

Environmental Management Performance Report

FY03 Second Quarter



**Pacific Northwest
National Laboratory**

Operated by Battelle for the
U.S. Department of Energy



Department of Energy
Richland Operations Office

PREPARED FOR THE U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE
OFFICE OF ENVIRONMENTAL MANAGEMENT

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PACIFIC NORTHWEST NATIONAL LABORATORY

operated by

BATTELLE

for the

UNITED STATES DEPARTMENT OF ENERGY

under Contract DE-AC06-76RLO 1830



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INTRODUCTION

The purpose of this report is to provide the Department of Energy Richland Operations Office (RL) a quarterly summary of the of the Pacific Northwest National Laboratory (PNNL) performance by Battelle Memorial Institute and its subcontractors.

Section A, Executive Summary, provides an executive level summary of the cost, schedule, and technical performance described in this report. It summarizes performance for the period covered, highlights areas worthy of management attention, and provides a forward look to some of the upcoming key performance activities as extracted from the contractor baseline.

The remaining sections provide a safety overview of PNNL and detailed performance data relative to each individual subproject in support of Section A of the report.

The report date on the cover is the month through which performance is being reported.

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Section A

Executive Summary

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INTRODUCTION

This document provides the Department of Energy Richland Operations Office (DOE-RL) with a report of the Pacific Northwest National Laboratory (PNNL) performance by Battelle Memorial Institute and its subcontractors. All information is as of March 30, 2003 unless otherwise noted.

The section begins with a description of the top accomplishments for the second quarter that are considered to have made the greatest contribution toward safe, timely, and cost-effective clean up. Following the accomplishment section, is an overall fiscal year-to-date summary analysis addressing cost, schedule, and milestone performance. Concluding the Executive Summary, a forward-looking synopsis of Upcoming Planned Key Events is provided.

Note: Milestones tracked and reported in the Executive Summary are FY2003 Contract Milestones and consist of two Department of Energy levels. In descending order, these levels are 1) Department of Energy-Headquarters (HQ), and 2) Richland Operations (RL).

MAJOR ACCOMPLISHMENTS FOR THE SECOND QUARTER 2003

South Hanford Industrial Area Clean Up Laboratory Legacy Removal & Operations

The RPL/325 staff have maintained and operated the facility ready to serve numerous projects to achieve goals during the second quarter as follows: The High Level Waste (HLW) feed solution decontamination was completed for use by selected vendors to conduct tests of their technology to support the Supplement Treatment Program for accelerated closure of single shell tanks. Physical properties measurements needed for the TRU waste disposal supplemental technology was initiated this quarter in support of the Supplemental Technology Program. A contract was established with AMEC, a CH2M-Hill Hanford Group (CHG) vendor, and testing preparations were completed for conducting the Bulk Vitrification Test using the AMEC melter technology. The Pu polycube samples were packaged and shipped to Fluor for completion of a milestone to attain stabilization of that material at the Plutonium Finishing Plant.

Legacy Facilities and Waste Management tasks completed this quarter include: Eight shipments (seven drums and a burial box) containing 46 legacy waste items were shipped to CWC. Two facilities, 3718-S and 332, were shutdown and placed into a "cheap-to-keep" condition awaiting transfer to the RCC cleanup contractor for final disposition.

Near Term Stewardship

The Surface Environmental Surveillance Project successfully completed a competitive bidding process and awarded a 3-year contract for the conduct of radiological analytical services. The process, which was initiated approximately one year ago, included the preparation of a detailed Request for Proposals and extensive proposal reviews and laboratory evaluations prior to awarding the contract.

A final draft of the Hanford Cultural Resource Management Plan (HCRMP) was completed and submitted to DOE-RL for final review and approval. The draft HCRMP includes significant revisions following extensive reviews by the DOE-RL Office of Chief Counsel and others.

Site Integration

Hanford Solid Waste – EIS Preparation Support

The revised draft HSW EIS was approved by RL on March 29, 2003. Production work was undertaken on a 2 shift per day basis, and the document is in full scale duplication with only a few minor portions outstanding and the preparation of the electronic versions was commencing. The post cards to over 1400 interested citizens were mailed out. The mailing lists were finalized, express boxes ordered, and preparations for the distribution were made.

Work also continued on the additional groundwater analyses (requested by EPA in their 3/12/03 letter) to assess concentrations at 100m down gradient of the new multi-use disposal facilities and to perform some sensitivity analyses regarding the performance of barriers, caps and other mitigation measures. A decision on how this information will be incorporated into the final EIS needs to be made.

Hanford Site Planning & Integration

The RL-AMI Technical Support Project received a shutdown order in January. Staff completed RL-LCM Version 1.1. at the end of March per the schedule. RL authorized additional work on the LCM (structural/capability enhancements) and initiated a new project for this work. Transition activities and project closeout was initiated.

Groundwater Management and Monitoring

The 200-BP-5 Groundwater Operable Unit Sampling and Analysis Plan was completed; DOE transmitted the plan to regulators for final review and approval.

The April-June 2002 RCRA Groundwater Monitoring Quarterly Report was completed; DOE transmitted the report to the regulators.

The quarterly summary of groundwater monitoring activities conducted in the 400 Area during April 1 through June 30, 2002 was transmitted to DOE and Fluor Hanford (FH).

Groundwater/Vadose Zone Integration

Initiated preparations for a May 6-7, 2003 workshop with the Environmental Management Sciences Program (EMSP) managers and investigators, Hanford Site personnel, regulators, Tribal Nations, and stakeholders. The workshop will focus on subsurface transport and soil and groundwater remediation as well as a separate session on high-level waste tank projects.

Conducted a meeting at Stanford University to develop a two-year research plan for integrated S&T Project and Environmental Management Sciences Program research on uranium geochemistry to enable predictions of uranium fate and transport needed for U-Plant regional closure and 300 Area monitored natural attenuation.

Completed studies of strontium-90 uptake by periphyton (an aquatic plant) and initiated studies of strontium-90 uptake by fish to provide ecological risk assessment data that will be used to reach a final record of decision for groundwater at 100-N Area.

The Composite Analysis Maintenance Plan and the FY02 Annual Status reports have been delivered to DOE-RL.

The assessment of composite impact was completed to support the Solid Waste EIS. Charley Kincaid met with the Washington State Department of Ecology staff to explain the approach and results of this analysis in preparation for the release of the EIS.

Presented a paper at Waste Management 03 in February 2003 titled "Calculating Economic Risk After Hanford Cleanup". The paper was based on results of the initial assessment performed using the System Assessment Capability and was presented by M.J. Scott

Safeguards and Security

A "satisfactory" rating was received for the Periodic Safeguards and Security Survey conducted by DOE RL safeguards and Emergency Services. This is the highest rating possible.

Security Conditions 2 ("SECON 2") measures were implemented as a result of the conflict in Iraq. These measures have since been downgraded to SECON 3.

An annual review, performance test, tamper indicating device review, physical inventory of nuclear material, and Material Balance Area Custodian training was conducted of a Laboratory project's subcontractor.

The key deliverable to update the Laboratory's Cyber Security Program Plan was completed as scheduled.

The FY 2003 Nuclear Materials Inventory Assessment was completed and provided to DOE RL for submittal to DOE-HQ. This report provides current use and disposition plans for the nuclear material inventory, as well as an inventory of the radioactive materials at PNNL. This report is used by a number of program offices at HQ for planning and management of DOE's material inventory.

PERFORMANCE DATA AND ANALYSIS

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

FY 2003 Schedule and Cost Performance

Schedule Performance — Fiscal Year (FY) 2003 schedule performance reflects a negative 21 percent (-\$7.1M) unfavorable schedule variance that is outside the established 10 percent threshold. Projects outside the threshold with unfavorable variances are: South Hanford Industrial Area Clean Up, the unfavorable schedule variance results from activities being placed on hold which are a part of the current project baseline of \$29,108,149, which is much larger than the anticipated target funding of \$17,064,286. A formal Baseline Change Request (BCR) is in process that will align the project with the FY03 work authorization. The Groundwater/ Vadose Zone Monitoring Program which has delayed certain work scope as staff has been diverted to unplanned work supporting the Solid Waste Environmental Impact Statement project and to align with the Fluor baseline and delay in completing the Composite Analysis Technical Scope. Detailed variance analysis explanations may be found in the applicable project section.

Cost Performance — FY 2003 cost performance reflects an overall 6 percent (\$1,517K) favorable cost variance that is within the established 10 percent threshold. However, individual projects outside the threshold with favorable variances are South Hanford Industrial Area Clean Up, and Near Term Stewardship. Detailed variance analysis explanations may be found in the applicable project sections.

