\$52K)**; **(5.3%)** [Last Month: (\$46K); (9.1%)]

Cause: 300-FF-1 is behind schedule due to awaiting comments on CVPs.

Resolution: When the initial CVP is approved, the remaining CVPs will be completed.

PBS-RC05 – River Corridor Waste Management

Schedule Variance = **(\$243K)**; **(5.6%)** [Last Month: (\$84K); (3.9%)]

Cause: Operations at ERDF delayed due to six days of weather-related curtailment.

Resolution: Schedule recovery expected.

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OUTCOME STATUS (COST/SCHEDULE) continued:

Cost:

River Corridor Restoration	FY02 EAC	BCWP	ACWP	Variance
		\$K	\$K	\$K
RC01 100 Area River Corridor Cleanup	73,571	10,001	8,902	1,099
RC02 300 Area Cleanup	9,898	924	798	126
RC05 River Corridor Waste Management	25,362	4,061	5,048	(987)
TOTAL River Corridor Restoration	108,831	14,986	14,748	238

PBS-RC01 – 100 Area River Corridor Cleanup

Cost Variance = \$1099K; 11.0% [Last Month: \$335K; 7.5%]

Cause: Less hazardous material at D Reactor was discovered than planned.

Resolution: Underrun has been reflected in the EAC.

Cause: Accruals were understated.

Resolution: Accruals will be corrected in December.

PBS-RC02 – 300 Area Cleanup

Cost Variance = \$126K; 13.6% [Last Month: \$75K; 16.4%]

Cause: 300-FF-1 procurement packages required less labor than planned and regulatory costs have not been incurred as anticipated.

Resolution: Underrun has been reflected in the EAC.

PBS-RC05 – River Corridor Waste Management

Cost Variance = (\$987K); (24.3%) [Last Month: \$121K; 5.9%]

Cause: Accruals were overstated due to a systems error.

Resolution: Accrual error will be corrected in December.

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ISSUES (REGULATORY/EXTERNAL/DOE):

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 date 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.

Status: An Agreement in Principle (AIP) was signed by RL, EPA, and Ecology on October 31 outlining the 100/300 Area Tri-Party Agreement milestone negotiation process. Negotiations are currently proceeding to address M-16 and M-93 milestones for the 100/300 Areas. Target date for reaching agreement on the Tri-Party Agreement milestone draft change packages is December 31, 2001.

D and H Reactor Impacts of Tri-Party Agreement Milestones: The acceleration of the reactor ISS projects is no longer consistent with the current M-93 milestones, especially the competitive procurement milestone (M-93-12) for DR Reactor.

Status: An AIP was signed by RL, EPA, and Ecology on October 31 outlining the 100/300 Area Tri-Party Agreement milestone negotiation process. Negotiations are currently proceeding to address M-16 and M-93 milestones for the 100/300 Areas. Target date for reaching agreement on the Tri-Party Agreement milestone draft change packages is December 31, 2001.

Increased Hot Spots and Radiation Levels: The number of hot spots currently found in F Reactor FSB and the radiation levels exceed the assumptions made during preparation of the current cleanout schedule. This is causing:

- Increased radiation monitoring and survey documentation
- Revised As Low as Reasonably Achievable (ALARA) planning and dose estimates (tracking individual dose of personnel)
- Excavation taking longer due to hot spot removal in larger areas
- High radiation area control constant versus sporadic (as planned)

Status: A BCP has been submitted to address the above impacts.

Decontamination and Decommissioning (D&D) Worker Turnover: 13 out of 17 Reactor ISS D&D staff have transferred through the Labor Assets Management Program (LAMP) process in FY01.

Status: In October, two additional D&D workers LAMPed out and two are pending, thus minimizing remaining worker knowledge base. Currently, the project is rearranging staff for more experienced personnel to support critical work (F Basin).

INTEGRATION ACTIVITIES:

None identified at this time.

