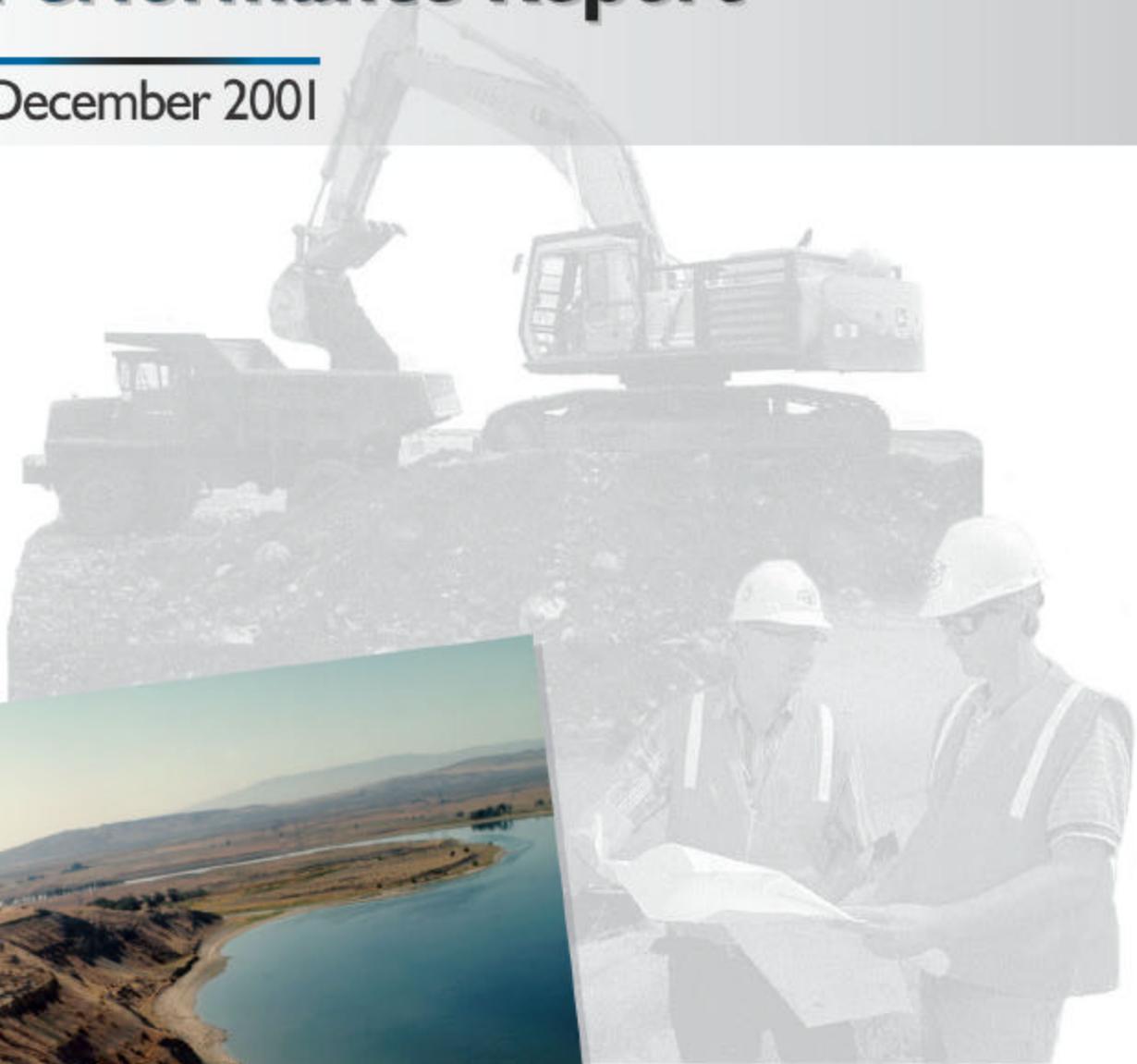


Environmental Management Performance Report

December 2001



E0201053.1



Department of Energy
Richland Operations Office



Bechtel Hanford, Inc.
Environmental Restoration Contractor

Data as of month-end December

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INTRODUCTION

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 December 31.

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

Data as of month-end December

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

Data as of month-end December

NOTABLE ACCOMPLISHMENTS:

River Corridor Restoration:

Soil excavation and pipe reduction/removal activities for five pipelines were completed in the 100 B/C Area. Overburden removal activities continued on four other pipelines, and contaminated soil excavation activities were initiated. Verification (confirmation) sampling was completed at three outfall structures. Additional plume excavation activities were initiated on December 20.

In the 100 H Area, reseeding and revegetation were completed on December 11, which satisfies completion of *Tri-Party Agreement* Milestone M-16-26B (due March 31) almost four months ahead of schedule. Higher-than-average precipitation helped the germination process.

Excavation of the deep vadose test pit (7.6 meters [25 feet] deep) was completed in the floor of the 116-F-14 Retention Basin in the 100 F Area. The test pit was excavated to sample the vertical extent of contamination. Sample information is required to support residual radioactivity (RESRAD) modeling for the 100-FR-1 Operable Unit cleanup verification package (CVP) preparation.

In the 100 N Area, five additional plumes were identified around the 116-N-3 Crib. Completion of plume excavation activities is expected in January, with confirmation sampling and cleanup verification activities to follow. Excavation and loadout activities were also performed at the 116-N-1 Trench.

Revegetation activities were completed at the JA Jones and 600-23 sites on December 14, which satisfies completion of *Tri-Party Agreement* Milestone M-16-41C.

During December, the Environmental Restoration Disposal Facility (ERDF) received 42,316 metric tons (46,645 tons) of contaminated waste, for a total of 132,614 metric tons (146,182 tons) in FY02. A total of 2,993,240 metric tons (3,299,483 tons) have been disposed in ERDF since operations began in July 1996. ERDF Disposal personnel have worked 68 months without a lost-time accident, and the ERDF Transportation team has driven 9,141,956 kilometers (5,680,548 miles) without an at-fault vehicle accident.

The Idaho National Engineering and Environmental Laboratory (INEEL) project team visited ERDF to observe and discuss subcontracting strategies and operating procedures in preparation for the construction and operation of the INEEL disposal facility. It is anticipated that lessons learned at ERDF will have a positive impact on INEEL's overall waste transportation and disposal program. Additional meetings are planned for January.

The 233-S waste package (Box 39) that was retrieved from ERDF due to suspect characterization data was re-assayed. The results indicated no transuranic (TRU) or high-level wastes were present. However, because the nondestructive assay (NDA) results were very close to the ERDF acceptance limit, a conservative decision was made to bury Box 39 in the Low-Level Burial Ground (LLBG) rather than rebury it in ERDF. Since this was the worst-case package, the other six suspect 233-S waste packages that were disposed in ERDF will remain in place. Operations are under way to backfill the excavated area and resume normal operations.

Documentation reviews were completed prior to initiating the DR Reactor safe storage enclosure (SSE) work. A pre-construction meeting for mobilization was held on December 10. The subcontractor began moving office trailers on site and constructing a perimeter fence around the reactor building on December 13. Progress continued on the D, H, and F Reactor interim safe storage (ISS) activities as well.

Drilling of the In Situ Redox Manipulation (ISRM) Phase III barrier wells was initiated in December. A total of 17 wells are planned for installation.

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

Drilling was initiated at the 100-KR-4 groundwater operable unit in support of FY02 CERCLA upgrades.

Responses to the CERCLA 5-year review action items to meet the December 31 milestones were transmitted to the regulators.

The three River Corridor pump and treat systems operated above the planned 90% availability levels in December.

Regulatory evaluation of the 618-10 and 618-11 waste sites located in the 300 Area was completed. This evaluation identified the regulatory requirements and potential issues related to remediation of these waste sites. It also supports timely review for obtaining necessary regulatory approvals for remedial design/action.

River Corridor Surveillance and Maintenance (S&M) activities were performed in December to ensure inactive facility integrity and safety. Analysis results for the 308 facility indicated the facility is beryllium-free. This is the last ERC facility identified as possibly containing beryllium.