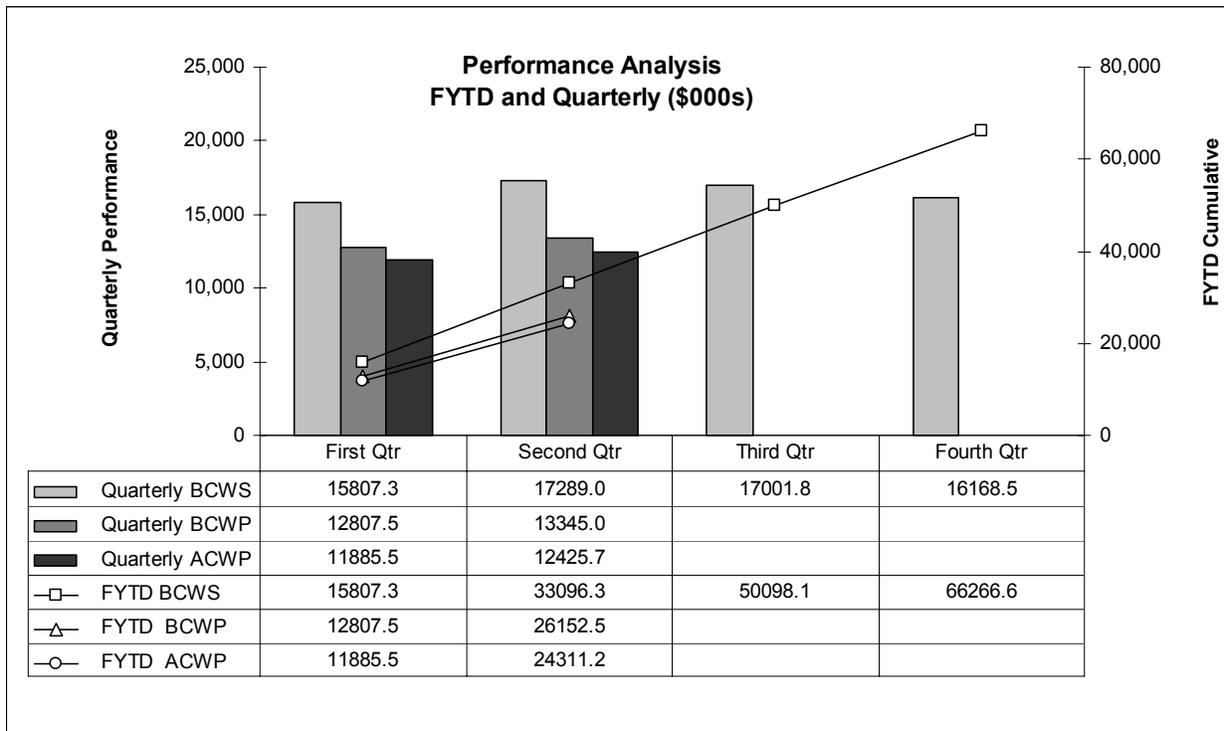
BASELINE PERFORMANCE STATUS

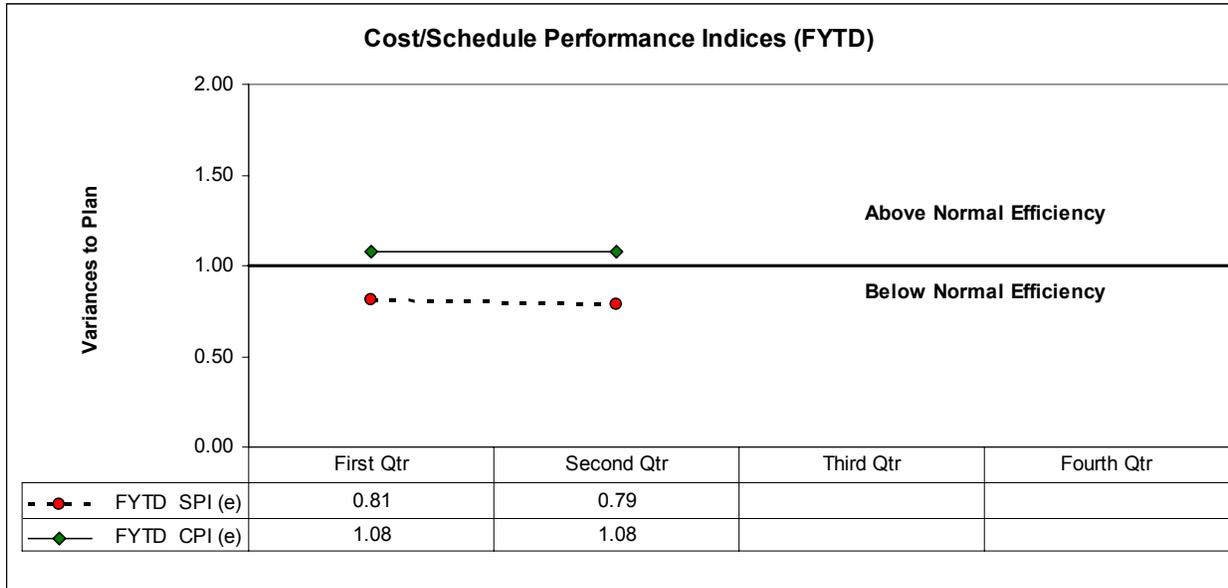
FY 2003 COST / SCHEDULE PERFORMANCE – ALL FUND TYPES

FY TO DATE STATUS (\$K)

Subactivity	WBS	Type	Expected Authorized Funds	Funding Received To Date	Current Authorized Baseline	BCWS FYTD	BCWP FYTD	ACWP FYTD	CV FYTD	CV %	SV FYTD	SV %	
RL-RS01	South Hanford Industrial Area Cleanup	3.2.1.7	OP	17,052	10,098	29,146	13,896	7,279	6,465	814	11	-6,617	-48
RL-SC01	Near Term Stewardship	3.5.1	OP	6,122	3,976	6,122	3,026	2,963	2,565	398	13	-63	-2
RL-SS01	Site Integration	3.4.1.3	OP	4,888	4,699	4,888	4,060	4,060	4,154	-94	-2	0	0
RL-SS03	Groundwater Mgmt And Monitoring	3.4.3.1	OP	10,584	6,044	10,584	5,492	5,460	5,124	336	6	-32	-1
RL-SS04	Groundwater / Vadose Zone Monitoring	3.4.4	OP	6,268	2,059	6,268	2,809	2,415	2,363	52	2	-394	-14
RL-SS-D	Safeguards And Security	3.4.6.3	OP	9,260	7,321	9,260	3,814	3,814	3,803	11	0	0	0
Operating Total				54,173	30,220	66,267	33,096	25,990	24,473	1,517	6	-7,106	-21
PNNL Program Total				54,173	30,220	66,267	33,096	25,990	24,473	1,517	6	-7,106	-21

Notes: Column headings [Budgeted Cost of Work Scheduled (BCWS), Budgeted Cost of Work Performed (BCWP), etc.] are defined in the glossary at the end of the report. The Annual Budget is FY2003 workscope only and does not include prior year scope.





MILESTONE PERFORMANCE

Milestones represent significant events in project execution. They are established to provide a higher level of visibility to critical deliverables and to provide specific status about the accomplishment of these key events. Because of the relative importance of milestones, the ability to track and assess milestone performance provides an effective tool for managing the PNNL EM cleanup mission. These milestones are consistent with the PNNL contract. FY milestone performance shows that four RL milestone were scheduled and completed for the quarter.

Groundwater Management and Monitoring

DOE-RL milestone: Submit Hanford Site Groundwater Monitoring for FY2002 Annual Report to DOE. Completed 2/27/03

DOE-RL milestone: Submit quarterly letter report for Resources Conservation and Recovery Act monitoring to DOE by e-mail. Completed 2/13/03

PNNL Safeguards and Security

DOE-RL milestone: PNNL-03-05 (5.1) Update the PNNL Cyber Security Program Plan (Key Deliverable) was completed as required (3/31/03).

DOE-RL milestone: PNNL-03-10 (6.2) Update the Security Education and Awareness Program Plan documenting the existing program and identifying specific future enhancements to increase employee involvement in security awareness (Deliverable) was completed as required (2/28/03).

Type		Current Quarter Milestones			Fiscal Year-To-Date Milestones			Remaining	FY Total
		Scheduled	Completed	Delinquent	Scheduled	Completed	Delinquent		
DOE	HQ	0	0	0	0	0	0	0	0
	FO	0	0	0	0	0	0	0	0
	RL	4	4	0	6	6	0	13	19
PNNL	Key	11	10	1	19	20	1	29	49
Total		15	14	1	25	26	1	42	68

PERFORMANCE OBJECTIVES

Safeguards and Security – The primary performance objective is to provide an efficient and economical safeguards and security program to provide appropriate control and protection of resources, facilities and assets.

An effective documented SAS program addressing the following areas is maintained:

- SAS Program Management & Planning
- Information Security (including Classification)
- Physical Security
- Personnel Security
- Nuclear Material Control & Accountability
- Cyber Security

Performance Indicator

Status

- 1) Self -Assessments - Completion of internal self-assessments of SAS activities and completion of associated corrective actions in accordance with schedules to assess internal compliance and effectiveness of the management system. This will be reported on a quarterly basis.

No assessments scheduled first or second quarter. All corrective actions from previous assessments on track. Based on reduced Continuing Resolution funding, the self-assessment program has been deferred to later in the year.

- 2) External Evaluations - The composite rating for each evaluation, survey and/or assessment of SAS activities by external organizations/clients (such as DOE) to assess compliance with external requirements. Completion of associated corrective actions in accordance with approved plans shall also be included. Satisfactory (or above) ratings.

RL SES Periodic Survey. Composite rating of Satisfactory (conducted in November) received.

LIFE CYCLE BASELINE

The following chart reflects the PNNL EM Direct Funded Programs lifecycle (FY 2003 through FY 2046) planned metrics by Project Baseline Summary (PBS).

(As of Second Quarter FY 2003)

(In Thousands)	FY 02 & Prior	FY03	FY04 - 12	FY 13 - 46	Total (TPC)
RS01-S Hanford Industrial Area Clean Up	90,375	28,916	155,757	398,256	673,304
SC01-Near Term Stewardship	38,987	6,134	76,904	452,386	574,411
SS01-Site Integration	10,383	4,888	22,316	0	37,587
SS03-GW Mgmt & Monitoring	Life Cycle Information not available				0
SS04-GWvadose Zone Integration	Life Cycle Information not available				0
SS-D Safeguards & Security	21,017	16,132	145,233	549,421	731,803

UPCOMING PLANNED KEY EVENTS

The following key events are extracted from the authorized baseline and are currently expected to be accomplished during the next several months.

South Hanford Industrial Area Clean Up (LRO)

A major revision to the LRO Project baseline will be initiated to implement the RL management decision on 300 Area accelerated cleanup, specifically focused on the continued operations and final closure of the RPL/325 facility.

Planning is underway to relocate the electrical service from the 615-BYRL facility. Once the electrical is relocated, disposition of the facility can occur.

Near Term Stewardship

The "Climatological Data Summary Report for CY 2002" is scheduled for completion during the third quarter of FY03.

Initiate 100 B/C Pilot Study upland sampling in May 2003.

Initiate environmental sampling in support of 100-NR-2

Site Integration

Following the public review period, a supplemental final EIS will be prepared, reviewed, approved and issued by June 20th, allowing issuance of Record's of Decision by July 31, 2003.

Complete RL AMI project closeout

Groundwater Management and Monitoring

Complete 100-K Burial Grounds soil-gas probe installation and soil gas sampling.

Complete October – December 2002 Resources Conservation and Recovery Act Quarterly Report and transmit to DOE.

Complete revised Groundwater Quality Assessment Plan for the 216-U-12 Crib.

Participate in Notice of Deficiency (NOD) comment workshops with DOE, FH, and Ecology, regarding the LLBG final status groundwater monitoring plan.

Complete Data Quality Objectives (DQO) summary document for groundwater monitoring in the 100-BC-5 and 100-FR-3 Operable Units. Prepare sampling and analysis plans and obtain regulator approval.

Groundwater/Vadose Zone Integration

Prepare and present a paper at the 4th Symposium on the Hydrogeology of Washington State in April 2003.

Continue laboratory and modeling investigations of T-TX-TY tank farm samples and uranium-transport experiments. Initiate laboratory studies on uranium-bearing samples from the 300 Area.

Continue strontium-90 uptake studies for fish to support 100-N ecological risk assessment.

Continue work on remediation technical element activities in the science and technology roadmap targeted at developing data to evaluate remediation alternatives for 100-NR-2.

Complete software modifications to meet requirements to support the Composite Analysis and other planned assessments.

Complete the Technical Scope and Approach document for the Composite Analysis. This document will summarize the assumptions used to develop the analysis and the modeling approach to be used in this analysis.

Safeguards and Security

Continue to provide expertise, oversight, guidance, and training related to the appropriate protection of personnel and physical and intellectual property of the government, other clients, and Battelle. In addition, provide for the control, accountability, and inventory management of nuclear materials.

The DOE Office of Independent Oversight and Performance Assurance (DOE OA) is preparing to conduct the inspection of the Hanford Site and PNNL Safeguards and Security Survey during the third quarter. The data call was completed during the second quarter.

