

HANFORD SITE

Environmental Restoration Contract *Monthly Performance Report*

November 2003



Accelerating Cleanup ...



Department of Energy
Richland Operations Office



Bechtel Hanford, Inc.
Environmental Restoration Contractor

ENVIRONMENTAL RESTORATION EXECUTIVE SUMMARY

November 2003 Monthly Report

SAFETY:

During the period October 1, 2003 through November 30, 2003, the ERC experienced 4 first aid incidents and 1 lost away injury, which equates to having **93% of our workdays injury free**. Selected members of the ERC Team performed and documented the annual Voluntary Protection Program (VPP) self-assessment, involving 13 interviewers and 84 individuals who volunteered to be interviewed. This self-assessment information will be compared with a similar self-assessment performed one year ago. A summary of this information will be added to the ERC VPP Application for Star Status to be submitted to DOE by mid-December 2003.

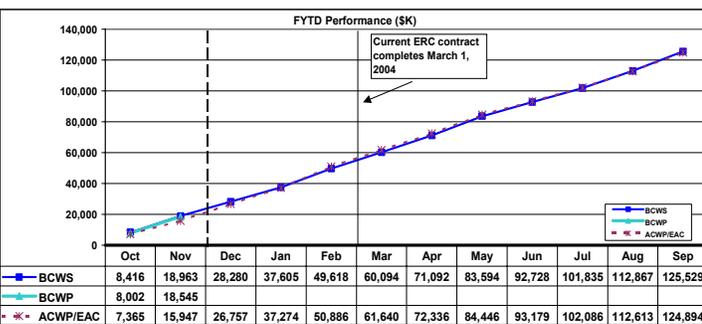
HIGHLIGHTS:

- Completed H Reactor hot spot removal in west transfer pit (no additional spent fuel elements found).
- Completed D Reactor SSE design.
- Completed 1304-N Dump Tank mobilization and demolition preparation activities.
- Completed 100 B/C pipeline plume excavation on November 5 meeting TPA Milestone M-16-26E nearly 11 months ahead of schedule.
- Initiated backfill of 100 B/C pipelines; completion is scheduled for March 2004
- Initiated remediation of four accelerated 100 B/C Area Burial Ground sites.
- Initiated 300-FF-1 and 618-5 Burial Ground regrade project.
- Excavated 569,736 bank cubic yards (BCY) (40.4% complete) since ERDF Cells 5/6 expansion project began on October 7.
- Submitted Baseline Risk Assessment Scoping document to RL for approval.

UPCOMING KEY ACTIVITIES:

- Issue F Reactor S&M Plan; close out ISS subcontract - 12/03.
- Complete H Reactor FSB excavation - 2/04.
- Commence/complete remediation of five small K Area sites and 116-KE-1/116-KW-1 Condensate Cribs.
- Distribute *Conceptual Site Model for 100 B/C Pilot Project Ecological Risk Assessment* for external review - 12/03.

PERFORMANCE:



- SV:** (\$418K); (2.2%). Start of 1304-N Dump Tank removal impacted by weather (wind/radon) and issues involving contamination control/equipment (lift) problems; delay in 105-F decon pad excavation/sampling due to resources working higher priorities; delay in starting 100 Area asbestos abatement due to PFWR; and deferral of B Reactor dynamic assessment.
- CV:** \$2,598K; 14.0%. ERDF Expansion payment record not processed; ERDF Disposal accrual understated; reduced miscellaneous support, equipment, material at H Reactor ISS due to discovering fewer fuel elements than anticipated; and less engineering support for D Reactor. *After record and accrual adjustment, actual variance is \$1.5M (+8.1%).*

EAC TRENDS:

FYTD: (\$636K)

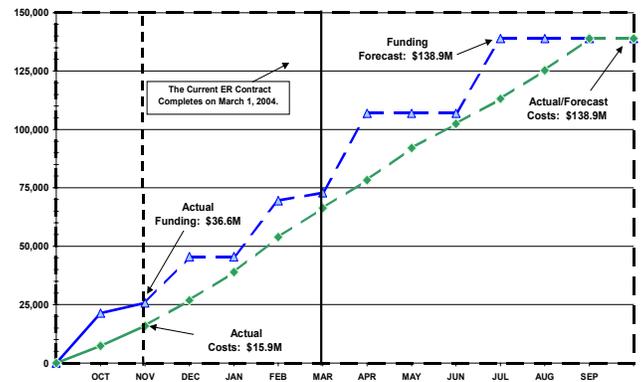
Current Month: (\$998K)

- B Reactor dynamic assessment to be deferred to FY05.
- ERDF transportation labor underruns.
- Staffing reductions in Program Management and Support.
- Unplanned costs for material, equipment, subcontract, engineering support for Risk Assessment project.