Section C - Central Plateau Transition

CP01 - 200 Area Remediation



Rigging Attachment to Vessel L-13 at 233-S



Bagging Out Waste at 233-S



Standing Water on PUREX Roof



RCT Smoke Testing Air Flow
in the REDOX Sample Gallery

Data as of month-end November

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SECTION C – CENTRAL PLATEAU TRANSITION

Data as of month-end November

ACCOMPLISHMENTS:

200 Area Remediation (CP01):

Central Plateau remediation and groundwater monitoring activities that were performed in November included:

- Held a workshop with RL, EPA, and Ecology to define the assumptions and basis for negotiation of Tri-Party Agreement Milestones M-13, M-15, M-16, and M-20 for Central Plateau waste site assessment and remediation.
- Completed test pit sampling at the 216-A-29 Ditch for the 200 Area Chemical Sewer Operable Unit (200-CS-1), including sampling for the vitrification plant design work.
- Resumed monitoring well drilling on November 26 at an alternate location within the PFP protected area in support of the carbon tetrachloride investigation.
- In the 200 Area, both groundwater pump and treat systems (200-UP-1 and 200-ZP-1) operated above the planned 90% availability levels in November, processing approximately 30.5 million liters of groundwater. Since system inception, these two pump and treat systems have processed approximately 2.2 billion liters of groundwater. Approximately 81 kilograms of carbon tetrachloride were removed by 200-ZP-1 this period. Approximately 6,000 kilograms of carbon tetrachloride has been removed by 200-ZP-1 to date. Approximately 545 million liters of groundwater have been transported to the Effluent Treatment Facility (ETF) for processing since 200-UP-1 began operation. 343 million liters were previously processed prior to using ETF.
- The 200-UP-1 upgrade subcontractor mobilized and initiated field activities.

November decommissioning activities that were accomplished in the highly contaminated 233-S Plutonium Concentration Facility included:

- Removed approximately 17 meters (55 feet) of vessel L-10. Removal of the L-10 vessel is approximately 50% complete. To date, 11 vessels have been removed from the process hood. A total of 15 vessels are planned for removal by June 2002. The original baseline identified removal of six vessels by June 2002.
- Removed approximately 85 meters (278 feet) of process hood piping.
- Performed NDA of 32 drums, 4 waste packages, and a 60 milliliter liquid sample.
- Packaged 13 drums of Conex box waste.
- Approved and issued the revised sampling and analysis plan (SAP).

Central Plateau S&M activities that were performed in November to ensure inactive facility integrity and safety included:

- Commenced field work on the U Plant railroad cut RARA interim stabilization.
- Completed sampling tasks for the 200 Area asbestos abatement project.
- Continued to review and update the emergency action plans for the 200 Area S&M facilities.
- Completed enclosure design review for the B Plant filter changeout.
- Issued the Central Plateau herbicide/pesticide subcontract.
- Completed the draft NOC for hexone interim stabilization work.

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MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS):

TPA Milestone	Description	Due Date	(F)/(A) Date
M-13-26	Submit Plutonium/Organic-Rich Process Waste Group (200-PW-1) Work Plan	12/31/01	12/20/01 (F)
M-13-00L	Submit 3 200 NPL RI/FS (RFI/CMS) Work Plans	12/31/01	12/31/01 (F)
M-15-40A	Complete U Pond/Z Ditches Cooling Water Group Field Work Through Sample Collection and Analysis	9/30/02	9/30/02 (F)
M-15-42B	Submit 200-TW-2 OU Draft A Remedial Investigation Report to Ecology	9/30/02	9/30/02 (F)
M-15-41B	Submit 200-TW-1 OU Draft A Remedial Investigation Report to EPA	10/30/02	10/30/02 (F)
M-13-00M	Submit 3 200 NPL RI/FS (RFI/CMS) Work Plans	12/31/02	12/31/02 (F)
M-20-39	Submit 216-S-10 Pond and Ditch Closure/Post Closure Plan to Ecology in Coordination with the Work Plan for the Chemical Sewer Group	2/28/03	2/28/03 (F)
M-15-38A	Submit Draft A Gable Mountain Pond/B Pond and Ditch Cooling Water Group Feasibility Study and 216-B-3 Pond System RCRA TSD Unit Closure Plan and Submit Draft A Gable Mountain Pond/B Pond and Ditch Cooling Water Group Proposed Plan/Proposed RCRA Permit Modification	3/31/03	3/31/03 (F)