The Information Classification and Control Policy (ICCP) group within DOE is proceeding with plans for an oversight review of the Classification, Declassification, and Unclassified Controlled Nuclear Information (UCNI) programs of the Richland Operations Office (RL) to include PNNL in April. The data call was completed during the second quarter.

EMERGING ISSUES

None to report this quarter.

OTHER HANFORD CONTRACTOR SUPPORT

PNNL Technology Applications Support to Bechtel Hanford Inc.

PNNL is providing support to the Bechtel Hanford, Inc (BHI) Technology Application group in FY2003 through a work order that is being extended as the BHI contract is extended. These are accomplishments for BHI Technology Application that included support from PNNL.

Two technology deployments occurred in the second quarter of FY2003. The Ultralift was deployed in January 2003 to aid in moving a 500-pound safe from the 105-N Building. Using the Ultralift instead of the baseline resulted in improved personnel safety and reduced cost and time for heavy lifting activities. The ISO-CART system, with an HPGe detector, was deployed in February 2003 at 190-DR. The deployment was a validation of the ISO-CART system using the In Situ Object Counting System as a control. The ISO-CART system was used to characterize vacuum filters in the facility.

BHI Technology Application is working through the Bechtel Technology Panel, a Bechtel corporate initiative, to collaborate with other Bechtel projects at the Savannah River, Idaho, Oak Ridge, and Nevada DOE sites. In the second quarter of FY03 the panel continued work on defining priority multi-site science and technology issues by developing a strategic mapping of these issues to project schedules.

Technical assistance was provided to the projects in the following areas:

- Technology Application provided a report outlining the technology options for treating drums containing pyrophoric zircaloy metal chips that are buried in the 618-7 burial ground.
- Technology Application provided a fact sheet describing options for deep contamination at the 116-N-1 Crib for distribution with the project's proposed Explanation of Significant Difference to address this contamination.
- Technology Application provided a white paper describing bioremediation, natural attenuation, and infiltration barrier options for treating hydrocarbon contamination discovered beneath the excavation of the 618-4 burial ground.
- Documentation of field-portable XRF technology for use in metals analysis by the RAWD Project was updated for the project.
- A letter report comparing the effectiveness, costs and environmental information of 12 potential fixatives for use at the 105H Fuel Storage Basin was prepared. A Test Plan for five selected technologies was also prepared.
- Metal decontamination techniques were reviewed for the Interim Safe Storage Project.
- Information identifying in situ remediation and characterization options for subsurface piping was provided to the project for use in a report examining the cost benefit of leaving some subsurface piping in place.

PNNL Support to Fluor Hanford

The Laboratory continued to support Fluor's accelerated clean-up efforts. Specific highlights this quarter include:

PNNL has developed and deployed a one of-a-kind gamma detector system that is being used to measure contamination levels on the floor and the walls of the Spent Nuclear Fuel Basins. Data obtained from the floor and wall measurements is being used to estimate contamination levels in the concrete and will provide essential data supporting deactivation and closure decisions.

PNNL completed the development of multi-component ion exchange models to allow future predictions of strontium and cesium source terms and reactive transport. These predictions will be used to support site-wide remediation decisions.

Developed an alternative approach to dispose of legacy plutonium holdup material at the Plutonium Finishing Plant. Under this task, PNNL and Fluor Hanford staff provided the technical justification to dispose of Pu debris in polyjars instead of pipe overpack containers. This approach will significantly reduce costs and minimize storage space requirements.

A novel approach for characterizing large waste items is being adopted by the PFP Decommissioning project. The method has been facilitated by PNNL modifications to hand-held alpha monitors that extends the range of measurement to levels needed to designate waste as LLW or TRU. This method will greatly reduce the time needed for complete surveys.

In collaboration with Rocky Flats, Savannah River Site, DOE-Albuquerque, DOE-RL and Fluor, PNNL is supporting the development of technical basis documentation to support a decision that would allow plutonium containing high amounts of chloride salts to be stabilized at a lower temperature. If approved by DOE and the DNFSB, lower temperature stabilization would reduce the corrosion problems caused by the chloride. This decision requires DOE and DNFSB approval.

PNNL Support to CH2M HILL:

Under the auspices of the Memorandum of Agreement signed between PNNL and CH2M HILL management during the second quarter of FY03, PNNL continued science and technology support to CH2M HILL to enhance the Tank Farm Contractor's ability to accelerate cleanup. PNNL staff supported key CH2M HILL projects in the areas of accelerated tank closure and supplemental treatment.

PNNL continued technical support to Supplemental Technologies through the second quarter. PNNL is providing key technical and management support to CH2M HILL in the Supplemental Treatment Program evaluating low-activity waste immobilization options that could be implemented supplemental to the Waste Treatment Plant LAW vitrification facility. PNNL delivered cold simulant and decontaminated radioactive tank waste produced in the second quarter to two laboratories for use in vendor-directed testing of containerized grout and bulk vitrification technologies – allowing supplemental treatment testing to begin on schedule. As the support laboratory to the bulk vitrification vendor, PNNL also completed formulation of a baseline glass at APEL for the project, and initiated preparations at the RPL for third quarter laboratory- and engineering-scale radioactive waste vitrification testing. PNNL staff also performed testing on actual TRU tank wastes to evaluate and document the physical properties critical to TRU packaging system design and operations.

PNNL also continued support to CH2M HILL in the preparation of data packages for the tank closure Environmental Impact Statement (EIS). PNNL management and technical staff provide leadership and detailed data input to support several data packages on storage, retrieval, closure, safety, and supplemental treatment. The final data packages are to be completed early in the third quarter and transmitted to the independent NEPA contractor preparing the EIS. This EIS is on the critical path for ORP and CH2M HILL in accelerating the tank remediation activities at Hanford.

In addition, PNNL contributed to CH2M HILL projects and strategic planning in areas of retrieval and tank integrity by:

- Completing and published the final report documenting the results of performance evaluation testing of electrical leak-detection methods at the Hanford Mock Tank in FY 2002-2003. The results are described in the following report, "Barnett, D.B., et al. 2003. "Results of Performance Evaluation Testing of Electrical Leak-Detection Methods at the Hanford Site Mock Tank – FY 2002-2003." PNNL-14192, Pacific Northwest National Laboratory, Richland, Washington.
- Completed and documented a feasibility study for using a single mixer-pump in Tank AN-101. The current waste retrieval plan calls for using two mixer pumps to mix waste to be stored in Tank AN-101. This study provided a technical basis for the W-211 Project to use a single mixer pump for AN-101 to save cost and time without sacrificing the waste mixing performance. The study results are described in the following PNNL report: Onishi, Y., B.E. Wells, S.T. Yokuda, and G. Torrenes. 2003. "Feasibility Study on Using a Single Mixer Pump for Tank 241-AN-101 Waste Retrieval," PNNL-14105, Pacific Northwest National Laboratory, Richland, Washington.
- Completed Tank 241-AN-105 retrieval assessment, including the five steps for waste retrieval and subsequent pipeline transfer for the W-211 Project. Through rheology measurements, chemical solid analysis, and pump jet and pipeline transfer modeling, the report concludes that the liquid and slurry waste can be retrieved and pumped if inline and in-tank dilution are used. The study results are described in the following report, "Onishi, Y., J. M. Tingey, B.E. Wells, J. Lui, G. Terrones, K.P. Kechnagle, S.T. Yokuda, and M. Quinn. 2003. "Retrieval and Pipeline Transfer Assessment of Hanford Tank 241-AN-105 Waste," PNNL-14144, Pacific Northwest National Laboratory, Richland, Washington.

OHC ISSUES

External Issues/ DOE Requests/Regulatory/DOE Issues

Issue: A potential organizational conflict of interest was identified by PNNL that affected work being conducted for CH2M HILL in the Supplemental Treatment program.

Impact: If unmitigated, the OCI may put DOE-ORP and CH2M HILL's supplemental treatment technology evaluation, downselection, and future procurement decisions at risk.

Corrective Action: An OCI Mitigation Plan was prepared, coordinated with CH2M HILL and ORP management and legal counsel, submitted, and approved by Roy Schepens, ORP Manager on February 24, 2003. PNNL removed itself from performance of specific work activities supporting CH2M HILL, and implemented several other mitigating actions per the approved plan.

Issue: BHI Contract Extension

Impact: If BHI's contract is not renewed, we will have to propose re-establishing this program with the new contractor.

Corrective Action: No corrective action required at this time. PNNL Staff will take appropriate action once the contract is awarded.



Section B

Safety Overview

Environment, Safety, Health & Quality

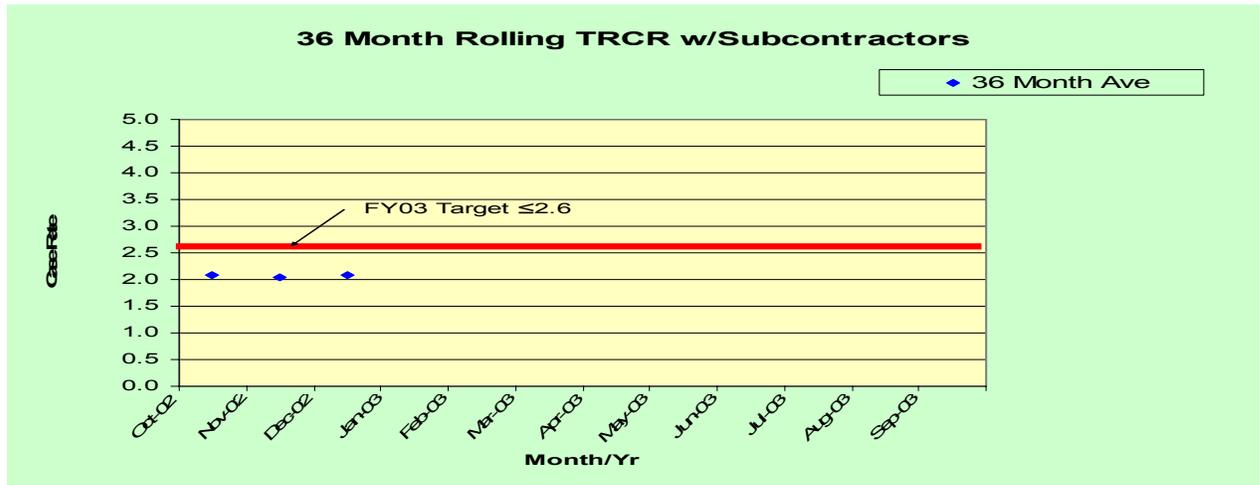
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SAFETY OVERVIEW