Eleven technology deployment benefit analyses were transmitted to RL in December. The benefit analyses included fact sheets and cost savings reports for technology deployments that were ongoing or occurred in FY01. An ERC technology deployment fund has been established for FY02. A document containing criteria for use of the fund, including a proposal outline, was also issued in December.

The lifecycle Baseline Update was completed in December including incorporation of RL adjustments. This update only incorporated the FY02 Detailed Work Plan (DWP) that was implemented in October, updated rates to FY02 dollars, and incorporated several RL adjustments (primary responsibility shifts from contractor to RL). A baseline change proposal (BCP) was also prepared that will formally implement the baseline values (Rev. 4 Limited Update). As this was a planned limited update, the three-volume baseline books and associated Long Range Plan graphic were not re-issued.

Central Plateau Transition:

Three Draft A Remedial Investigation/Feasibility Study (RI/FS) work plans (200-PW-1, 200-LW-1, 200-MW-1) were transmitted to the regulators on December 26, satisfying *Tri-Party Agreement* Milestone M-13-00L and M-13-26 (due 12/31/01).

The Washington State Department of Ecology (Ecology) approved the interim stabilization recommendation to grout-fill the hexone tanks located in the 200 Area.

The Canyon Disposition Initiative (CDI) proposed plan was transmitted to the U.S. Environmental Protection Agency (EPA) Region 10 for comment.

The two Central Plateau pump and treat systems operated above the planned 90% availability level in December.

Site Integration and Infrastructure:

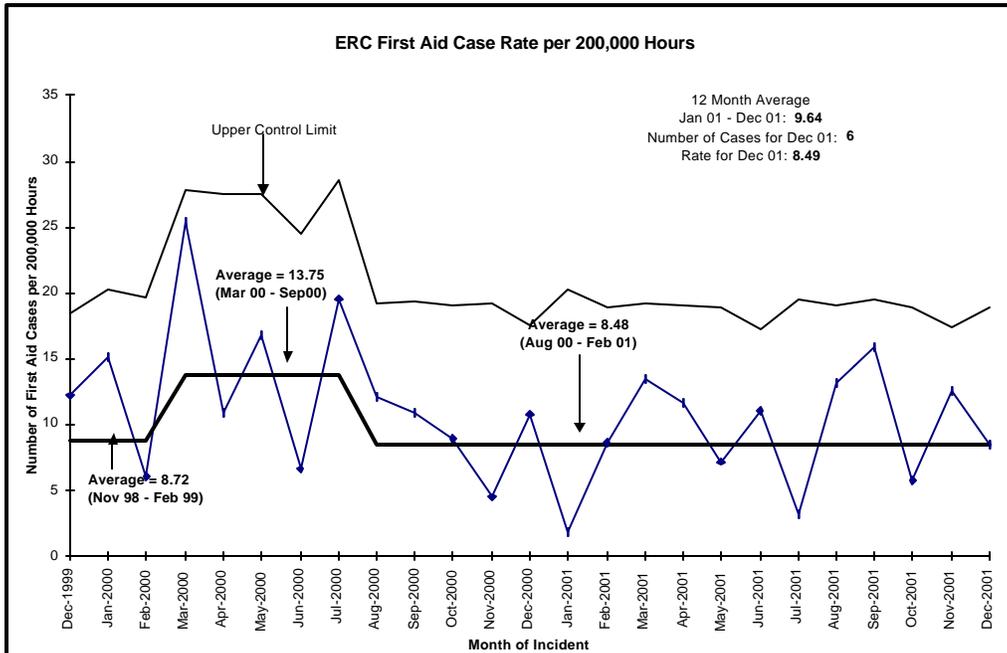
A meeting was held with the technical staff of the Confederated Tribes of the Umatilla Indian Reservation to discuss the groundwater/vadose zone System Assessment Capability (SAC) approach and initial assessment results. A meeting was also held with Ecology and State of Oregon representatives to discuss the SAC initial assessment results, Science and Technology (S&T) progress, and plans for FY02.

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

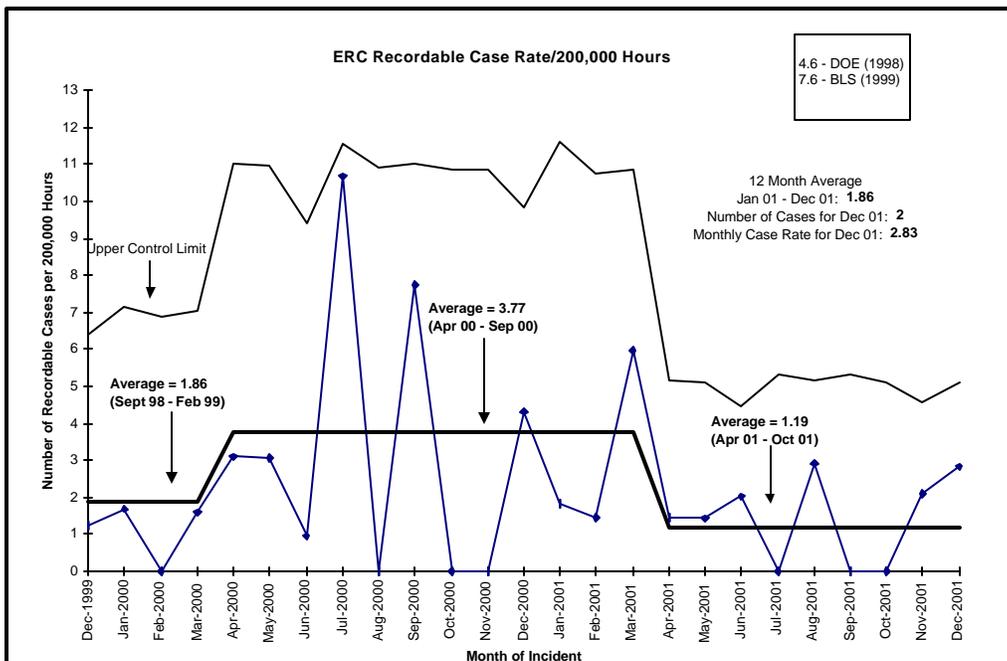
ENVIRONMENTAL RESTORATION

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SAFETY:



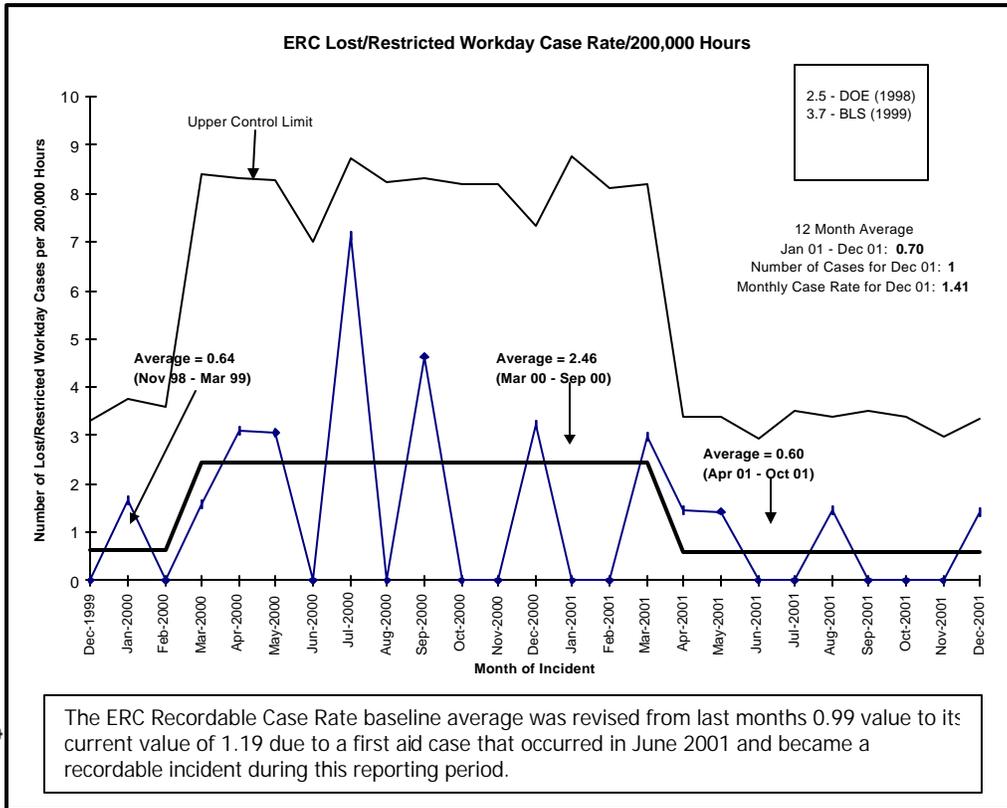
This data has been stable since August 2000, as there have been no significant trends.