PERFORMANCE OBJECTIVES:

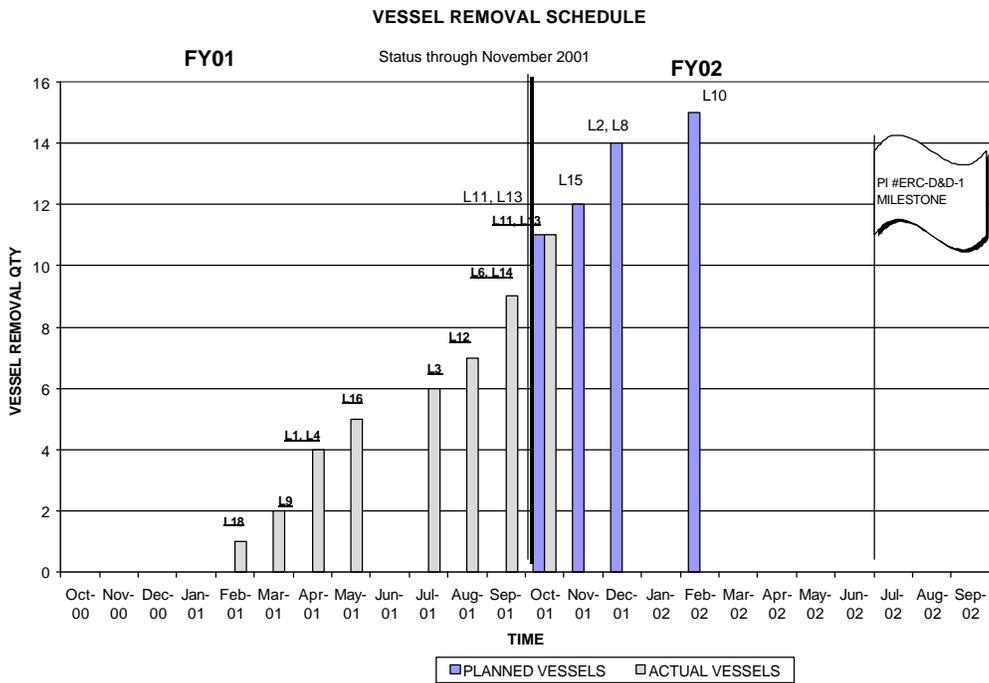
PI	Task	Status
233-S*	<ul style="list-style-type: none"> • 8 vessels by 6/30/02 • 7 additional vessels by 6/30/02 (Stretch) 	On schedule to remove 15 vessels by 6/30/02.



*Multi-year PI developed in FY01. RL has not formally transmitted final FY02 PIs to BHI.

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT ENVIRONMENTAL RESTORATION NOVEMBER 2001

PERFORMANCE MEASURES/METRICS:



STRETCH AND SUPERSTRETCH GOALS:

RL has not formally transmitted final FY02 goals to BHI.

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OUTCOME STATUS (COST/SCHEDULE):

Schedule:

Central Plateau Transition	BCWS	BCWP	Variance
	\$K	\$K	\$K
CP01 200 Area Remediation	5,172	4,591	(581)
TOTAL Central Plateau Transition	5,172	4,591	(581)

PBS-CP01 – 200 Area Remediation

Schedule Variance = **(\$581K)**; **(11.2%)** [Last Month: (\$209K); (7.6%)]

Cause: PFP well drilling behind schedule due to off-center drilling at the original site.

Resolution: Drilling has been relocated to an alternate site, and is expected to complete one month late.

Cause: Hexone interim stabilization activities are behind schedule due to regulator issue resolution and associated delay in reaching an alternative regulator selection decision.

Resolution: A decision is anticipated by the end of January. A recovery schedule will be implemented.

Cause: Process hood vessel waste disposal activities at the 233-S facility D&D project are behind schedule due to NDA issues requiring a new subcontract placement.

Resolution: First shipment to the Central Waste Complex (CWC) is scheduled for December; new NDA subcontract has been signed and work has commenced.