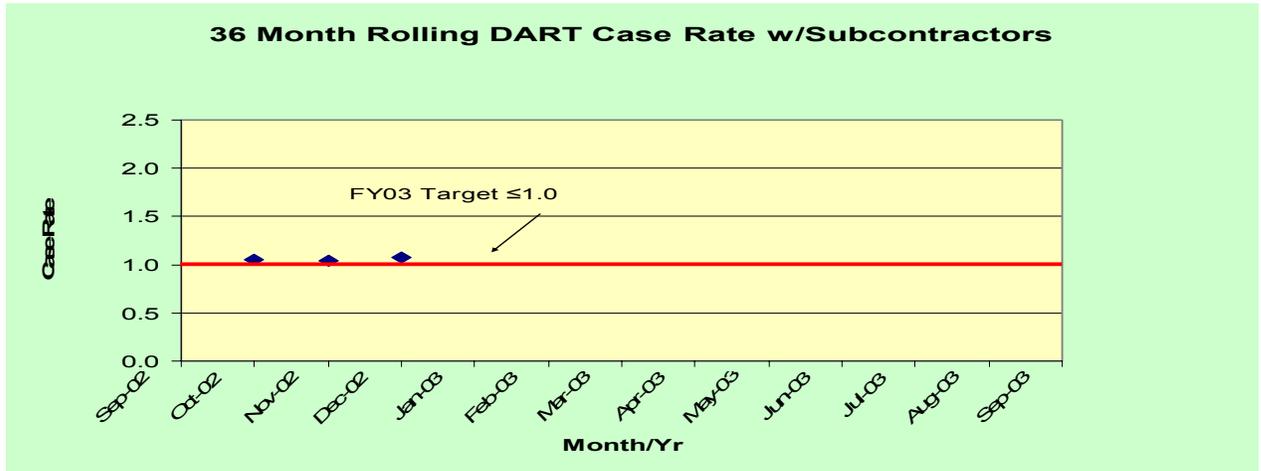
The focus of this section is on documenting trends in lab wide work-related injury and illness rates. These are the same performance indicators as appear in the FY 2002 Battelle Performance Evaluation and Fee Agreement, which is part of the PNNL Operations Contract. The rates include both PNNL and PNNL Contractor data and are based on a 36 month rolling average. The monthly rates for Recordable and Lost Workday cases are presented graphically in this section and are monitored for statistically significant changes. Current efforts to improve performance are being made through the implementation of the Integrated Safety Management System (ISMS) and Voluntary Protection Program (VPP).

Safety Indicators

Total Recordable Case Rate – the number of OSHA recordable injuries and illnesses per 100 FTEs. PNNL’s 36 Month Rolling Recordable case rate is below the FY03 Target of 2.6.



Days Away Restricted or Transferred (DART) Case Rate – a subset of the total recordable case rate, the number of injuries and illnesses resulting in days away from work, and/or days of restricted/transferred (temporary) activity per 100 FTE’s. PNNL’s 36 Month rolling DART case rate is slightly above the FY03 target of 1.0 and the issue has been brought to the attention of senior management at the last Management Council Meeting. Individual directorates with cases contributing to the PNNL total are currently reviewing the issue and exploring opportunities for improvement.





RS01

South Hanford Industrial Area Clean Up

*WBS 3.2.1.7
EM Laboratory Legacy Waste
Removal and Operations*

Program Manager
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INTRODUCTION

The purpose of the EM Laboratory Legacy Waste Removal and Operations (LRO) Project, Work Breakdown Structure (WBS) 3.2.1.7, is to disposition Cold War legacy wastes and facilities remaining at PNNL and to operate and maintain the Radiochemical Processing Laboratory (RPL/325) in a "ready-to-serve" configuration as a Critical Hanford Facility to support accelerated cleanup.

The LRO Project scope includes the following:

- Conduct essential safety activities within RPL/325 (a Category II Nuclear Facility) to ensure that no inadvertent release of radioactive or hazardous materials occurs. Maintain the facility to maximize its availability for the critical mission role of site analytical support.
- Identify, characterize, and remedy all legacy waste and contamination resulting from projects conducted within DOE facilities and ground contamination sites currently assigned to PNNL.
- Complete legacy facility consolidation and pre-deactivation activities for DOE facilities assigned to PNNL in support of the 300 Area Accelerated Cleanup Project.

NOTE: Unless otherwise noted, all information contained herein is as of March 30, 2003.

SUMMARY ACCOMPLISHMENTS

The final FY 2003 funding allocation for all the Hanford projects including the EM Laboratory Legacy Removal & Operations (LRO) Project has not yet been determined. Although the Omnibus appropriation bill was approved by the President on February 20, allocations for each site have not yet been finalized by the Department of Energy (DOE) Headquarters (HQ). The LRO Project was funded to April 11 through an emergency allotment.

Radiochemical Processing Laboratory (RPL/325) staff maintained the facility in a "ready-to-serve" capacity supporting various Hanford programs in the second quarter of FY-03. Some of the major accomplishments on these projects include the following:

- Completed the definition of the alternative resins treatment program in support of alternatives to Cesium (Cs) ion exchange resins and received authorization to proceed with the work
- Completed melter feed and vitrification testing on AZ-101 Low Activity Waste tank sample, culminating in the melting of the glass sample for waste form qualification analysis.
- Conducted actual tank waste sample testing on abnormal processing conditions for the Strontium (Sr)/Transuranic (TRU) precipitation process. The process tests demonstrated the robustness of the process in support of Waste Treatment Plant (WTP) design and permitting.
- Several samples of AY-102 tank wastes were packaged and shipped for off site analysis in support of the WTP design.
- Submitted several draft and final reports to Bechtel National which report on filtration performance of Sr/TRU precipitate, performance of Superlig 639 and 644 for removal of Technetium (Tc) and Cs respectively, evaluation of temperature and caustic effects on Hanford tank waste solubility, thermal and radiolytic gas generation from TRU precipitated sludge, thermodynamic modeling of slurry leaching, chemical analysis and physical property testing of AP-104 waste, development and testing of the automated Tc-99 monitor, and mixing of WTP process solutions.

- The High Level Waste (HLW) feed solution decontamination was completed for use by selected vendors to conduct tests of their technology to support the Supplement Treatment Program for accelerated closure of single shell tanks. The feed solution will be used in a series of tests to qualify the vendor for conceptual design of their supplemental technology.
- Physical properties measurements needed for the TRU waste disposal supplemental technology was initiated this quarter in support of the Supplemental Technology Program.
- Established a contract with AMEC, a CH2M-Hill Hanford Group (CHG) vendor, and completed testing preparations for conducting the Bulk Vitrification Test using the AMEC melter technology
- The Pu polycube samples were packaged and shipped to Fluor for completion of a milestone to attain stabilization of that material at the Plutonium Finishing Plant.

PNNL staff members provided continued support for a variety of activities including legacy waste remediation, shutdown facility surveillance, Waste Identification Data System (WIDS) site management/disposition, 300 area accelerated cleanup and interface with the Department of Ecology regarding legacy waste removal progress.

Waste removal and demolition efforts on the RPL/325 glove box and fume hood project began in February. Work continued on the cleanout of items inside the 604 glove box. Planning continued on the removal of the LSL-II radon holdup system. Planning and scheduling was initiated on the bowling ball casks inspection and disposition.

Staff continues to monitor and provide support for waste items submitted to Radioactive Waste Operations (RWO). Eight shipments (seven drums and a burial box) containing 46 legacy waste items were shipped to CWC this quarter.

Two shutdown facilities were inspected this quarter with no issues. Two additional facilities, 3718-S and 332, were shutdown this quarter and placed into a "cheap-to-keep" condition awaiting transfer to the RCC cleanup contractor for final disposition. These will be added to the semi-annual surveillance and maintenance schedule. A radiation survey was completed on the 6652-E facility as a precursor to transfer of the facility.

300 Area Transition staff are in the process of defining PNNL's requirements for access to the Arid Land Ecology (ALE) Reserve. Project staff met with DOE Office of Site Services (OSS) and DOE Office of Assistant Manager for Technical Support (AMT) staff to coordinate efforts to provide PNNL's input into the next update of the existing Memorandum of Understanding (MOU), the land transfer permit, and the Comprehensive Conservation Plan.

Activities for relocating research and development activities from the 3720 Building to the Radiochemical Processing Laboratory (RPL/325) were initiated during the second quarter. During the last week of March the relocation project activities were placed on hold pending completion of an evaluation of future options for RPL/325 which is expected to be completed by early May.

UPCOMING ACTIVITIES

A major revision to the LRO Project baseline will be initiated to implement the RL management decision on 300 Area accelerated cleanup, specifically focused on the continued operations and final closure of the RPL/325 facility.

FY 2003 final work authorization for the project is expected to occur during the third quarter. The project's baseline will then be aligned with the expected funding level. The priority work scope that had

to be deleted or deferred will then be submitted for funding consideration by the RL Site Integration Board competing with the other unfunded work that has emerged as priorities across the Site for FY03.

The RPL/325 will continue current fiscal year operational activities to maintain its ready-to-serve capacity in support of the Hanford EM accelerated cleanup mission.

Activities to disposition the accumulated legacy wastes at the Lab will continue with a focus on removal of legacies at the RPL/325.

Planning is underway to relocate the electrical service from the 615-BYRL facility. Once the electrical is relocated disposition of the facility can occur.

MILESTONE ACHIEVEMENT

Type		Current Quarter Milestones			Fiscal Year-To-Date Milestones			Remaining	FY Total
		Scheduled	Completed	Delinquent	Scheduled	Completed	Delinquent		
DOE	HQ	0	0	0	0	0	0	0	
	FO	0	0	0	0	0	0	0	
	RL	0	0	0	0	0	0	3	
PNNL	Key	0	0	0	0	2	0	13	
Total		0	0	0	0	2	0	16	

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that no milestones are delinquent. The DOE Milestones associated with this project are listed below

- RLRS01L303 "RPL Phase II Room 604 Glovebox Cleanout Complete" (D) due 09/30/03. On track.
- RLRS01L305 "Content Verification and Disposal of 3 Bowling Ball Casks Complete" (D) due 09/30/03. On track.
- RLRS01L307 "LSL II Radon Holdup System Disposition Complete" (D) due 09/30/03. On track

FY 2003 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FY TO DATE STATUS – (\$000)

B&R	WBS	Subactivity	Title	Type	SubAcct	Authorized Funds	Rec'd To Date	BCWS FYTD	BCWP FYTD	ACWP FYTD	CV FYTD	CV %	SV FYTD	SV %
EW02J1350	3.2.1.7	EM Lab Legacy Removal & Operations				28,915.6	8,091.0	13,896.4	7,279.1	6,478.3	800.8	11	-6617.4	-48
		3.2.1.7.1	RPL Operations		22547	17,510.1	6,046.0							
		3.2.1.7.2	Legacy Waste		18698/28029	4,555.2	1,283.0							
		3.2.1.7.3	LRO Program Mgmt		19958	835.0	462.0							
		3.2.1.7.4	PNNL Facility Consol		44778	6,015.3	300.0							
* PNNL has \$1944K carryover, is expecting \$15044K new B/A in FY 2003, for a total of \$16988K. Current new B/A obligated is \$6146K.														