TPA MILESTONES:

- Three TPA milestones are scheduled for completion during FY04:
- M-16-03H, Complete 300 Area regrade (due 6/30/04); *forecast 3/1/04.*
- M-16-26E, Complete 100 B/C pipeline excavation (due 9/30/04); *completed 11/5/03.*
- M-93-11, Complete F Reactor ISS (due 9/30/04); *forecast 12/31/03.*

FUNDING:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

- Mud dauber contamination legacy (H Reactor).
- Airborne radiation control concern at 1304-N (fixative issues).
- Non-ERC Hanford waste to ERDF.

ENVIRONMENTAL RESTORATION FACILITIES DECOMMISSIONING PROJECT

November 2003 Monthly Report

SAFETY:

No first aid, recordable, lost workday cases, or skin contaminations experienced FYTD.

HIGHLIGHTS:

H Reactor:

- Completed transfer bay slab demolition.
- Completed hot spot removal in west transfer pit (no additional spent fuel elements found).
- Completed core sample removal and analysis from the gas wing in preparation for explosive demolition.

D Reactor:

- Completed SSE design.

1304-N Dump Tank:

- Completed mobilization and demolition preparation activities.
- Completed fogging of the tank interior.

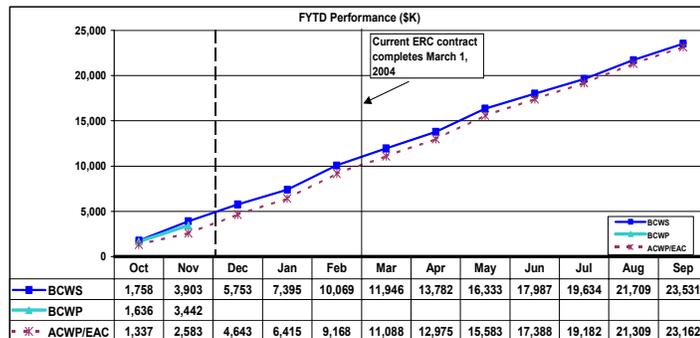
S&M:

- Performed site and facility S&M activities.

UPCOMING KEY ACTIVITIES:

- Issue F Reactor S&M Plan; close out ISS subcontract - 12/03.
- Ship fuel pieces from H Reactor to K Basin - 1/04.
- Complete H Reactor FSB excavation - 2/04.
- Complete 1304-N Emergency Dump Tank removal - 3/04.

PERFORMANCE:



- SV:** (\$461K); (11.8%). Start of 1304-N Dump Tank removal impacted by weather (wind/radon) and issues involving contamination control/equipment (lift) problems; delay in 105-F decon pad excavation/sampling due to resources working higher priorities; delay in starting 100 Area asbestos abatement due to PFWR; and deferral of B Reactor dynamic assessment.
- CV:** \$859K; 25%. Reduced miscellaneous support, equipment, material at H Reactor ISS due to discovering fewer fuel elements than anticipated; less engineering support for D Reactor.