This data has been stable since April 2001.

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT ENVIRONMENTAL RESTORATION DECEMBER 2001

SAFETY continued:



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
DECEMBER 2001**

SAFETY continued:

	FYTD	Current Period (11/25/01- 12/23/01)	Current Period Comments
First Aid	22	6	(4) strain/pain, (1) electric shock, (1) foreign body in eye
OSHA Recordable	4	2 (includes 1 restricted workday case below)	(1) eye abrasion with prescriptions, (1) possible rotator tear/strain
Restricted Workday Case	1	1	(1) possible rotator tear/strain
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 has established a task team to look into Oversight of Subcontractor Safety Performance and a second team to look at Flow-down of Safety Requirements to Subcontractors.
- An Incident Evaluation Review board was held on December 10, to review the hoisting and rigging incident associated with the F Reactor fuel storage basin (FSB) crane and waste transport/disposal container.
- The ERC, as of December 31, 2001, has worked approximately 975,000 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.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
DECEMBER 2001**

SAFETY continued:

Integrated Environmental Safety and Health Management System (ISMS):

Status:

- Completed the "Assessment of the Effectiveness of Tumbleweed Control on ERC Waste Sites." The observations for safety improvements to the program were completed on December 6.
- The Solid Waste Information Tracking System (SWITS) was utilized to track and status waste generated by project activities. Waste tracking activities included: issuance and logging and data entry associated with four shipment numbers to support shipment of wastes to Central Waste Complex (CWC) and LLBG; issuance and logging of 146 Package Identification Numbers. Completed SWITS entries and associated record keeping for 223 containers to ship to various Project Hanford Management Contractor (PHMC) facilities.
- Technical consulting services are being provided to Fluor Hanford (FH), to prepare a sampling and analysis plan for characterization of the 384 Powerhouse Bunker site soil and groundwater and perform as the Certified Site Assessor in accordance with WAC-173-360. The sampling strategies were presented to Ecology on December 17.
- At RL's request, performed a gap analysis on RL's "Guidance on the Principles, Criteria, and Attributes of a Contractor Self-Assessment Program." Only one criteria within the program was not already covered by ERC's implementing procedures.
- Developed and issued a BHI response to one finding and one observation in RL Facility Representative Surveillance Report S-01-OOD-GROUNDWTR-002, Equipment and Piping Labeling. The related action plans are scheduled for completion January 31.
- Twenty-six self assessments, eight Quality Services surveillance reports, six nonconformance reports, four corrective action requests, two RL surveillance reports, and one issue were brought to the attention of management. All were screened for PAAA compliance determinations.
- Performed a surveillance of ERC's Analytical Field Services and Sample Management's tracking, handling, and Analytical Data Packaging control and processes. The surveillance resulted in one Corrective Action Request pertaining to the lack of Form Control.
- BHI completed a Freeze Protection focused assessment. The assessment resulted in three "Corrected on the Spots" (concerning loose junction box and outlet cover plates and a missing emergency care kit inspection), plus seven observations, most unrelated to freeze protection. Two RL Facility Representatives participated in the assessment and had favorable comments on the thoroughness of the assessment.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
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SAFETY continued:

Conduct of Operations:

Condition Description: On November 13, Ecology was conducting an inspection of the 100-N septic system. Part of this inspection involved the 100-N Sewage Lift Station, which was operated under Ecology's State Waste Discharge Permit, #4507. During this inspection, project management and Ecology discovered BHI was out of compliance with permit condition S2.C, Flow Measurement. The condition requires that the flow meter at lift station #1 be calibrated at a minimum frequency of at least once per year. The project identified that the device had not been calibrated during the life of the permit (approximately four years). Permit Condition S3.E, Noncompliance Notification, requires that Ecology be notified immediately if the permittee can not comply with the terms and conditions of the permit. This notification triggered an occurrence report under DOE 232.1A, Group 2E, off-normal, 2.

Corrective Action Plan:

1. Replace flow meter at the #1 Lift Station. Target Completion Date: 1/15/02.
2. Revise the Field Support Task Instruction to include the annual calibration of the lift station flow meter. Target Completion Date: 1/15/02.

Condition Description: On October 30, during a National Environmental Safety assessment performed by BHI personnel, a potential discrepancy was identified in the methodology used to estimate the potential radiological offsite dose to the maximally exposed individual from decommissioning activities at the 233-S facility. This estimate of emissions supports the air monitoring plan which was approved by EPA. The error consisted of comparing an estimated abated dose against the stack classification criteria in WAC 246-247.

Corrective Action Plan:

1. Revise engineering procedures to include the development of all calculations and final documentation for control of configuration. Completed: 12/12/01.
2. Revise the engineering procedure for the preparation of engineering calculations to require appropriate subject matter expert review and documentation of that review. Completed: 11/30/01.
3. Identify subject matter experts for applicable documents. Provide a mechanism for traceability of the document reviewed. Completed: 11/30/01.

PROCESS IMPROVEMENTS:

Six Sigma:

Status:

- Implementation of Six Sigma program across the ERC continues.
- Development of the Draft Six Sigma Program Implementation Plan is about 60% complete.
- Support of RL yellow belts with the development and implementation of Six Sigma.

Process Improvement Projects (PIPs) and status include:

- The Contaminated Concrete Demolition PIP (PIP #4) was completed on 12/21/01.
- The Radiological Work Control Process PIP (PIP #6) is in the "Measure Phase" and is about 25% complete.
- Evaluating two processes as potential PIP candidates: Periodic Maintenance Work Package Development, and Waste Management Phase 3 Process Improvements.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
DECEMBER 2001**

MAJOR COMMITMENTS:

Tri-Party Agreement Milestones: Seventeen (17) *Hanford Federal Facility Agreement and Consent Order* (*Tri-Party Agreement*) milestones are planned for completion during FY02 (16 FY02 planned milestones and 1 "to be determined" [TBD] dated milestone). Through December, 11 milestones have been completed; 10 ahead of schedule, and 1 on schedule. Milestones completed during December include the following:

- M-16-00F "Establish Date for Completion of all 100 Area Remedial Actions" (due December 31), was completed on December 31, as scheduled. A completion letter will be transmitted to the regulators upon River Corridor change package approval, which is expected by April 30.
- M-16-26B "Complete Remediation and Backfill of 51 Liquid Waste Sites in 100-BC-1, 100-BC-2, 100-DR-1, 100-DR-2, and 100-HR-1 Operable Units and Process Effluent Pipelines in 100-DR-1, 100-DR-2, and 100-HR-1 Operable Units. Complete Revegetation of 36 Liquid Waste Sites in 100-BC-1, 100-DR-1, 100-DR-2, and 100-HR-1 Operable Units as Defined in RDR/RAWP for 100 Area" (due March 31), was completed on December 11, almost four months ahead of schedule.
- M-16-41C "Complete Backfill and Regrading of JA Jones and 600-23 Waste Sites. Revegetation will occur during the following planting season" (due TBD), was completed on December 14.
- M-13-26 "Submit Plutonium/Organic-Rich Process Waste Group (200-PW-1) Work Plan" (due December 31), was completed on December 26.
- M-13-00L "Submit Three 200 NPL RI/FS (RFI/CMS) Work Plans" (due December 31), was completed on December 26.

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) has been developed. Negotiations are proceeding with the regulators, and a change request will be prepared after resolution has been determined.