FY TO DATE SCHEDULE / COST PERFORMANCE

Schedule Variance Analysis:

Description and Cause: The cumulative schedule variance through the quarter is a negative \$-6617K (-48%). The unfavorable schedule variance results from activities being placed on hold which are a part of the current project baseline of \$29,108,149, which is much larger than the anticipated target funding of \$17,064,286. A formal Baseline Change Request (BCR) is in process that will align the project with the FY03 work authorization. The final FY 2003 allocation for all the Hanford projects including the LRO Program has not yet been determined. The LRO Program Office is awaiting receipt of a formal DOE work authorization and budget target prior to the submittal of the change request. It is expected that the schedule variance will continue until the BCR deferring the unfunded scope is approved. Tasks that have not started in FY03 because of Continuing Resolution (CR) restrictions are: RPL/325 Infrastructure, the RPL/325 B-Cell Tank Cleanup, 306W Pits/Trenches Characterization and Remediation of Residual Material, Richland North Campus Radiological License Release, and License Termination Planning and Preparation. Once the change request rebaselining the project is implemented, the schedule variance will become more relevant.

Impact: Completion of Legacy waste cleanup will be extended. RPL/325 Infrastructure improvements will not be completed as planned.

Corrective Action: Legacy waste cleanup and 300 area transition activities falling below the funding target will be deferred to the out-years. RPL/325 infrastructure modifications will be deferred and alternate DOE PBS funding sources will be pursued.

Cost Variance Analysis:

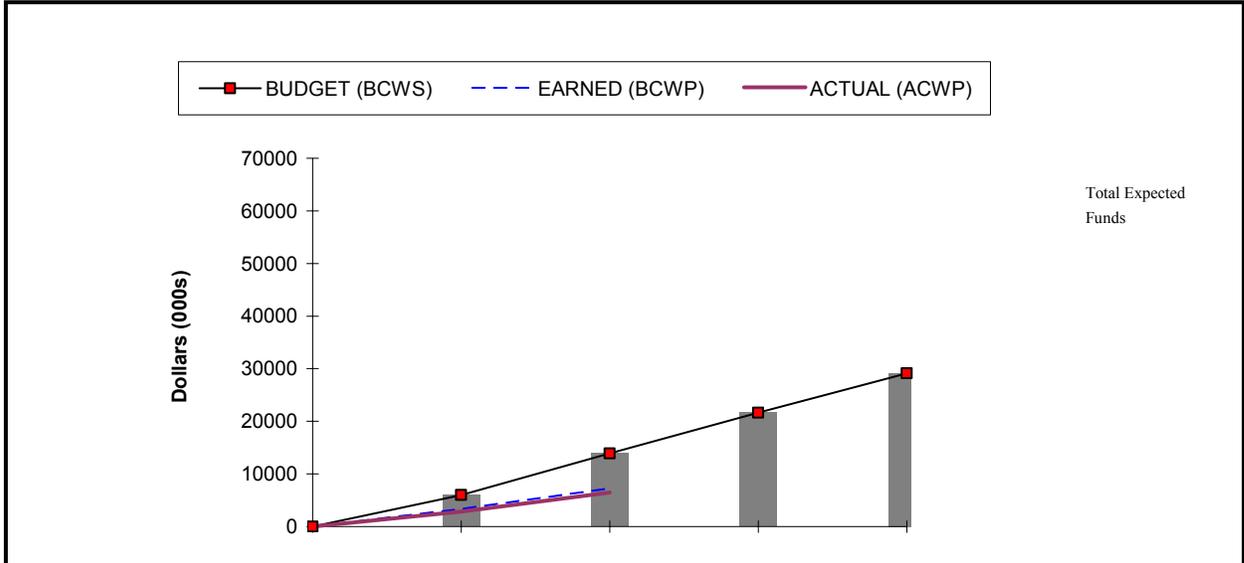
Description and Cause: The cumulative cost variance through the quarter is a positive \$814K (11%). The favorable cost variance is due to realized project efficiencies and less than planned labor costs associated with completion of scheduled activities for the LRO Project office \$24K and RPL/325 operations \$895K. This is offset by a negative monthly CV \$110K associated with the effort to perform surveys of the 6652-E and 3720 facilities and the performance of utility work at 615 BYRL. The project anticipates completing the fiscal year within budget. The LRO project office is currently evaluating unfunded priority items and will prepare a BCR to redirect available funds.

Impact: No significant impact is associated with this favorable cost variance.

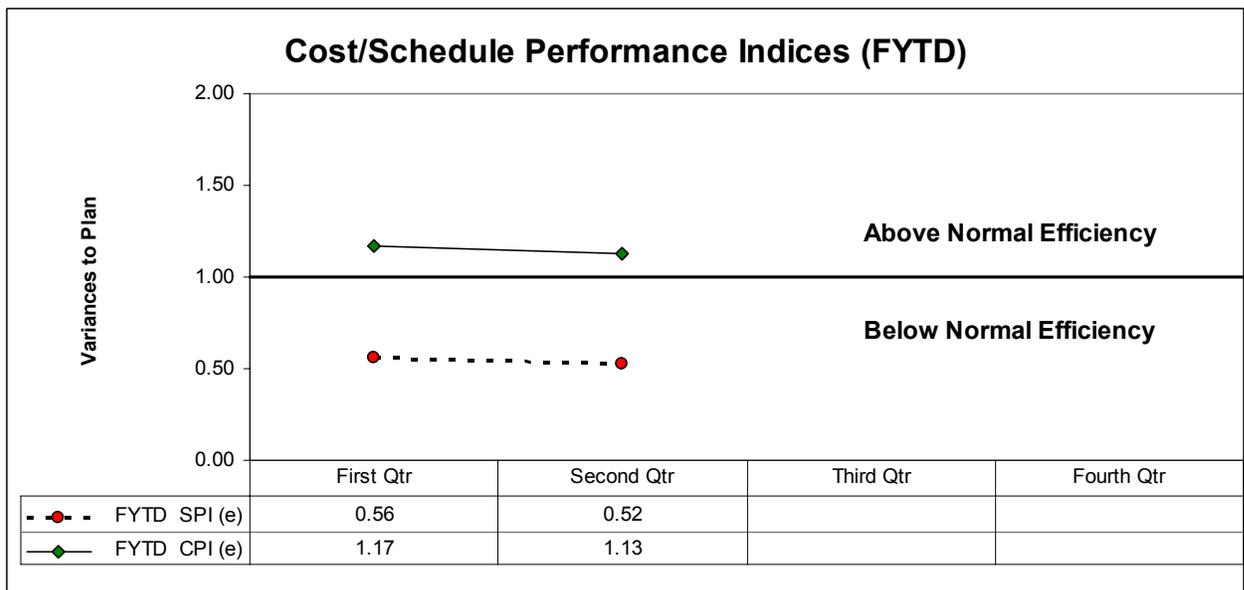
Corrective Action: Identified cost under-runs will be redirected within the LRO project.

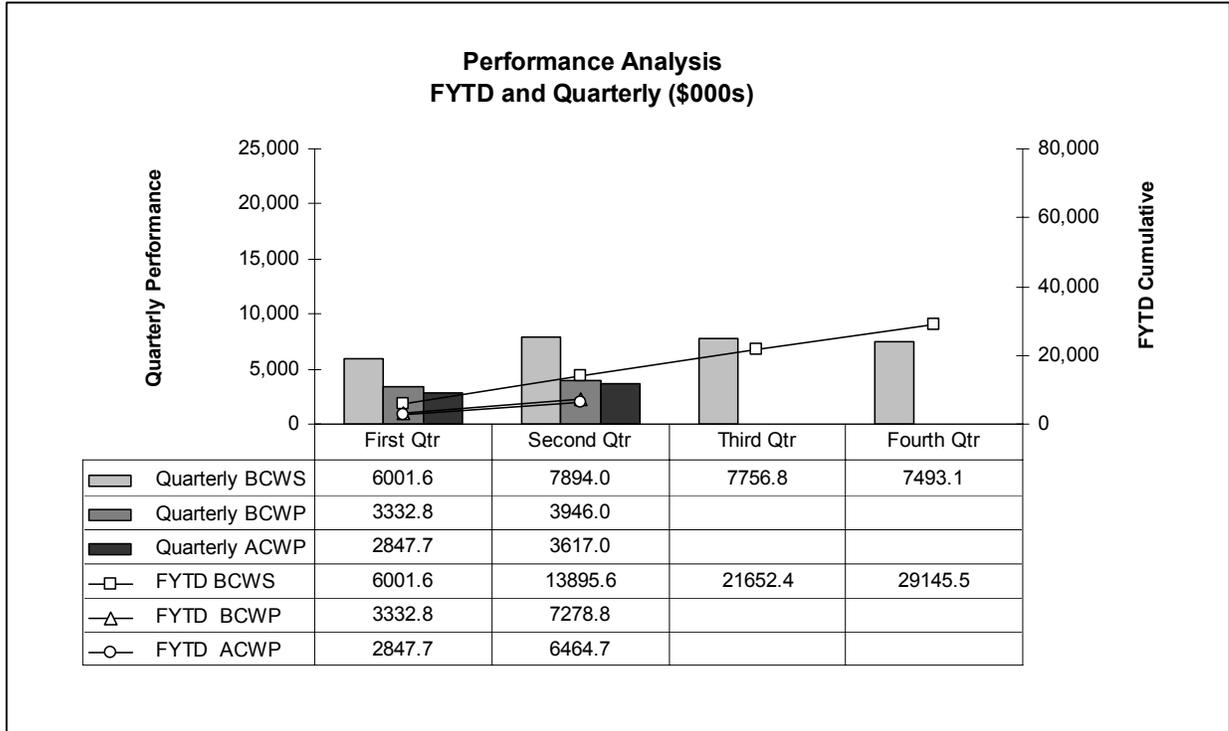
Cost / Schedule Performance

FY 2003 Cum to Date Status
 (DOLLARS IN THOUSANDS)



	First Qtr	Second Qtr	Third Qtr	Fourth Qtr	CUM Total
FINPLAN (New BA)	4370.0	3720.0	0.0	0.0	8090.0
BCWS	6001.6	7894.0	7756.8	7493.1	29145.5
BCWP	3332.8	3946.0			
ACWP	2847.7	3617.0			
COST VARIANCE	485.1	329.0			
SCHD VARIANCE	-2668.8	-3948.0			
CUM FINPLAN	4370.0	8090.0			
CUM BCWS	6001.6	13895.6	21652.4	29145.5	
CUM BCWP	3332.8	7278.8			
CUM ACWP	2847.7	6464.7			
CUM COST VARIANCE \$	485.1	814.1			
CUM COST VARIANCE %	15%	11%			
CUM SCHD VARIANCE \$	-2668.8	-6616.8			
CUM SCHD VARIANCE %	-44%	-48%			





ISSUES

Technical Issues

Issue: None

Impact:

Corrective Action:

External Issues/ DOE Requests/Regulatory/DOE Issues

Issue: Because of the terrorist attacks on September 11, 2001, the ability to obtain transport vehicles for shipments of the large plutonium-238 source has become extremely strained within the DOE complex. No vehicles were available to complete shipments in FY02.