EAC TRENDS:

FYTD: (\$369K)

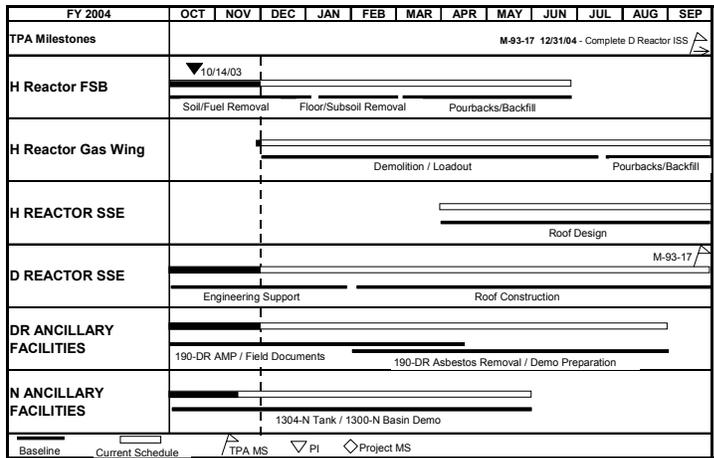
Current Month: (\$277K)

- B Reactor dynamic assessment to be deferred to FY05.
- 300 Area S&M and 190-DR demolition preparation less than anticipated.

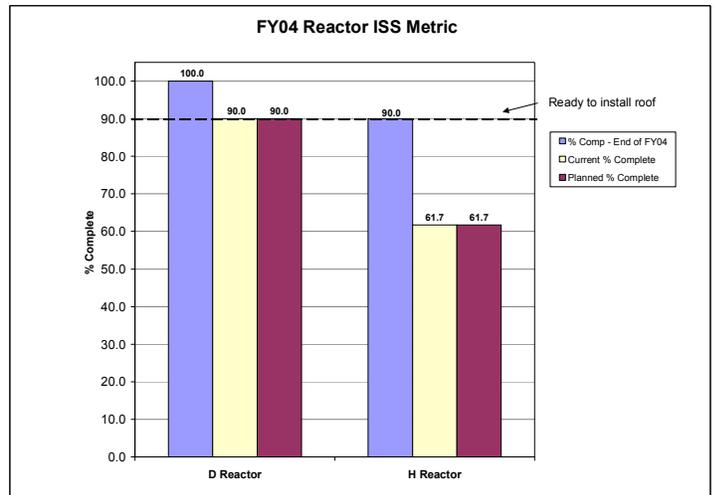
TPA MILESTONES:

- M-93-11, Complete F Reactor ISS (Due 9/30/04); *forecast 12/31/03*. (Physical ISS work completed in August; awaiting regulator approval of S&M Plan.)
- M-93-17, Complete D Reactor ISS (due 12/31/04); *forecast 9/30/04*.

SUMMARY SCHEDULE:



ISS METRIC:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

- Mud dauber contamination legacy (H Reactor).* Surveying/downposting areas within site perimeter fence ongoing; 80-90% of areas previously posted have been recovered to original postings. Areas within reactor building and SSE are in process of being surveyed.
- Concern about airborne radiation control at 1304-N (fixative issues).*

ENVIRONMENTAL RESTORATION REMEDIAL ACTION PROJECT

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SAFETY:

FYTD: 3 first aids; 0 recordable; 0 lost workday cases
Current Month: 3 first aids (2 strains, 1 contusion)

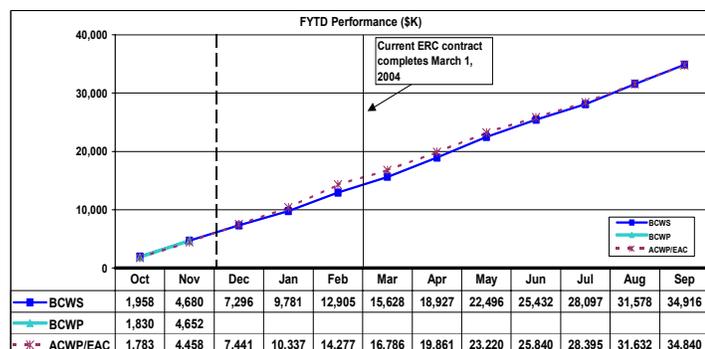
HIGHLIGHTS:

- Completed 100 B/C pipeline plume excavation on November 5 meeting TPA Milestone M-16-26E nearly 11 months ahead of schedule.
- Initiated backfill of 100 B/C pipelines; completion is scheduled for March 2004.
- Initiated remediation of four accelerated 100 B/C Area Burial Ground Sites.
- Submitted recommendation for remediation award of 100 B/C Burial Grounds and Remaining Sites to RL for approval. Award is planned for early December; work will begin January 2004.
- Continued 100 K Area excavation at 116-KE-4 Retention Basin, 116-K-1 Crib (plumes), and 100-KR pipelines.
- Completed 116-KW-3 Retention Basin confirmation sampling and analysis. CVP is 40% complete.
- Held 116-N-1 Crib pre-bid meeting on November 4.
- Initiated 300-FF-1 and 618-5 Burial Ground regrade project.
- Preparing an ESD changing the 300-FF-2 cleanup levels for select outside-the-fence waste sites from industrial to unrestricted.
- Completed historical and current industry practices research for handling/treating zircalloy shavings/chips in the 618-7 Burial Ground.

UPCOMING KEY ACTIVITIES:

- Commence/complete remediation of five small K Area sites and 116-KE-1/116-KW-1 Condensate Crib.
- Submit BCPs for 100 F Area remaining sites accelerated design and RFP, for accelerated scope at the 100 B/C miscellaneous remaining sites, and for the 118-K-1 Burial Ground.
- Begin 618-7 Burial Ground field activities in March 2004.

PERFORMANCE:



- **SV:** (\$28K); (0.6%). Plumes at 116-K-1 and wind days. Variance partially offset by accelerated efforts on 300 Area regrading.
- **CV:** \$194K; 4.2%. Credit received for return of excess 300-FF-1 soil bags; labor underruns at 100-NR-1.

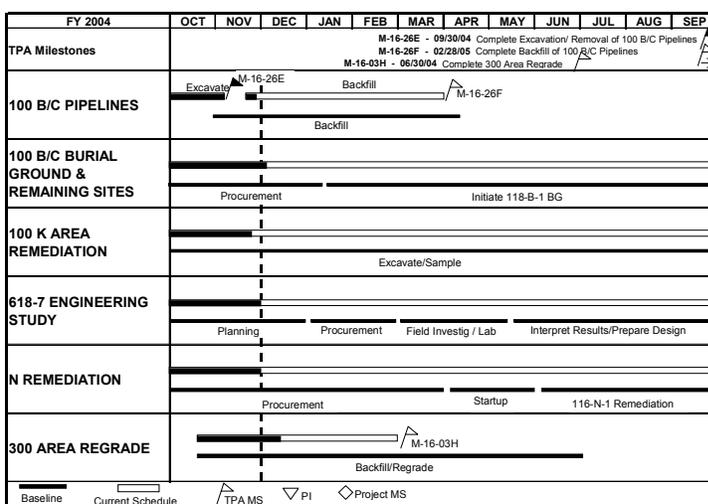
EAC TRENDS:

FYTD: (\$76K)
Current Month: (\$90K)
• Efficiencies on 618-7 research task.

TPA MILESTONES:

- M-16-03H, Complete 300-FF-1 and 618-5 Burial Ground regrade (due 6/30/04); *forecast 3/1/04.*
- M-16-26E, Complete excavation/removal of 100 B/C pipelines (due 9/30/04); *complete 11/5/03, nearly 11 months ahead of schedule.*
- M-16-26F, complete backfill of 100 B/C pipelines (due 2/28/05); *forecast 3/30/04.*

SUMMARY SCHEDULE:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

None at this time.

ENVIRONMENTAL RESTORATION WASTE OPERATIONS PROJECT

November 2003 Monthly Report

SAFETY:

FYTD: 1 first aid; 0 recordable; 0 lost workday cases
Current Month: 1 first aid (foreign body-sliver)

Occurrence: Articulated dump truck mechanical failure (RL-BHI-ERDF-2003-0006).