Cost:

Central Plateau Transition	FY02 EAC	BCWP	ACWP	Variance
		\$K	\$K	\$K
CP01 200 Area Remediation	33,294	4,591	4,265	326
TOTAL Central Plateau Transition	33,294	4,591	4,265	326

PBS-CP01 – 200 Area Remediation

Cost Variance = **\$326K**; **7.1%** [Last Month: \$373K; 14.7%]

Cause: Combining the 200-CS-1 test pit pre-job planning effort with work for another Hanford Site contractor resulted in savings.

Resolution: Underrun has been trended and reflected in the EAC.

Cause: D&D at the 233-S facility is being performed with fewer craft resources.

Resolution: Underrun has been reflected in the EAC.

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ISSUES (REGULATORY/EXTERNAL/DOE):

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). Tri-Party Agreement Milestones M-13-00X require submittal of 3-4 work plans per year, such that the RI/FS's for the past practices waste sites will be completed by December 31, 2005. Tri-Party Agreement Milestones M-20-XX require the completion of RCRA closure plans by February 28, 2004.

Status: Currently, two additional work plans are being developed per RL direction received on October 2 to meet M-13-00L. An AIP has been drafted and is to be signed in December by RL and the regulators. Negotiations will then proceed to address Tri-Party Agreement Milestones M-13, M-15, M-16, and M-20 for the 200 Area. The Tri-Parties anticipate agreement on draft change requests by January 31, 2002.

233-S Process Hood: 232 items of NDA information previously provided by FH-PFP in final data reports are invalid because of calibration errors that occurred in May 1999. 23 of the 232 packages were shipped to ERDF using PFP's invalid numbers.

Status: The 233-S waste package with suspected characterization data (Box 39) was successfully exhumed from ERDF. It was intact with only minimal deformation to the plywood lid. The box has been re-assayed, and the results are being evaluated to determine the disposition of the remaining boxes at ERDF.

Standard Waste Box (SWB): The SWB Safety Analysis Report for Packaging (SARP) has not been revised in approximately two years and no revisions are planned. Multiple Hanford Site contractors are procuring SWB containers to a drawing revision more recent than that listed in the SARP. Lack of an up-to-date SARP may preclude shipment of transuranic (TRU) waste to CWC.

Status: It has been determined the SWB SARP will not be included in the Hanford Site-wide Transportation Safety Document (TSD). ERC Waste Management will attempt to determine if an exemption can be utilized to allow the project to ship waste to CWC using an SWB. If progress is not made toward an exemption, the currently loaded SWBs will require unloading and the contents in some cases will need to be size reduced.

INTEGRATION ACTIVITIES:

Teamed with FH on development of a work order to support re-roofing tasks for the PUREX and B Plant facilities. BHI is assisting FH in the development of the work scope for subcontracting, preparation of the SAP, sample collection, and with overall expertise in re-roofing the PUREX and B Plant facilities.

Section D - Site Integration & Infrastructure

SS03 - Groundwater Management & Monitoring

SS04 - Groundwater/Vadose Zone Integration



Cable Tool Drilling at the 241-TX Tank Farm



Air Rotary Drilling at the SX Tank Farm



Geophysical Logging at the 241-S/SX Tank Farm

Data as of month-end November

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SECTION D – SITE INTEGRATION & INFRASTRUCTURE

Data as of month-end November

ACCOMPLISHMENTS:

Groundwater Management and Monitoring (SS03):

The remainder of the CY01 RCRA groundwater well drilling was completed on November 8, satisfying Tri-Party Agreement Milestone M-24-00M (due December 31) seven weeks ahead of schedule. Eleven groundwater monitoring wells were installed supporting achievement of M-24-00M.

The revised, final-status 300 Area Process Trenches Groundwater Monitoring Plan was released. The updated plan describes an alternate statistical method for monitoring groundwater more efficiently. A meeting was also held with RL, Ecology, and other contractors regarding the revised plan in relation to the Hanford Site RCRA Permit.