Impact: The shipment of the LP-1 (a large Pu source) will not be made in the foreseeable future. If the shipments are delayed beyond February 2003, the cask packaging will no longer be compliant with its Certificate of Conformance and may require a new packaging effort or a waiver request.

Corrective Action: PNNL continues to work with the DOE authorities to see if any alternatives exist but none have been found.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR Number	Class	BCR Description	Status
PWM-2003-001	II	Scope, Schedule & Budget Baseline Changes to Reflect FY03 Reprice	Approved
PWM-2003-002	I	Scope, Schedule & Budget Baseline Changes to Reflect FY03 Target Funding	Pending
PWM-2003-003	I	Incremental Infrastructure Funding for the RPL HVAC Upgrade	Submitted to DOE



SC01

Near Term Stewardship: Public Safety & Resource Protection

*WBS 3.5.1.2
Natural/Cultural/Ecological
Resource Management*

*WBS 3.5.1.3
Site Environmental and Public
Protection Assurance*

Project Manager
R. L. Dirkes, PNNL
(509) 376-8177

INTRODUCTION

The PNNL Public Safety and Resource Protection Program (PSRPP) independently monitors the Hanford environment and conducts impact assessments to protect public and worker safety as well as Hanford's significant ecological and cultural resources. The PSRPP, which is managed as a single integrated program, is made up of 5 individual projects:

- Hanford Environmental Oversight
- Meteorological and Climatological Services
- Surface Environmental Surveillance
- Ecological Monitoring and Compliance
- Cultural Resources

The Public Safety & Resource Protection Program includes two level 4 Work Breakdown Structure (WBS) elements. Natural/Cultural/Ecological Resource Management, WBS 3.5.1.2 consists of:

- Preparation, implementation, and maintenance of cultural, archaeological, natural, land, and ecological resource protection/management plans for the Hanford Site to facilitate cost effective regulatory compliance and assure fulfillment of DOE environmental and cultural resource protection responsibilities

Site Environmental & Public Protection Assurance, WBS 3.5.1.3 consists of:

- Environmental surveillance and cumulative assessment of on-site and off-site environmental impacts and off-site human health exposures from Hanford operations.
- Preparation of the annual Site Environmental Report that documents Site environmental compliance status, environmental conditions on and around the Hanford Site, and the potential offsite public radiological exposure resulting from Hanford operations.
- Coordination of the preparation and revisions of, and maintenance of integrated "Hanford Site Environmental Monitoring Plan."
- Conducting of on-site surveillance to evaluate effectiveness of Hanford Site effluent controls and waste clean-up activities.
- Identification and development of data, models, and programs needed for timely and responsive action in support of present and future River Corridor and Central Plateau accelerated clean-up activities and Site environmental and ecological assessment activities.
- Monitor the abundance, vigor, and distribution of plant and animal populations on the Hanford Site and evaluate the cumulative impacts of Site operations on these resources.
- Perform baseline ecological and cultural resource surveys to document the occurrence of protected resources and evaluate and document impacts to protected species and habitats as required by NEPA and the Endangered Species Act.
- Monitor meteorological and climatological conditions on site to support other site programs and emergency response needs, and associated data collection (manual, remote, local) and reporting.

NOTE: Unless otherwise noted, all information contained herein is as of March 30, 2003.

SUMMARY ACCOMPLISHMENTS

The "Hanford Site Environmental Surveillance Master Sampling Schedule for Calendar Year 2003" was completed and distributed. This culminates the annual review of the Surface Environmental Surveillance Project sampling design, which included reviews of past sample results and current site activity projections as well as an exposure pathway analysis and interactions with other Hanford contractors and outside agencies such as the Washington Department of Health.

Integration activities aimed at maximizing operational efficiencies and minimizing duplication of efforts continued during the quarter. Staff continued to support DOE and contractor environmental surveillance activities, capitalizing on existing capabilities inherent to the Public Safety and Resource Protection Program, including:

- 100 B/C Pilot Study activities:
 - formulate project objectives and issue Data Quality Objective (DQO) report,
 - develop draft Sample Analysis Plan (SAP),
 - support external peer review of DQO and SAP,
 - initiate upland sampling in May 2003
- 100-NR-2 Project activities:
 - literature search focused on riparian zone environment and aquatic and riparian ecological receptor impacts at the 100-N Area,
 - assessment of existing data
 - identification of ongoing/planned ecological work,
 - support integration of ongoing efforts and future planning activities
- shoreline aquifer sampling in support of the Groundwater Monitoring Program,
- collaborate with Washington Department of Health to revise and reprint PNNL-13692, "Survey of Radiological and Chemical Contaminants in the Near-Shore Environment at the Hanford Site 300 Area",
- coordinate with Bechtel National and Hanford Near-Field Environmental Monitoring on future air monitoring program for Waste Treatment Plant (vitrification plant)
- technical issue resolution associated with activist issues regarding dose rates in the Columbia River, activist issues on 300 Area clean-up raised by Columbia River Keeper, and Tribal issues raised by the Yakama Nation to the Natural Resource Trustees Council and the Hanford Advisory Board regarding potential risks to Native Americans resulting from consumption of Hanford Reach fish,
- prepare data packages of Columbia River monitoring data in support of Environmental Protection Agency Region 10 follow-up of Columbia River Basin Contaminant Survey,
- radiological release of Hanford National Monument lands to US Fish and Wildlife Service.

Public Safety and Resource Protection Program staff members Ernest Antonio and Ted Poston conducted a short workshop and overview on the application of the DOE Technical Standard, "A Graded Approach for Evaluating Radiation Doses to Aquatic and Terrestrial Biota (DOE-STD-1153-2002)." Ernest and Ted are also members of the Department of Energy Headquarters' (DOE-HQ) Biota Dose Assessment Committee (BDAC) at the Hanford Site. Recent correspondence from DOE-HQ emphasized the use of this standard at DOE sites across the complex in evaluating potential impacts to biota. Attendees included members of the Natural Resource Trustees Council, DOE-RL, and other Site contractors.

The Site Environmental Report summary pamphlet for 2000 won an award of merit at this years meeting of the Puget Sound Chapter of the Society for Technical Communication. The 2001 report and pamphlet are also currently under consideration for a similar award.

UPCOMING ACTIVITIES

The "Climatological Data Summary Report for CY 2002" is scheduled for completion during the third quarter of FY03.

Initiate 100 B/C Pilot Study upland sampling in May 2003.

Initiate environmental sampling in support of 100-NR-2

Preparation of the following Hanford Site documents is scheduled to continue during the upcoming quarter:

- Hanford Site Environmental Report for CY 2002
- National Environmental Policy Act Characterization Document, Revision 15.

MILESTONE ACHIEVEMENT

Type		Current Quarter Milestones			Fiscal Year-To-Date Milestones			Remaining	FY Total
		Scheduled	Completed	Delinquent	Scheduled	Completed	Delinquent		
DOE	HQ	0	0	0	0	0	0	0	
	FO	0	0	0	0	0	0	0	
	RL	0	0	0	0	0	0	1	
PNNL	Key	6	6	0	7	7	0	5	
Total		6	6	0	7	7	0	6	

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

FY 2003 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FY TO DATE STATUS – (\$000)

B&R	WBS	Subactivity	Title	Type	SubAcct	Total Authorized Funds	Funding Rec'd to Date	BCWS FYTD	BCWP FYTD	ACWP FYTD	CV FYTD	CV %	SV FYTD	SV %
EW02J1370	3.5.1.2	RLSC01	PSRPP	OP		6,134	3,406	3,026	2,963	2,565	399	14	-63	-2

Schedule Variance Analysis:

Description and Cause: There is no significant cumulative schedule variance.

Impact:

Corrective Action:

Cost Variance Analysis:

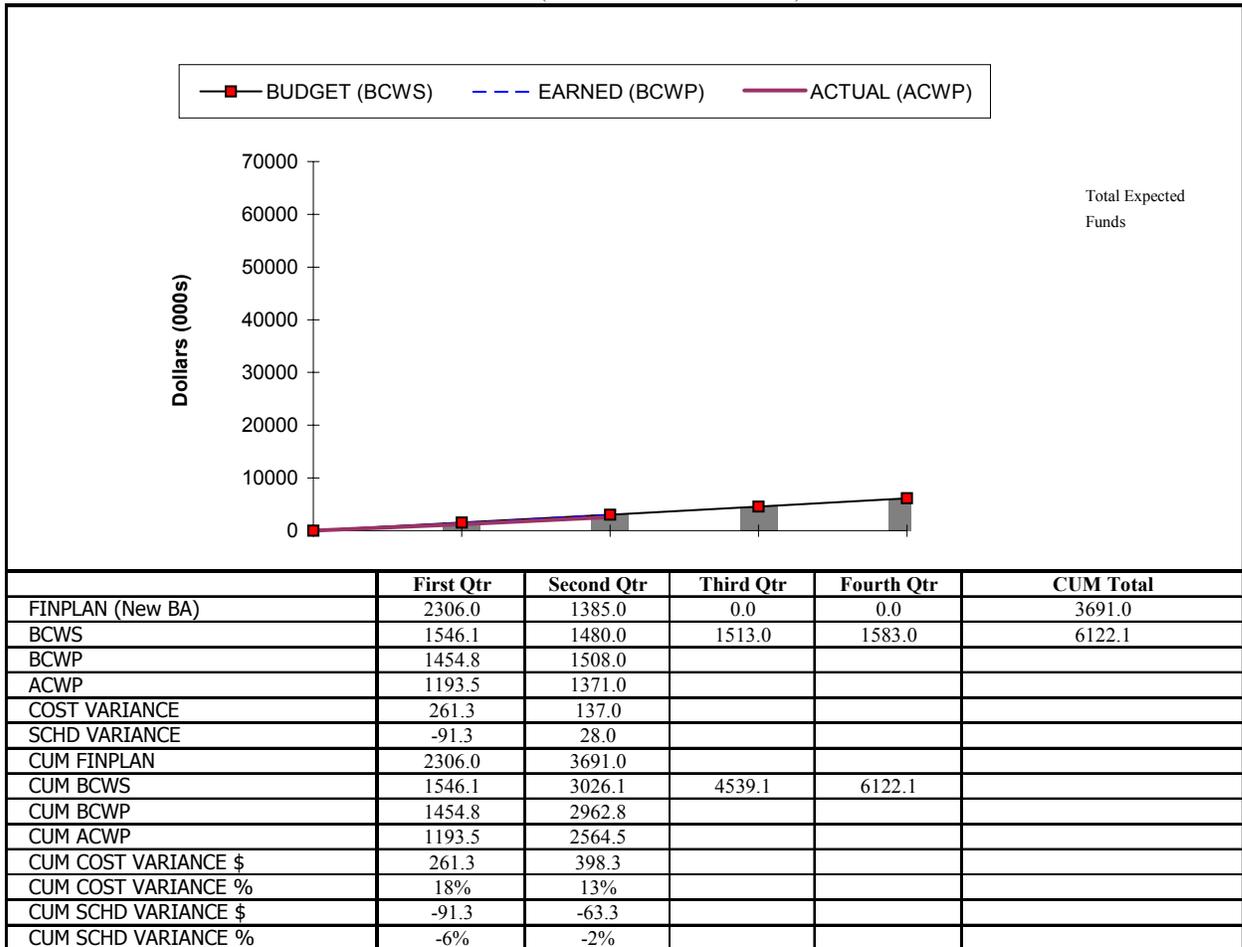
Description and Cause: The favorable cumulative cost variance (\$399K – 14%) is due in part to outstanding analytical costs that are not accounted for in the current processing. Temporary reassignment of staff to support the 100 B/C Area Pilot Study, Solid Waste Environmental Impact Statement, expanded riverbank seep monitoring, and the development of an enhanced integrated ecological/biological monitoring capability has also contributed to the cost variance. In addition, the initiation of some scheduled activities were delayed due to environmental conditions during the past fall, further contributing to the cost variance.