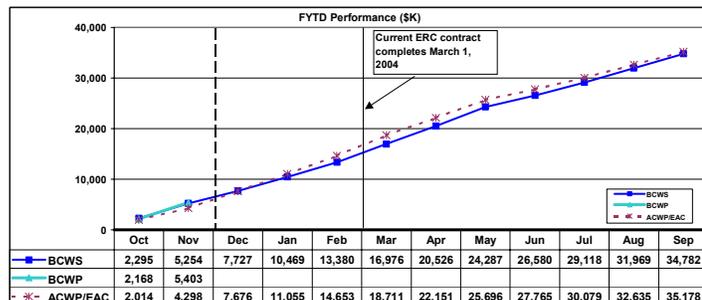
HIGHLIGHTS:

- Disposed 28,504 tons of waste in ERDF in November; 70,736 tons during FY04; 4,588,501 tons of contaminated material have been disposed in ERDF since operations began in July 1996.
- Suspended ERDF Disposal operations 6 days (out of 18 scheduled workdays) due to high winds.
- Excavated 331,072 bank cubic yards (BCY) at ERDF expansion Cells 5/6 project in November; excavated 569,736 BCY (40.4% complete) since project began on October 7.
- Completed pug mill mobilization.
- Completed 90-day test pad construction; installed Sealed Double Ringed Infiltrometer (SDRI) on November 25.
- Initiated preparation of excavation permits for alternate gravel pits.

UPCOMING KEY ACTIVITIES:

- Complete treatment of depleted uranium chips-in-oil drummed waste (from 618-4 Burial Ground) that was sent to Oak Ridge in September. All treatment is expected to be complete by April 2004. Treated waste will be returned to ERDF for disposal. (M-16-03I).
- Begin receiving 183-H Solar Basin drummed waste requiring treatment at ERDF in December. Full-scale treatment will continue for several months.
- Begin receiving waste from 116-KW-1 and 116-KW-2 (K Area accelerated scope) that is expected to contain elevated levels of carbon-14. Waste will be treated at ERDF to immobilize carbon-14 prior to disposal.
- Due to adding second shift, anticipate ERDF Cells 5/6 excavation to complete approximately three weeks ahead of schedule (early February 2004).
- Receive 90-day test pad results late February 2004.
- Initiate Admix production in February 2004.

PERFORMANCE:



- SV:** \$149K; 2.8%. Treatment of uranium chips-in-oil drums ahead of schedule; offset by excavation delay of ERDF expansion due to several days of inclement weather.
- CV:** \$1,105K; 20.5%. ERDF Expansion payment record not processed in November; ERDF Disposal accrual understated. Both will be corrected in December.

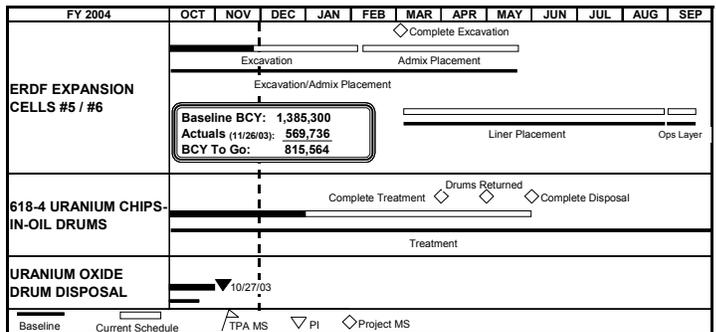
EAC TRENDS:

- FYTD: \$395K
Current Month: (\$112K)
- Transportation labor underruns.

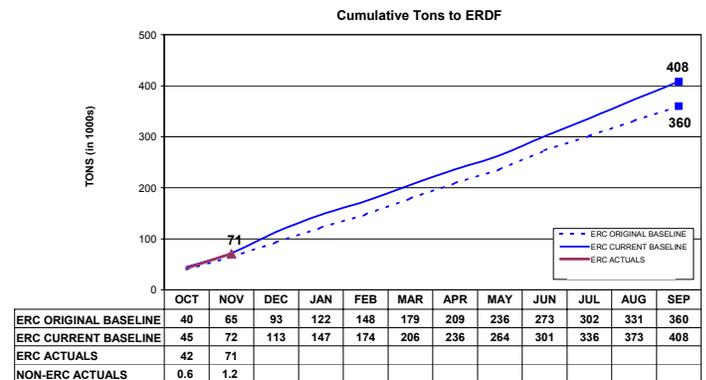
TPA MILESTONES:

- M-16-03I, Complete treatment of drummed waste from 618-4 Burial Ground (due TBD).