A paper was presented at the DOE Complex-Wide Environmental Monitoring Workshop held in Brookhaven, New York. The subject was recent tritium investigation results from the 618-11 Burial Ground, 100 K Area, and on groundwater monitoring optimization at the Hanford Site.

Groundwater/Vadose Zone Integration (SS04):

The initial SAC assessment results were presented to the Tribal Nation technical representatives during November. The design of the first assessment was also completed that will be run during FY02.

The third module, SAC Inventory, was added to the virtual library.

The third annual Environmental Management Science Program (EMSP) workshop was held with EMSP investigators, integrating results of their research into the core projects.

The FY00/01 Vadose Zone Transport Field Studies Report was published. The report summarizes results from the first two years of field experiments conducted in the 200 East Area.

MAJOR COMMITMENTS (FISCAL YEAR PLUS 6 MONTHS):

TPA Milestone	Description	Due Date	(F)/(A) Date
M-24-53	Install Two (2) Additional Wells at SST WMA TX-TY	12/31/01	11/8/01 (A)
M-24-54	Install One (1) Additional Well at SST WMA T	12/31/01	10/18/01 (A)
M-24-55	Install Two (2) Additional Wells at SST WMA S-SX	12/31/01	11/8/01 (A)
M-24-00M	Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in Calendar Year 2001 if Required	12/31/01	11/8/01 (A)
M-24-00N	Install RCRA Groundwater Monitoring Wells at Rate of Up to 50 in Calendar Year 2002 if Required	12/31/02	12/31/02 (F)

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PERFORMANCE OBJECTIVES:

RL has not formally transmitted final FY02 PIs to BHI.

PERFORMANCE MEASURES/METRICS:

None identified at this time.

STRETCH AND SUPERSTRETCH GOALS:

RL has not formally transmitted final FY02 goals to BHI.

OUTCOME STATUS (COST/SCHEDULE):

Schedule:

Site Integration & Infrastructure	BCWS	BCWP	Variance
	\$K	\$K	\$K
SS03 – Groundwater Management & Monitoring	3,104	2,925	(179)
SS04 - Groundwater/Vadose Zone Integration	1,802	1,398	(404)
TOTAL Site Integration & Infrastructure	4,906	4,323	(583)

PBS-SS03 – Groundwater Management and Monitoring

Schedule Variance = (\$179K); (5.8%) [Last Month: (\$128K); (7.8%)]

Cause: RL and regulator burial ground boundary discussions have extended beyond the planned completion date delaying monitoring network design.

Resolution: Schedule variance expected to be recovered.

PBS-SS04 – Groundwater/Vadose Zone Integration

Schedule Variance = (\$404K); (22.4%) [Last Month: (\$196K); (26.1%)]

Cause: S&T Roadmap workshops were rescheduled to January to avoid other conflicts.

Resolution: Work will be completed in January.

Cause: Scope to place the Virtual Library on the internet was postponed due to security concerns.

Resolution: Scope will be deferred per RL; a BCP will be prepared.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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OUTCOME STATUS (COST/SCHEDULE) continued:

Cost:

Site Integration & Infrastructure	FY02 EAC	BCWP	ACWP	Variance
		\$K	\$K	\$K
SS03 – Groundwater Management & Monitoring	18,219	2,925	2,638	287
SS04 - Groundwater/Vadose Zone Integration	6,781	1,398	974	424
TOTAL Site Integration & Infrastructure	25,000	4,323	3,612	711

PBS-SS03 – Groundwater Management and Monitoring

Cost Variance = \$287K; 9.8% [Last Month: \$208K; 13.7%]

Cause: Underrun due to accrual system error in groundwater sampling and offsite analysis costs, partially offset by additional costs for relocation of the PFP well.

Resolution: Accrual will be corrected in December.

PBS-SS04 – Groundwater/Vadose Zone Integration

Cost Variance = \$424K; 30.3% [Last Month: \$285K; 51.4%]

Cause: Underrun due to accrual system error and decrease in costs associated with the SAC computer purchase and software modification.

Resolution: Accruals will be corrected in December.

ISSUES (REGULATORY/EXTERNAL/DOE):

None identified at this time.

INTEGRATION ACTIVITIES:

None identified at this time.