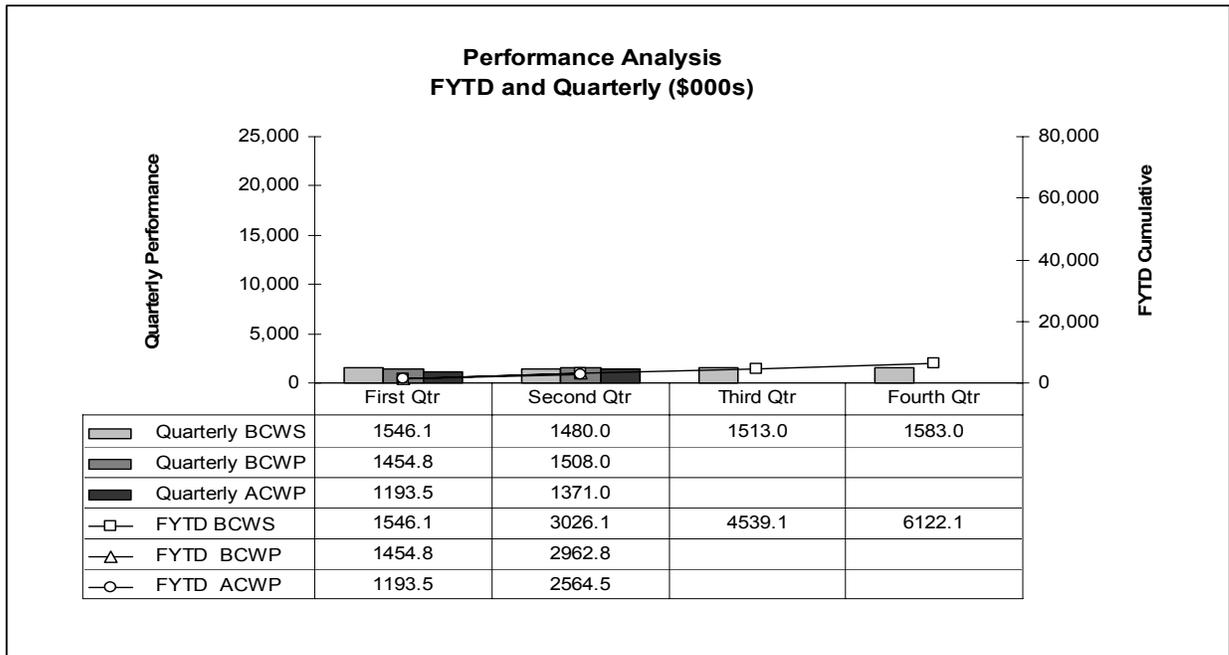
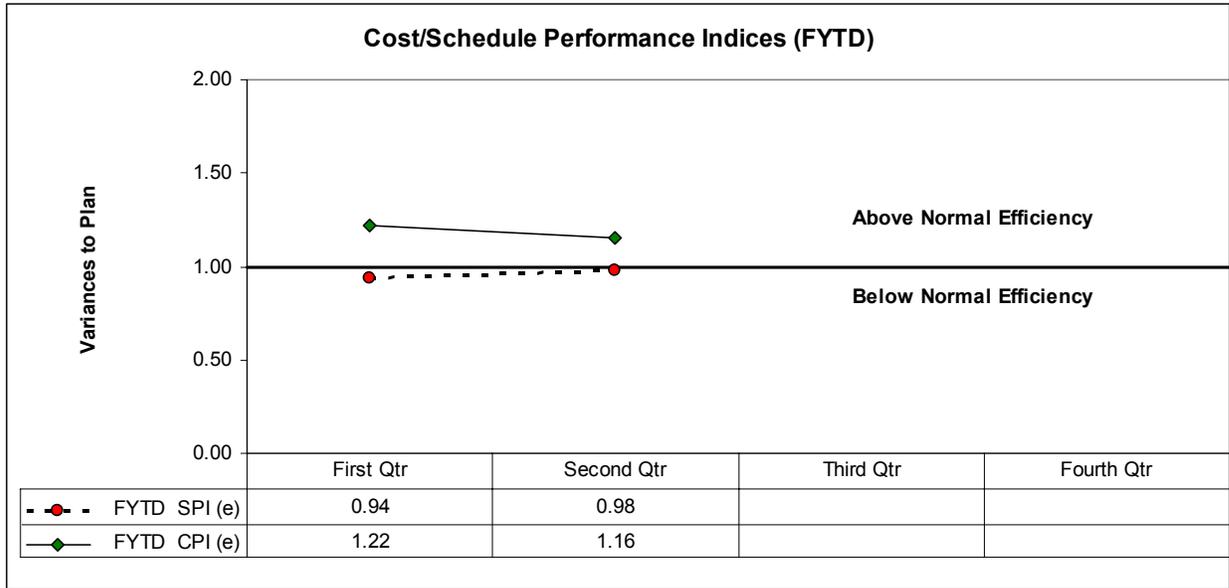
Impact: No adverse impact is anticipated as a result of this variance.

Corrective Action: The cost variance is expected to decrease as program costs are accounted for in future financial processing. In addition, fieldwork that was delayed last quarter has been initiated and staff temporarily reassigned to other activities are expected to return to the scheduled activities.

Cost / Schedule Performance

FY 2003 Cum to Date Status
 (DOLLARS IN THOUSANDS)





ISSUES

No issues to report during the second quarter of FY 2003.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

A Baseline Change Request is under preparation for the PSRPP to request FY 2002 Carryover dollars consistent with DOE-RL Work Authorization, B&R No. EW02J1370. The BCR is anticipated to be submitted to DOE-RL next quarter.



SS01

Site Integration

*WBS 3.4.1.3
Hanford Solid Waste - EIS
Preparation Support*

*Hanford Site Planning
and Integration*

Project Managers

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B. A. Reichmuth, PNNL
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INTRODUCTION

RL Directed Support Project, Work Breakdown Structure (WBS) 3.4.1.3 consists of decision support, technical analysis, strategic planning, risk management support, and policy analysis to RL's Assistant Manager for Integration (AMI). This work break down structure also includes PNNL's support the Hanford Solid Waste EIS.

NOTE: Unless otherwise noted, all information contained herein is as of March 30, 2003.

SUMMARY ACCOMPLISHMENTS

Hanford Solid Waste EIS Support:

- An updated Summary and Volume 1 was produced for the approval meeting the morning of 3/29/03. Keith Klein approved the revised HSW EIS for public review at that time.
- The revised draft HSW EIS was approved by RL on March 29, 2003. A baseline change request was submitted on March 6, 2003 and was approved on March 18, 2003. The change request supports an overall funding increase and a revised schedule.
- Production work (including final editing, QC reviews, validation review comment incorporation, duplication, and preparation of the CDs) was undertaken on a 2 shift per day basis starting on Wednesday 3/26/03 and continuing through Saturday and Sunday. As of Sunday night, the document was in full scale duplication with only a few minor portions outstanding and the preparation of the electronic versions was commencing.
- The post cards to over 1400 interested citizens were mailed out. These were for individuals who had not requested a copy of the document, but who had attended a public meeting or submitted comments on the previous draft.
- The mailing lists were finalized, express boxes ordered, and preparations for the distribution were made.
- Work also continued on the additional groundwater analyses (requested by EPA in their 3/12/03 letter) to assess concentrations at 100m down gradient of the new multi-use disposal facilities and to perform some sensitivity analyses regarding the performance of barriers, caps and other mitigation measures. This work will be wrapped up in the next week. A decision on how this information will be incorporated into the final EIS needs to be made.

Hanford AMI Support:

- The RL-AMI Technical Support Project received a shutdown order in January. RL directed that Version 1.1 of the Life Cycle Model (LCM) be completed on schedule and that project transition and closeout activities be initiated.
- Completed RL-LCM Version 1.1. at the end of March per the schedule. RL authorized additional work on the LCM (structural/capability enhancements) and initiated a new project for this work.
- Transition activities and project closeout initiated.

UPCOMING ACTIVITIES

- Following the public review period, a supplemental final EIS will be prepared, reviewed, approved and issued by June 20th, allowing issuance of Record's of Decision by July 31, 2003.
- Complete RL AMI project closeout

MILESTONE ACHIEVEMENT

Type		Current Quarter Milestones			Fiscal Year-To-Date Milestones			Remaining	FY Total
		Scheduled	Completed	Delinquent	Scheduled	Completed	Delinquent		
DOE	HQ	0	0	0	0	0	0	0	
	FO	0	0	0	0	0	0	0	
	RL	0	0	0	0	0	0	0	
PNNL	Key	0	0	0	0	0	0	0	
Total		0	0	0	0	0	0	0	

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

FY 2003 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FY TO DATE STATUS – (\$000)

B&R	WBS	Subactivity	Title	Type	SubAcct	Total Authorized Funds	Funding Rec'd To Date	BCWS FYTD	BCWP FYTD	ACWP FYTD	CV FYTD	CV %	SV FYTD	SV %
EW02J1390	3.4.1.3	RLSS01	SS01 - Site Integration	OP		5,412	4,699	4,060	4,060	4,153	-93	-2	0	0
EW02J1390	3.4.1.3	RLSS01	Hanford Solid Waste - EIS Prep Support	OP	26772	3,217	2,504	2,285	2,285	2,378	-93	-4	0	0
EW02J1390	3.4.1.3	RLSS01	Hanford Site Planning & Integration Support to DOE-RL	OP	30289	1,547	1,547	1,502	1,502	1,502	0	0	0	0
EW02J1390	3.4.1.3	RLSS01	SS01 Misc	OP	Various	648	648	273	273	273	0	0	0	0

Schedule Variance Analysis:

Description and Cause: As of the end of March the RL AMI project has no schedule variance for the second quarter. This activity is level of effort support. The Hanford Solid Waste EIS support project has a cumulative schedule variance of 0% and is on schedule to begin the public comment period April 11, 2003.