Total <i>Tri-Party Agreement</i> Milestones Due in FY02	17*
Total Planned Through December	8
Total Completed Through December	11

*Includes a "TBD" milestone

Remaining <i>Tri-Party Agreement</i> Milestones to be Completed in FY02	6
Forecast Ahead of Schedule	3
Forecast On Schedule	2
Forecast Unrecoverable	1

EM Corporate Performance Measures:

	DWP FY02	FY02 Mgmt Commitments	Current Baseline	Completed YTD
Waste Site Excavations	13	13*	12	2
Technology Deployments	0	3	3	0

*IPABS currently reporting 12 (change request pending).

PERFORMANCE OBJECTIVES:

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

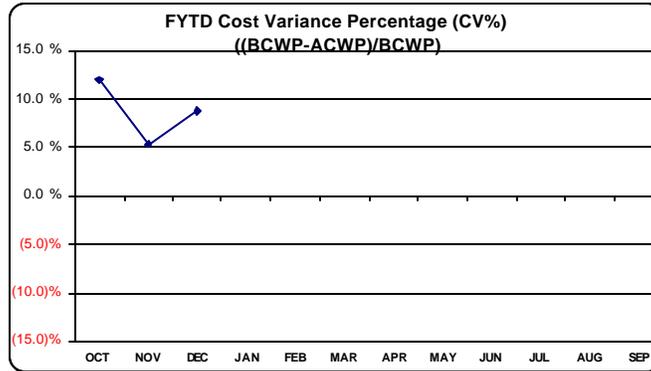
ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT

ENVIRONMENTAL RESTORATION

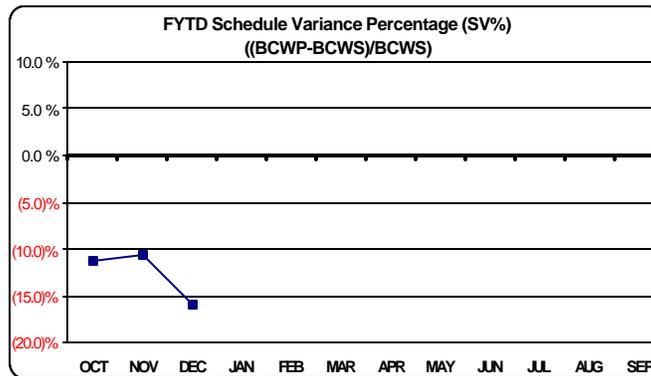
DECEMBER 2001

TOTAL ERC COST/SCHEDULE OVERVIEW:

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



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	EAC
CURRENT PERIOD													
ACWP	10,237	12,390	11,786										
BCWP	11,635	12,270	13,863										
FISCAL YEAR TO DATE													
ACWP	10,237	22,627	34,413										
BCWP	11,635	23,905	37,768										
CV	1,398	1,278	3,355										
CV%	12.0%	5.3%	8.9%										
EAC (Cumulative)	10,237	22,627	34,413	50,631	66,060	84,973	98,926	112,493	127,389	139,800	152,661	168,686	168,687
Yr End Budget Variance	(75)	(387)	(274)										



	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	18,145	14,695	13,734	17,337	13,078	12,593	13,299	11,970	12,219	14,593
BCWP	11,635	12,270	13,863									
FISCAL YEAR TO DATE												
BCWS	13,121	26,752	44,897	59,592	73,325	90,662	103,740	116,332	129,631	141,602	153,821	168,413
BCWP	11,635	23,905	37,768									
SV	(1,486)	(2,848)	(7,129)									
SV%	-11.3%	-10.6%	-15.9%									

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
DECEMBER 2001**

TOTAL ERC COST/SCHEDULE OVERVIEW continued:

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

	FY02 DWP BCWS	CURRENT BCWS	FYTD			YTD SCHEDULE VARIANCE		YTD COST VARIANCE		EAC
			BCWS	BCWP	ACWP	\$	%	\$	%	
RC01	68,776	73,640	19,887	15,695	14,444	-4,192	-21.1%	1,251	8.0%	73,964
RC02	9,444	9,865	1,980	1,498	1,249	-482	-24.3%	249	16.6%	9,905
RC05	24,259	25,961	6,732	6,331	5,872	-401	-6.0%	459	7.3%	26,064
RCR-Subtotal	102,479	109,466	28,599	23,524	21,565	-5,075	-17.7%	1,959	8.3%	109,933
CP01	32,663	33,831	8,524	7,502	6,996	-1,022	-12.0%	506	6.7%	33,799
CPT-Subtotal	32,663	33,831	8,524	7,502	6,996	-1,022	-12.0%	506	6.7%	33,799
SS03	17,141	18,097	4,634	4,475	4,120	-159	-3.4%	355	7.9%	18,206
SS04	3,382	6,950	3,134	2,259	1,728	-875	-27.9%	531	23.5%	6,682
SI&I-Subtotal	20,523	25,047	7,768	6,734	5,848	-1,034	-13.3%	886	13.2%	24,888
SC01	71	69	7	7	4	0	0.0%	3	42.9%	67
SS-Subtotal	71	69	7	7	4	0	0.0%	3	42.9%	67
ERC TOTAL	155,736	168,413	44,898	37,767	34,413	-7,131	-15.9%	3,354	8.9%	168,687

Schedule Variance Summary:

Through December, the ER Project is \$7.1M (-15.9%) behind schedule. The negative schedule variance is attributed to late arrival of Reactor ISS excavator, late contract award for system upgrades for two 100 Area groundwater pump and treat units, Plutonium Finishing Plant (PFP) well drilling relocation, rescheduling GW/VZ S&T workshops, remediation delays due to inclement weather, and higher-than-expected radiation readings at the F Reactor FSB. No significant impacts are expected to result.

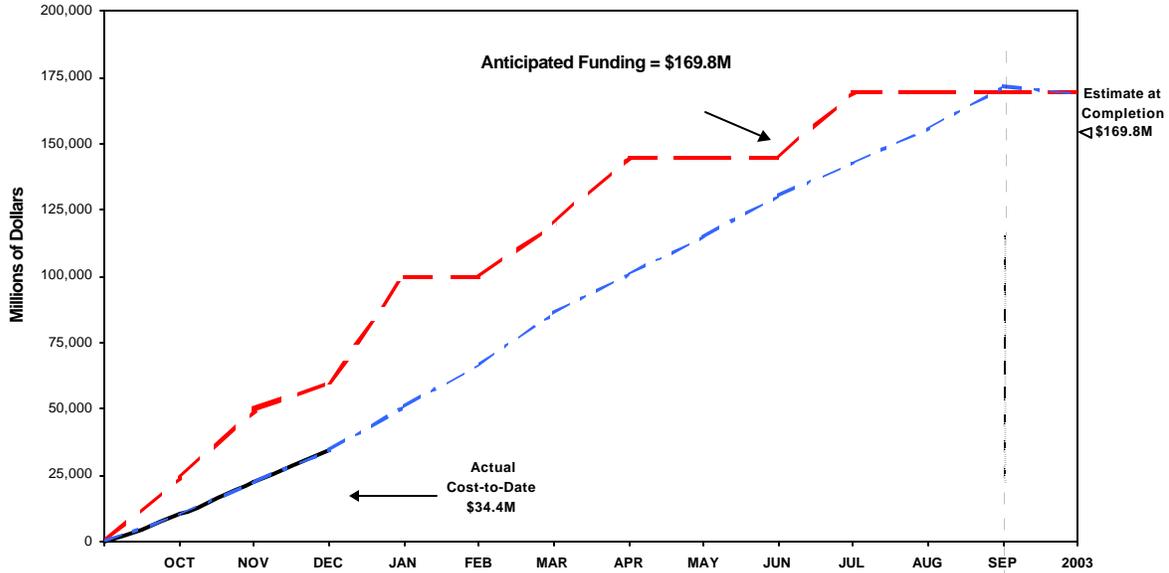
Cost Variance Summary:

At the end of December, the ER Project had performed \$37.8M worth of work, at a cost of \$34.4M. This results in a favorable cost variance of \$3.4M (+8.9%). The positive cost variance is attributed to lower labor costs at 100-FR-1 and 100 B/C, less hazardous material discovered at D Reactor, and decrease in costs associated with the GW/VZ SAC computer purchase and software modification.