SUMMARY SCHEDULE:



ERDF TONNAGE:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

- Non-ERC Hanford Waste to ERDF. Evaluate the acceptance of Hanford Site waste disposal.

ENVIRONMENTAL RESTORATION RISK ASSESSMENT AND SITE CLOSURE PROJECT

November 2003 Monthly Report

SAFETY:

No first aid, recordable, or lost workday cases experienced FYTD.

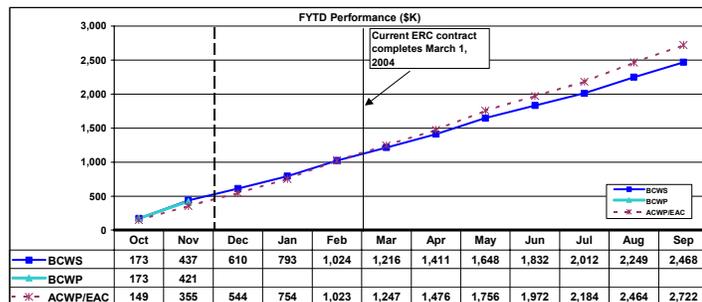
HIGHLIGHTS:

- Provided draft *100 Area and 300 Area River Corridor Baseline Risk Assessment: Basis and Assumptions on Project Scope* to RL, EPA, Ecology, Tribes, Trustees, and HAB for review.
- Provided draft Tribal Communication/Consultation Plan and Public Involvement Plan to RL in support of River Corridor Baseline Risk Assessment (RCBRA) Project.
- Resolved stop work order due to unidentified pipeline at Pit 30. Acquired drawing, added data to database, mapped data with existing data, and collected a GPS verification point in support of future risk assessment site closure activities. Confirmed pipeline was a 12-inch abandoned (unused) waste water pipeline belonging to old 200 Area Batch Plant.

UPCOMING KEY ACTIVITIES:

- Approval of *100/300 Area River Corridor Baseline Risk Assessment: Basis and Assumptions on Project Scope*.
- Approval of BCP for Risk Assessment and Site Closure Project accelerated workscope on December 18.
- Meet with Tribes to finalize RCBRA Project Tribal Communication/Consultation Plan in January.
- Provide draft annotated outline for 100/300 Area River Corridor Baseline Risk Assessment Work Plan in December.
- Initiate compilation of existing ecological data for 100/300 Area risk assessment in December.
- Initiate shoreline radiation surveys for 100/300 Area risk assessment in December.
- Distribute *Conceptual Site Model for 100 B/C Pilot Project Ecological Risk Assessment* for external review in December.
- Update 100 D/DR Area maps to assist in identifying potential sources for an increase in hexavalent chromium in groundwater wells.

PERFORMANCE:



- **SV:** (\$16K); (3.7%). Subcontract support experienced slight delay; no impact.
- **CV:** \$66K; 15.7%. Equipment received, but not yet billed.

EAC TRENDS:

FYTD: \$254K

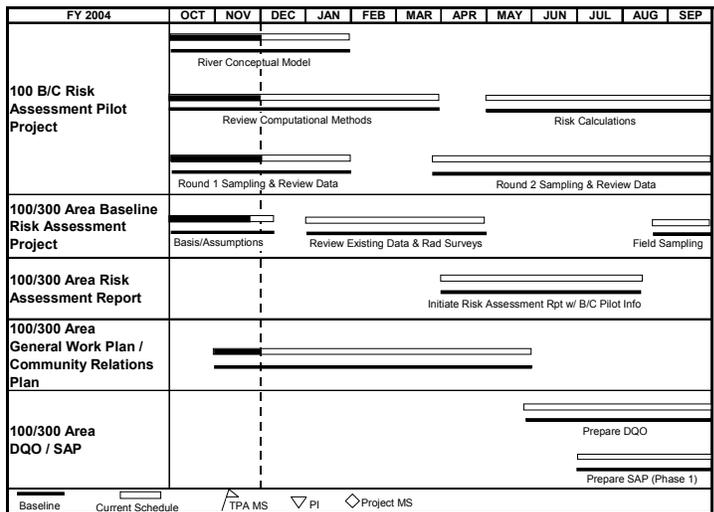
Current Month: \$254K

- Unplanned costs for material, equipment, subcontract, engineering support.