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT ENVIRONMENTAL RESTORATION DECEMBER 2001

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. Outyr. ETC	
APPROVED SCOPE														
1 Actual Cost	10,237	22,627	34,413											
2 Current Monthly EACs	10,237	12,390	11,786	16,218	15,428	18,913	13,952	13,567	14,895	12,412	12,861	16,026		
3 Cumulative EAC	10,237	22,627	34,413	50,631	66,059	84,972	98,924	112,491	127,386	139,798	152,659	168,685	1	168,686
JANUARY FY2002 APPROVED BCPs (Through 1/22/02)														
4 RC01/05 BCP-22035 Additional Plumes @ F Area/Defer 19 tons				13										13
5 Subtotal Approved Scope Changes				13	0	0	0	0	0	0	0	0	0	13
FY2002 PENDING BCPs														
6 RC01 BCP-22046 100-BC Scope Deferral											(179)	(179)		(358)
7 RC01 BCP-22047 Deferral of F Area Confirmation Sampling and CVP											(50)	(50)		(100)
8 RC01 Offset for CERCLA Well Installation					(192)									(192)
9 CP01 BCP-22028 Accelerate 200-ST-1 and 200-SW-2 RI/FS Work Plans					33	40	63	86	51	39	28	13	10	363
10 SS04 Replan Management Review for Characterization of Systems				(4)										(4)
11 SS04 Delete Scope for Upgrade of Carbon Tet Capability				(37)										(37)
12 SS04 Cancel Expert Panel Meeting #1					(67)	(68)	(68)	(68)						(271)
13 CP01 BCP-22042 Reduced TRU Waste Handling Costs @ 233-S				(90)										(90)
14 CP01 BCP-22045 Partial Funding for Fluor to revise SWB SARP @ 233-S				65										65
15 ALL BCP-22008 Waste Management Phase III Process Improvements				27	27	28	28	28	28	28	28	28		250
16 ALL Program Management Transition Recovery				500	500	500	500	500	500					3,000
17 ALL BCP-22036 Additional Requirements for the Volunteer Protection Program				29	29	29	29	29	30	30	30	30		265
18 ALL Pending Scope Additions, Deletions, Etc.				(322)	(322)	(322)	(323)	(323)	(323)	(323)	(323)	(323)	(323)	(2,904)
19 Subtotal Approved BCPs + Pending BCPs				0	503	330	529	552	575	609	97	(143)	(158)	10
Summary														
20 Current Monthly EAC + January FY2002 Approved BCPs & Pending BCPs	10,237	12,390	11,786	16,721	15,758	19,442	14,504	14,142	15,504	12,509	12,718	15,868		-
21 Cumulative EAC + January FY2002 Approved BCPs & Pending BCPs	10,237	22,627	34,413	51,134	66,892	86,334	100,838	114,980	130,484	142,993	155,711	171,579	11	168,686

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

See individual Outcome sections.

KEY INTEGRATION ACTIVITIES:

BHI and 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. During December, a communications plan was prepared, and work began on joint communication activities regarding ERC plateau work and associated staff transition to FH effective July 1.

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) was completed as scheduled. (Tri-Parties reached tentative agreement on the River Corridor negotiations on December 31, 2001. Proposed change packages will undergo a public comment review period. A milestone completion letter will be transmitted to the regulators upon change package approval which is expected by April 30, 2002.)

Tri-Party Agreement Milestone M-93-12, Issue 105-DR Disposition Competitive Procurement Package, due February 28, 2002. (This milestone is being proposed for deletion in the draft River Corridor change package.)

Central Plateau Transition:

Negotiations are proceeding with the Tri-Parties to address M-13, M-15, M-16, M-20 milestones for the Central Plateau (200 Area). Tentative agreement on draft change packages is expected to be reached by January 31, 2002.

Section B - River Corridor Restoration

RC01 - 100 Area River Corridor Cleanup

RC02 - 300 Area Cleanup

RC05 - River Corridor Waste Management



Fuel Storage Basin Cleanup at F Reactor



Final Cleanup at Crossing of Main Haul Road and I16-N-3 Bypass



F Reactor Fuel Storage Basin Cleanout

Data as of month-end December

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

Data as of month-end December

ACCOMPLISHMENTS:

100 Area River Corridor Cleanup (RC01):

Soil excavation and pipe reduction/removal activities on pipelines 12, 13, 14, 15, and 24 were completed in the 100 B/C Area. Overburden removal activities continued on pipelines 16, 17, 20, and 42, and contaminated soil excavation activities were initiated. Verification (confirmation) sampling was completed at three outfall structures (116-B-7, 132-B-6, and 132-C-2). A BCP was approved to excavate plumes that were identified in specific pipelines and outfalls. Plume excavation activities were initiated on December 20.

In the 100 H Area, reseeding and revegetation were completed on December 11, which satisfies completion of *Tri-Party Agreement* Milestone M-16-26B (due March 31) almost four months ahead of schedule. Higher-than-average precipitation has helped the germination process.

In the 100 F Area, potholing activities were completed to confirm the locations of the 1.0-meter (40-inch) and 1.5-meter (60-inch) steel and the 1.1-meter (42-inch) reinforced concrete pipelines. Excavation activities were initiated on additional plumes found at the 116-F-2 Disposal Trench and 100-F-2 Strontium Garden waste sites.

Excavation of the deep vadose test pit (7.6 meters [25 feet] deep) was completed in the floor of the 116-F-14 Retention Basin in the 100 F Area. The test pit was excavated to sample the vertical extent of contamination. Sample information is required to support RESRAD modeling for the 100-FR-1 Operable Unit CVP preparation.

In the 100 N Area, waste material was shipped from the 116-N-3 Pipe Trench and Bypass, as final cleanup activities continued following contamination surveys. Five additional plumes were identified around the 116-N-3 Crib. Completion of plume excavation activities is expected in January, with confirmation sampling and cleanup verification activities to follow.

Excavation and loadout activities were performed at the 116-N-1 Trench. Cover panel demolition and size reduction activities proceeded, as required, to stay ahead of the excavation activities. Demolition and size reduction were completed in each girder bay and covered with low-dose soil prior to moving to the next girder bay. Construction of haul roads around the 116-N-1 Trench continued, with completion expected in January.

Revegetation activities were completed at the JA Jones and 600-23 sites on December 14, which satisfies completion of *Tri-Party Agreement* Milestone M-16-41C.

The Remedial Design Report/Remedial Action Work Plan for the 100 Area, Rev. 3; the 100 Area Remedial Action Sampling and Analysis Plan, Rev. 3; and the 100 Area Burial Grounds Remedial Action Sampling and Analysis Plan, Rev. 0 were transmitted to RL on December 26. These documents were revised to address the regulators' comments.

Documentation reviews were completed prior to initiating DR Reactor SSE work. A pre-construction meeting for mobilization was held on December 10. The subcontractor began moving office trailers on site and constructing a perimeter fence around the reactor building on December 13.

The Auditable Safety Analysis (ASA) revision for F Reactor was approved on December 6. The only changes to the document consisted of incorporating approved Management of Change (MOC) documents. The document was sent to RL.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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ACCOMPLISHMENTS continued:

At D Reactor, pipe cuts were completed in both north/south water tunnels. This will allow the subcontractor to work on pourbacks in these areas. Pipe cuts were also completed in the FSB/Transfer Bay in preparation for D Reactor FSB demolition.

A walk-down was performed at the H Reactor gas/ventilation wing on December 11. Demolition methods were evaluated that could be funded as technology demonstrations. BHI Technology Application personnel are in the process of gathering information on a concrete splitter, controlled explosive demolition, and a wire saw for heavy concrete demolition.

Drilling was initiated at the 100-KR-4 groundwater operable unit in support of FY02 CERCLA upgrades.

Drilling of the ISRM Phase III barrier wells was initiated in December. A total of 17 wells are planned for installation.

Responses to the CERCLA 5-year review action items to meet the December 31 milestones were transmitted to the regulators.

In the 100 Area, the three groundwater pump and treat systems (100-HR-3, 100-KR-4, and 100-NR-2) operated above the planned 90% availability levels in December, processing approximately 52.9 million liters of groundwater and removing approximately 4.64 kilograms of chromium and 0.01 curie of strontium. Since system inception, these three pump and treat systems have processed over 3 billion liters of groundwater, removing approximately 276 kilograms of chromium and 1.13 curies of strontium.

100 Area River Corridor S&M activities that were performed in December to ensure inactive facility integrity and safety included issuance of the B Reactor Hazards Mitigation S&M Plan/Removal Action Work Plan for internal review.

300 Area Cleanup (RC02):

Regulatory evaluation of the 618-10 and 618-11 waste sites located in the 300 Area was completed. This evaluation identified the regulatory requirements and potential issues related to remediation of these waste sites. It also supports timely review for obtaining necessary regulatory approvals for remedial design/action.

The 618-5 Final Hazard Classification and Audible Safety Analysis (FHC/ASA) was transmitted to RL on December 17.

300 Area River Corridor S&M activities were performed in December to ensure inactive facility integrity and safety. Analysis results for the 308 facility indicated the facility is beryllium-free. This is the last ERC facility identified as possibly containing beryllium.

River Corridor Waste Management (RC05):

During December, ERDF received 42,316 metric tons (46,645 tons) of contaminated waste, for a total of 132,614 metric tons (146,182 tons) in FY02. A total of 2,993,240 metric tons (3,299,483 tons) have been disposed in ERDF since operations began in July 1996. ERDF Disposal personnel have worked 68 months without a lost-time accident, and the ERDF Transportation team has driven 9,141,956 kilometers (5,680,548 miles) without an at-fault vehicle accident.

Procedures were developed to allow some of the higher dose waste from F Basin to be shipped to ERDF in standard roll-off containers, instead of burial boxes. This will reduce the procurement of burial boxes and require less grout (void-filling) at ERDF and is expected to result in significant cost savings.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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ACCOMPLISHMENTS continued:

The INEEL project team visited ERDF to observe and discuss subcontracting strategies and operating procedures in preparation for the construction and operation of the INEEL disposal facility. It is anticipated that lessons learned at ERDF will have a positive impact on INEEL's overall waste transportation and disposal program. Additional meetings are planned for January.

The 233-S waste package (Box 39) that was retrieved from ERDF due to suspect characterization data was re-assayed. The results indicated no TRU or high-level wastes were present. However, because the NDA results were very close to the ERDF acceptance limit, a conservative decision was made to bury Box 39 in the LLBG rather than rebury it in ERDF. Since this was the worst-case package, the other six suspect 233-S waste packages that were disposed in ERDF will remain in place. Operations are under way to backfill the excavated area and resume normal operations.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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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	12/31/01 (A)
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	Proposed for deletion
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	12/11/02 (A)
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	4/30/02 (F)
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	2/21/02 (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	12/14/01 (A)

*Tri-Parties reached tentative agreement on the River Corridor negotiations on December 31, 2001.

Proposed change packages will undergo a public comment review period. Final approval of proposed changes is expected by April 30, 2002.

**An Explanation of Significant Difference (ESD) has been developed. Negotiations are in progress with the regulators to extend milestone completion date three months. A change request will be prepared after resolution has been determined.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
ENVIRONMENTAL RESTORATION
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PERFORMANCE OBJECTIVES:

RL has not formally transmitted final FY02 PIs to BHI.

PERFORMANCE MEASURES/METRICS:

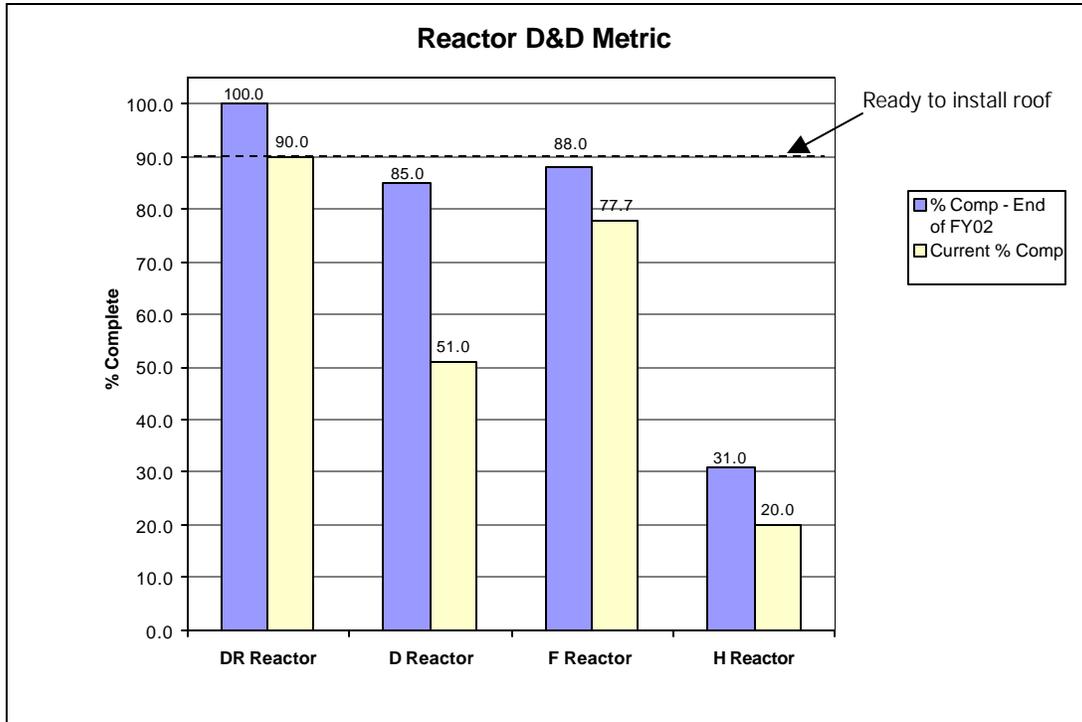
FY02 Performance Measures Summary:

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

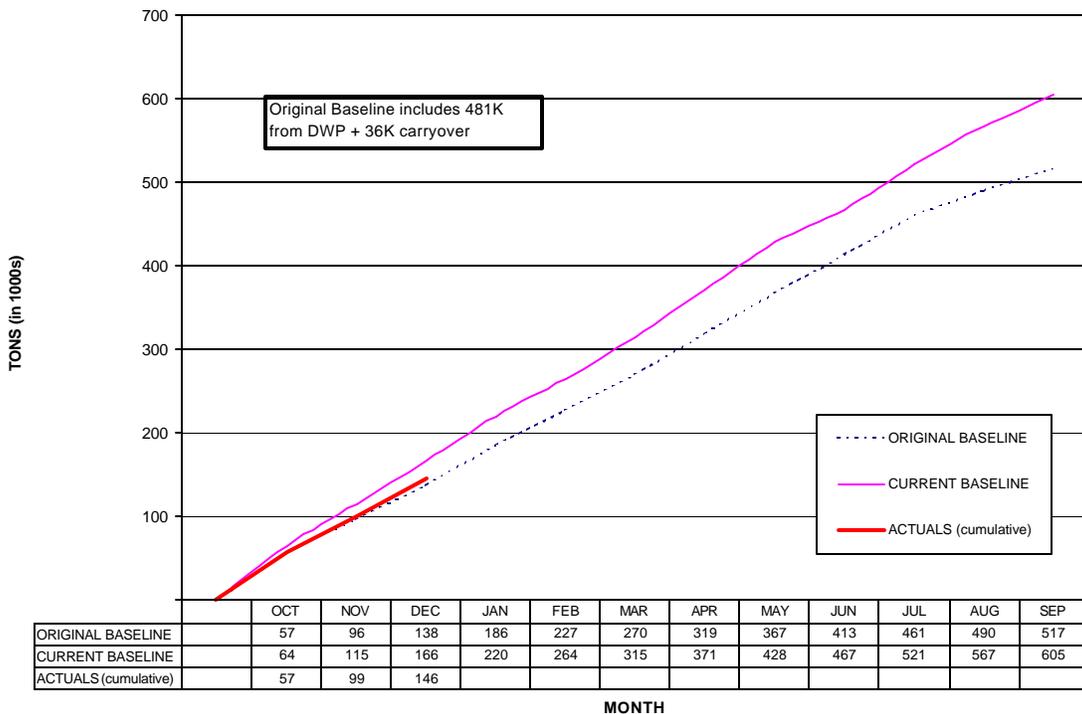
*IPABS currently reporting 12 (change request pending).

ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT ENVIRONMENTAL RESTORATION DECEMBER 2001

PERFORMANCE MEASURES/METRICS:



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



**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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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	19,887	15,695	(4,192)
RC02 300 Area Cleanup	1,980	1,498	(482)
RC05 River Corridor Waste Management	6,732	6,331	(401)
TOTAL River Corridor Restoration	28,599	23,524	(5,075)

PBS-RC01 – 100 Area River Corridor Cleanup

Schedule Variance = **(\$4192K); (21.1%)** [Last Month: (\$1389K); (12.2%)]

Cause: Reactor ISS excavator did not arrive in December as planned.

Resolution: Delivery of the excavator is expected in January.

Cause: Demolition of the D Reactor SSE roof is behind schedule due to delays in subcontractor key document submittals.

Resolution: The subcontract is being modified to extend the completion date of the DR Reactor roof.

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

Resolution: Recovery schedule has been implemented. Schedule recovery expected in April.

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 CERCLA well drilling started later than planned.

Resolution: The baseline is being revised to incorporate new subcontract approach with full recovery expected.

Cause: Delay in field preparation impacted ISRM drilling start in early December. Mitigation sampling delayed due to change in drilling methodology necessitating additional requirements for subcontract bid specifications.

Resolution: Drilling subcontractor initiated work on December 18. Mitigation sampling delayed until February. No impact to construction at this time.

Cause: Soil sampling delays due to increased contaminated plumes in the 100 B/C Area, and still awaiting several subcontractor drawings.

Resolution: Corrective action for the sampling variance is being evaluated; potential carryover item.

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

Cause: Weather and container issues delayed 100 N Area excavation.

Resolution: Schedule recovery expected to be achieved over next six months.

PBS-RC02 – 300 Area Cleanup

Schedule Variance = **(\$482K); (24.3%)** [Last Month: (\$52K); (5.3%)]

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.

Cause: 618-4 burial ground contract award/mobilization has not started.

Resolution: Awaiting approval to award contract. Award needs to be made by end of February, otherwise will need to go through rebidding process again.

PBS-RC05 – River Corridor Waste Management

Schedule Variance = **(\$401K); (6.0%)** [Last Month: (\$243K); (5.6%)]

Cause: Inclement weather delayed ERDF operations.

Resolution: Schedule recovery expected.

Cost:

River Corridor Restoration	FY02 EAC	BCWP	ACWP	Variance
		\$K	\$K	\$K
RC01 100 Area River Corridor Cleanup	73,964	15,695	14,444	1,251
RC02 300 Area Cleanup	9,905	1,498	1,249	249
RC05 River Corridor Waste Management	26,064	6,331	5,872	459
TOTAL River Corridor Restoration	109,933	23,524	21,565	1,959

PBS-RC01 – 100 Area River Corridor Cleanup

Cost Variance = **\$1251K; 8.0%** [Last Month: \$1098K; 11.0%]

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

Resolution: Underrun has been reflected in the EAC.

Cause: Underrun due to remediation accrual errors.

Resolution: Accruals will be corrected in January.

Cause: Labor costs at 100-FR-1 and 100 B/C lower than planned.

Resolution: Underrun has been reflected in the EAC.

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OUTCOME STATUS (COST/SCHEDULE) continued:

PBS-RC02 – 300 Area Cleanup

Cost Variance = **\$249K; 16.6%** [Last Month: \$126K; 13.6%]

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 = **\$459K; 7.3%** [Last Month: (\$986K); (24.3%)]

Cause: Planned overtime did not occur due to inclement weather curtailments.

Resolution: Overtime is expected to increase in spring/summer months to recover schedule.

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: Tri-Parties reached tentative agreement on the River Corridor negotiations on December 31, 2001. Proposed change packages will undergo a public comment review period. Final approval of proposed changes is expected by April 30, 2002. Issue closed.

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: Tri-Parties reached tentative agreement on the River Corridor negotiations on December 31, 2001. Proposed change packages will undergo a public comment review period. Final approval of proposed changes is expected by April 30, 2002. Issue closed.

Decontamination and Decommissioning (D&D) Worker Turnover: 16 out of 17 Reactor ISS D&D staff have transferred through the Labor Assets Management Program (LAMP) process since the beginning of FY01.

Status: The remaining experienced worker knowledge base continues to be lost. 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



Preparing for Work in an Enclosure at 233-S



Standing Water on PUREX Roof

Data as of month-end December

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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SECTION C – CENTRAL PLATEAU TRANSITION

Data as of month-end December

ACCOMPLISHMENTS:

200 Area Remediation (CP01):

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

- Transmitted three Draft A RI/FS work plans (200-PW-1, 200-LW-1, 200-MW-1) to the regulators on December 26, satisfying Tri-Party Agreement Milestone M-13-00L and M-13-26 (due 12/31/01).
- 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 December, processing approximately 31.3 million liters of groundwater. Since system inception, these two pump and treat systems have processed approximately 2.2 billion liters of groundwater. Approximately 92 kilograms of carbon tetrachloride were removed by 200-ZP-1 this period. Approximately 6,000 kilograms of carbon tetrachloride have been removed by 200-ZP-1 to date. Approximately 546 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.
- Completed 200-UP-1 remediation system upgrades. A second extraction well was successfully tied into the remediation system, and is now operational.

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

- Removed approximately 3 meters (10 feet) of vessel L-10 and 183 meters (599 feet) of process hood piping. Removal of the L-10 vessel is approximately 60% complete. Overall, vessel removal is progressing well and is expected to be completed ahead of schedule. 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.
- Completed removal of all process hood piping from Bay 3.
- Filled and assayed 10 waste drums, which completed assay of all available drums.
- Commenced removal of vessel L-2.
- Continued scaffold installation for vessel L-2 and L-8 removal.
- Commenced scaffold installation for vessel L-15 removal.

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

- Completed field work for the U Plant railroad cut Radiation Area Remedial Action (RARA) interim stabilization. Approximately 3.5 acres were downposted from a contamination area (CA) to an underground radioactive material (URM) area.
- Received regulator approval to reduce surveillance frequency from quarterly to annually for the REDOX, UO₃ (224-U Building), B Plant, and U Plant facilities.
- Completed PUREX semi-annual roof inspection and will continue to observe water infiltration. There is a general increase in contamination spread within the canyon due to continued water leakage. An Unreviewed Safety Question (USQ) has been issued.
- Established a work order to provide access to the Fuels and Materials Examination Facility (FMEF) in support of B Plant filter replacement mock-up training.
- Received Ecology approval to grout -fill the hexone tanks located in the 200 Area. This approach was the BHI recommended interim stabilization alternative.

**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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ACCOMPLISHMENTS continued:

- The Notice of Construction (NOC) for hexone interim stabilization work was transmitted to the Washington Department of Health.
- Received EPA approval to remove the REDOX diesel generator from service.
- Transmitted the CDI proposed plan to EPA Region 10 for comment.

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	12/26/01 (A)
M-13-00L	Submit 3 200 NPL RI/FS (RFI/CMS) Work Plans	12/31/01	12/26/01 (A)
M-15-40A	Complete U Pond/Z Ditches Cooling Water Group Field Work Through Sample Collection and Analysis	9/30/02	6/30/02 (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) 	Vessel removal is expected to be completed ahead of schedule.