TPA MILESTONES:

No FY04 milestones.

SUMMARY SCHEDULE:



PERFORMANCE INCENTIVES:

No approved PI's at this time.

ISSUES:

None at this time.

ENVIRONMENTAL RESTORATION PROGRAM MANAGEMENT AND SUPPORT PROJECT

November 2003 Monthly Report

SAFETY:

No first aid, recordable, or lost workday cases experienced FYTD.

HIGHLIGHTS:

Safety and Health:

- Performed and documented the annual VPP self-assessment. This assessment involved 13 interviewers and 84 volunteer interviewees at multiple projects.
- Working with 618-7 Burial Ground project to establish appropriate controls to prevent spread of contamination and ignition of metal shavings from recently excavated drums. These drums contain 5% (or greater) beryllium in zircalloy metal shavings and will require new controls.

Technical Services:

- Completed ERC training to the new model code requirements that were incorporated into General Design Criteria, BHI-00747.
- Submitted ERC planned asbestos removal actions for inclusion in a site-wide submittal to Benton County Air Authority.
- Completed corrective actions through the upgrade of procedures and work processes for biological vector hazards based on contamination spread by mud daubers at H Reactor.
- Completed final report on technology options for excavating, stabilizing, and disposing of drums of pyrophoric zircalloy that are present in the 618-7 Burial Ground.

UPCOMING KEY ACTIVITIES:

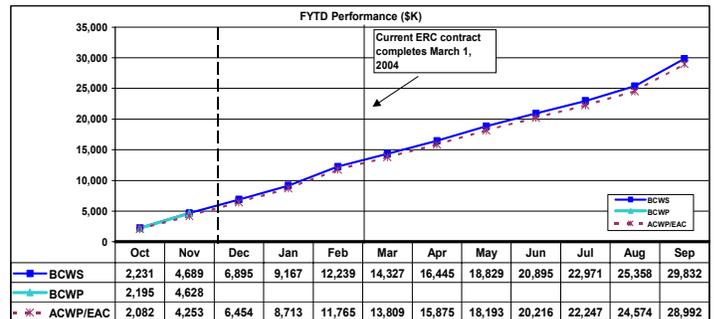
Safety and Health:

- Submit updated VPP application to RL by mid-December.

Technical Services:

- Complete the 2003 Hanford Site Tier Two Emergency and Hazardous Chemical Inventory Report due to Fluor Hanford on December 18.
- Development of site-wide Memorandum of Understanding for groundwater management in December.
- Submittal of Hanford RCRA Permit Renewal Application due to Ecology in March 2004.

PERFORMANCE:



- **SV:** (\$61K); (1.3%). N/A
- **CV:** \$375K; 8.1%.
- **Safety and Health:**
 - Rad Con scope continuing at minimum compliance level supported by existing resources.
- **Technical Services:**
 - Underruns in field sampling and analysis due to more direct project support being provided.
- **ARQP:**
 - Lost full-time manager and 3 staff. CATS support is continuing at minimum levels, 5 ISMS metrics and quarterly trend activities not being updated and reported. Recovery plan is being implemented.

EAC TRENDS:

FYTD: (\$840K)

Current Month: (\$773K)

- Staffing reductions in Rad Con, Baseline Management, and ARQP.

PERFORMANCE INCENTIVES:

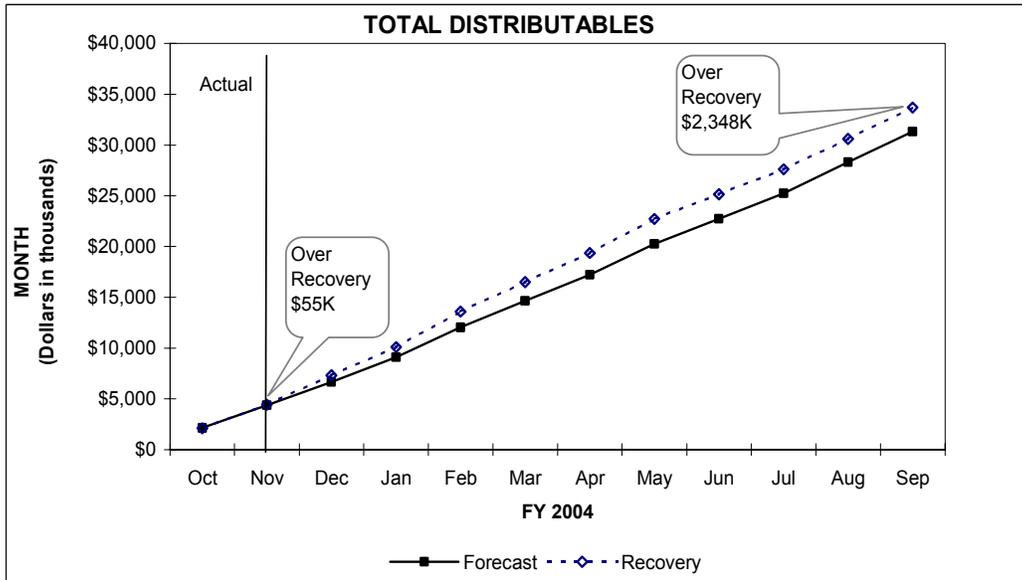
No approved PI's at this time.

ISSUES:

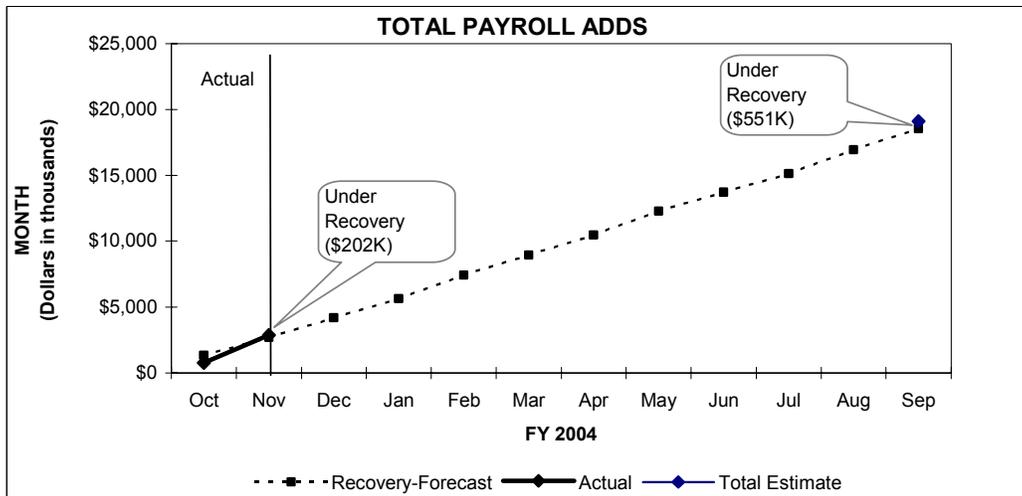
None at this time.

ENVIRONMENTAL RESTORATION RECOVERY

November 2003 Monthly Report



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
	Act	Act	Fcst										
Budget	2,289	2,803	2,238	2,521	2,902	2,595	2,605	3,074	2,527	2,480	3,127	2,957	32,118
Forecast	2,132	2,235	2,282	2,477	2,910	2,596	2,584	3,033	2,502	2,480	3,077	3,022	31,331
Recovery	2,113	2,310	2,899	2,789	3,489	2,901	2,869	3,339	2,433	2,461	2,999	3,077	33,679
Over/Under Recovery													
Monthly	-20	75	618	312	579	305	285	307	-69	-19	-79	55	2,348
Cum	-20	55	673	985	1,563	1,868	2,153	2,460	2,391	2,372	2,293	2,348	



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Recovery-Budget	1,410	1,791	1,427	1,448	1,796	1,516	1,512	1,856	1,419	1,408	1,846	1,680	19,110
Recovery-Forecast	1,347	1,329	1,496	1,464	1,799	1,521	1,497	1,832	1,422	1,412	1,811	1,618	18,549
Actual	761	2,117											19,100
Over/Under Recovery													
Monthly	586	-788											
Cum	586	-202											-551