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

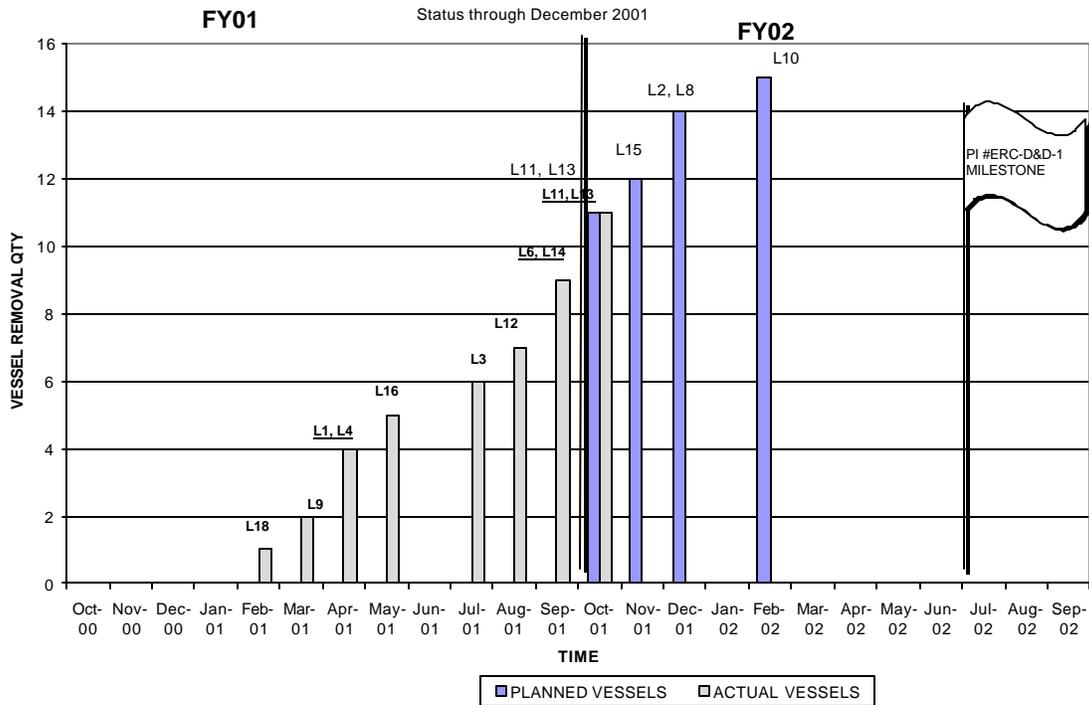
**ENVIRONMENTAL MANAGEMENT PERFORMANCE REPORT
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PERFORMANCE MEASURES/METRICS:

ERC identified two technologies for Central Plateau Transition to be deployed during FY02.

Technology Deployment	PBS	Planned Date	(F)/(A) Date
Passive Neutron Detector	CP01	3/31/02	3/31/02 (F)
Small-Diameter Geophysical Logging System	CP01	3/31/02	3/31/02 (F)

VESSEL REMOVAL SCHEDULE



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	8,524	7,502	(1,022)
TOTAL Central Plateau Transition	8,524	7,502	(1,022)

PBS-CP01 – 200 Area Remediation

Schedule Variance = **(\$1022K); (12.0%)** [Last Month: (\$581K); (11.2%)]

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: Hexone tank stabilization alternative approved by regulators; resolution of final compliance issues is expected in February. 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: New NDA subcontract has been signed and work has commenced. The first waste shipment to the CWC is scheduled for March.

Cost:

Central Plateau Transition	FY02 EAC	BCWP	ACWP	Variance
		\$K	\$K	\$K
CP01 200 Area Remediation	33,799	7,502	6,996	506
TOTAL Central Plateau Transition	33,799	7,502	6,996	506

PBS-CP01 – 200 Area Remediation

Cost Variance = **\$506K; 6.7%** [Last Month: \$327K; 7.1%]

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

Resolution: Underrun has been reflected in the EAC.

Cause: RARA interim stabilization ahead of schedule and material costs incurred have not yet been accrued.

Resolution: Will monitor variance.

Cause: Preparation of 200-LW-1 and 200-MW-1 work plans in parallel resulted in shared resources and technical data.

Resolution: Trend was initiated.

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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: Three work plans (200-PW-1, 200-RW-1, 200-MW-1) were transmitted on December 26, 2001, satisfying M-13-26 and M-13-00L. (Issue closed.) An Agreement in Principle (AIP) was signed and negotiations are proceeding to address *Tri-Party Agreement* Milestones M-13, M-15, M-16, and M-20 for the Central Plateau (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 most restrictive box (No. 39) was removed from ERDF and re-assayed. Box 39's content would have permitted burial in ERDF but was close to the ERDF waste acceptance criteria (WAC). A conservative decision was made to send Box 39 to the LLBG rather than rebury in ERDF. The remaining boxes in ERDF meet the ERDF WAC and will remain in place. Issue closed.

Standard Waste Box (SWB): The existing SWB Safety Analysis Report for Packaging (SARP) has not been revised in approximately nine 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 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). A work order was prepared to obtain a DOE approved Package Specific Safety Document (PSSD) by March 15, or revision to the existing SWB SARP. The parallel path alternative of writing an explanation to the existing SWB SARP is being investigated.

INTEGRATION ACTIVITIES:

Discontinued support to FH on re-roofing the PUREX and B Plant canyon buildings due to funding issues within FH. BHI completed the Fair Cost Analysis prior to suspending all other work associated with this task.

Section D - Site Integration & Infrastructure

SS03 - Groundwater Management & Monitoring

SS04 - Groundwater/Vadose Zone Integration



Phase III ISRM Barrier Well Installation



Drilling of New 100-KR-4 Injection Well



Cable Tool Drilling at the 241-TX Tank Farm

Data as of month-end December

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SECTION D – SITE INTEGRATION & INFRASTRUCTURE

Data as of month-end December

ACCOMPLISHMENTS:

Groundwater Management and Monitoring (SS03):

The remaining hydrologic slug tests were completed in the newly installed (CY01) RCRA groundwater monitoring wells.

A report, "Uncertainty Analysis Framework - Hanford Site-Wide Flow and Transport Model," was completed and distributed.

A draft of the 200 West Area hydrogeology report was submitted to RL and other Hanford Site contractors for review.

Groundwater/Vadose Zone Integration (SS04):

The Groundwater/Vadose Zone Integration Project Expert Panel report for the September 2001 meeting was received.

Upgrades to User, Administrative, and Environmental Monitoring Modules of the Virtual Library were completed.

A purchase order was issued for a new computer system for running assessments with the SAC. The new system will greatly reduce run times, allowing SAC to be a more responsive tool in supporting Hanford Site planning and decisions.

A meeting was held with the technical staff of the Confederated Tribes of the Umatilla Indian Reservation to discuss the SAC approach and initial assessment results. A meeting was also held with Ecology and State of Oregon representatives to discuss the SAC initial assessment results, S&T progress, and plans for FY02.

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:

ERC identified one technology for Site Integration and Infrastructure to be deployed during FY02.

Technology Deployment	PBS	Planned Date	(F)/(A) Date
Advanced Tensiometer	SS04	3/31/02	3/31/02 (F)

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	4,634	4,475	(159)
SS04 - Groundwater/Vadose Zone Integration	3,134	2,259	(875)
TOTAL Site Integration & Infrastructure	7,768	6,734	(1,034)

PBS-SS03 – Groundwater Management and Monitoring

Schedule Variance = **(\$159K); (3.4%)** [Last Month: (\$179K); (5.8%)]

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

Resolution: LLBG boundaries have been agreed upon and final status plan will be prepared this quarter.

PBS-SS04 – Groundwater/Vadose Zone Integration

Schedule Variance = **(\$875K); (27.9%)** [Last Month: (\$404K); (22.4%)]

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

Resolution: Workshops will be held in January/February.

Cause: Late approval for the purchase of the SAC computer system.

Resolution: Delivery of the computer system is expected in January.

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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	18,206	4,475	4,120	355
SS04 - Groundwater/Vadose Zone Integration	6,682	2,259	1,728	531
TOTAL Site Integration & Infrastructure	24,888	6,734	5,848	886

PBS-SS03 – Groundwater Management and Monitoring

Cost Variance = **\$355K; 7.9%** [Last Month: \$286K; 9.8%]

Cause: Underruns due to lower CY01 RCRA groundwater monitoring well installation subcontract costs; fewer roads and pads were required than planned.

Resolution: Underrun has been reflected in the EAC.

PBS-SS04 – Groundwater/Vadose Zone Integration

Cost Variance = **\$531K; 23.5%** [Last Month: \$424K; 30.3%]

Cause: Underrun due to less effort required than planned for preparation of the congressional report and decrease in costs associated with the SAC computer purchase and software modification.

Resolution: Trends are being prepared.

ISSUES (REGULATORY/EXTERNAL/DOE):

None identified at this time.

INTEGRATION ACTIVITIES:

None identified at this time.