Impact: None

Corrective Action: None

Cost Variance Analysis:

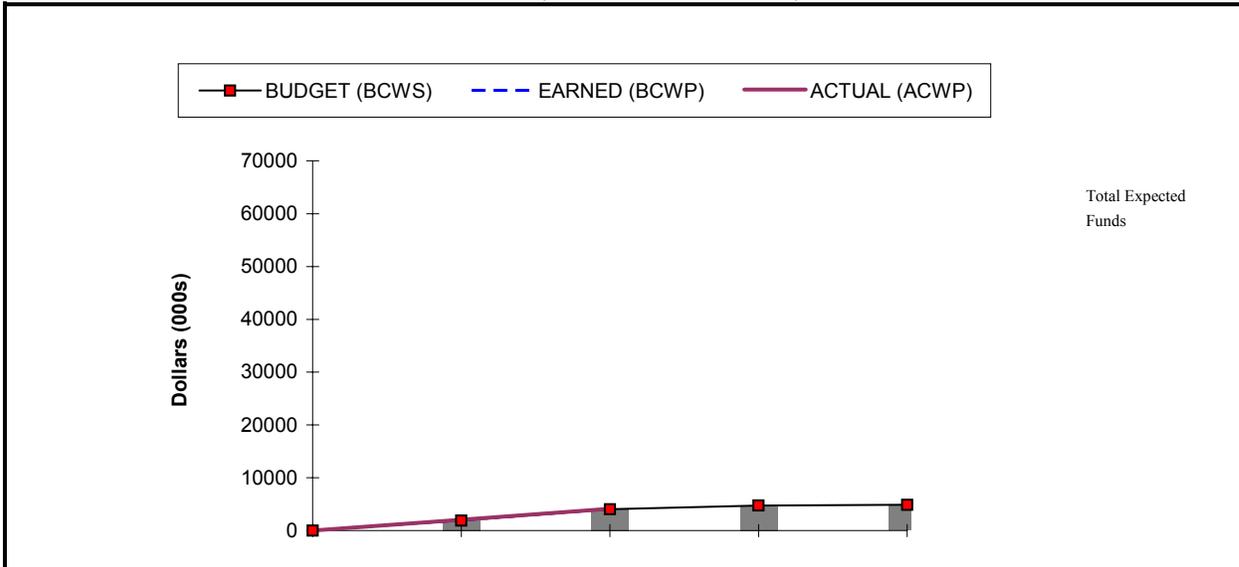
Description and Cause: The RL AMI project is being brought to closure. The Hanford Solid Waste EIS support project has a cumulative cost variance of 4% and anticipates completing on budget.

Impact: None

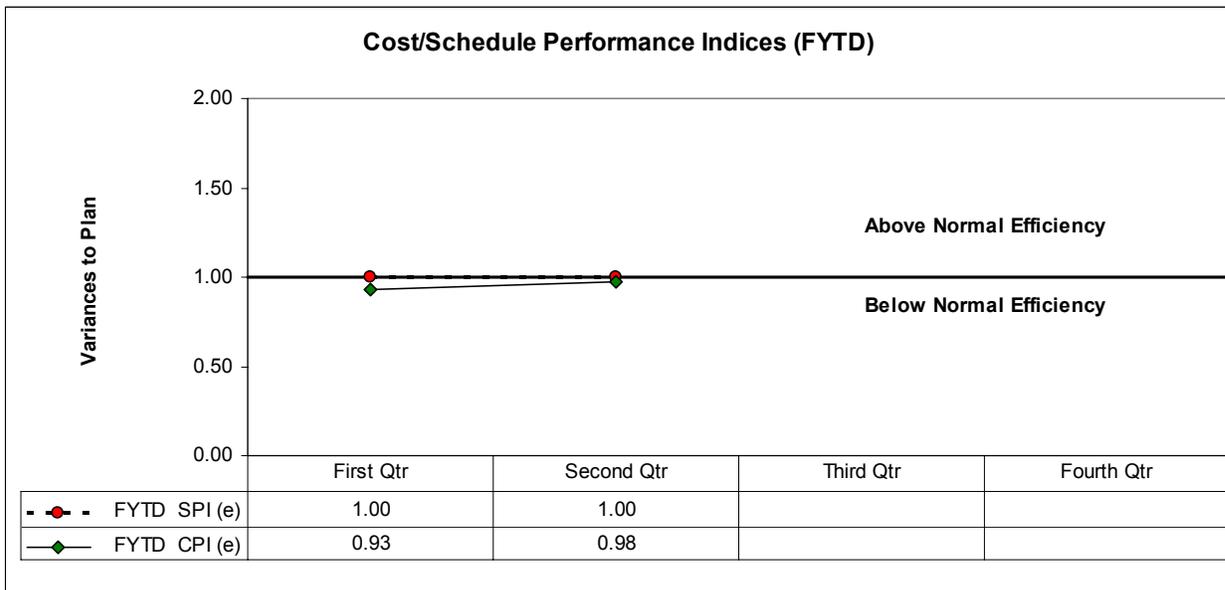
Corrective Action: None

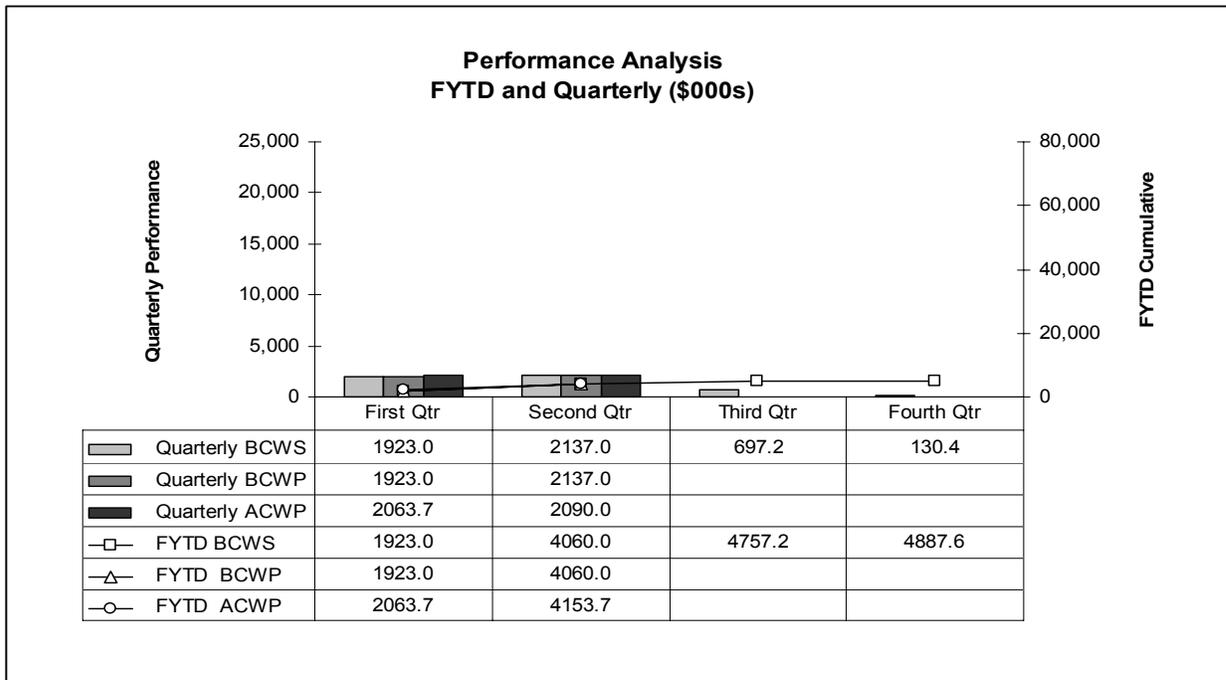
Cost / Schedule Performance

FY 2003 Cum to Date Status
 (DOLLARS IN THOUSANDS)



	First Qtr	Second Qtr	Third Qtr	Fourth Qtr	CUM Total
FINPLAN (New BA)	1960.5	1718.0	0.0	0.0	3678.5
BCWS	1923.0	2137.0	697.2	130.4	
BCWP	1923.0	2137.0			
ACWP	2063.7	2090.0			
COST VARIANCE	-140.7	47.0			
SCHD VARIANCE	0.0	0.0			
CUM FINPLAN	1960.5	3678.5			
CUM BCWS	1923.0	4060.0	4757.2	4887.6	
CUM BCWP	1923.0	4060.0			
CUM ACWP	2063.7	4153.7			
CUM COST VARIANCE \$	-140.7	-93.7			
CUM COST VARIANCE %	-7%	-2%			
CUM SCHD VARIANCE \$	0.0	0.0			
CUM SCHD VARIANCE %	0%	0%			





ISSUES

Technical Issues

Issue: The RL-AMI Technical Support Project received a shutdown order in January

Impact:

Corrective Action: Transition activities and project closeout have been initiated

External Issues/ DOE Requests/Regulatory/DOE Issues

Issue: The Hanford Solid Waste EIS Support project needs to schedule public meetings as soon as possible. In addition, it is essential that the transcripts of these meetings be made available within a few days of each meeting.

Impact: The public meetings need to be scheduled as soon as possible. The preferred dates to minimize impacts on this schedule are the week of April 28th and the week of May 5th. Delays beyond these dates may impact the completion schedule.

Corrective Action: New dates are based on the Recovery Schedule.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR Number	Class	BCR Description	Status
PEM-2003-01	I	Hanford Solid Waste EIS schedule and funding change	Approved



SS03

Groundwater Management and Monitoring

*WBS 3.4.3.1
Long Term Monitoring*

Project Manager
J. S. Fruchter, PNNL
(509) 376-3937

INTRODUCTION

Long Term Monitoring, Work Breakdown Structure (WBS) 3.4.3.1, consists of tasks for groundwater monitoring, seismic monitoring, groundwater modeling, vadose-zone monitoring and RCRA well installation.

The objective is to conduct groundwater monitoring, modeling and geohydrologic services for monitoring groundwater quality and movement on the Hanford Site.

NOTE: Unless otherwise noted, all information contained herein is as of March 30, 2003.

SUMMARY ACCOMPLISHMENTS

Completed the "Hanford Site Groundwater Monitoring for Fiscal Year 2002" report; DOE transmitted the report to the regulators. The report for fiscal year 2001 received a "Distinguished" award in the category of technical reporting from the Puget Sound Chapter of the Society for Technical Communications (STC). It then won an award of Excellence at the Society's international competition.

Transmitted the final, approved 200-BP-5 Groundwater Operable Unit Sampling and Analysis Plan.

Completed the July-September 2002 Resource Conservation and Recovery Act (RCRA) Groundwater Monitoring Quarterly Report; DOE transmitted the report to the regulators.

Completed the PNNL Report, "Results of Detailed Hydrologic Characterization Tests - Fiscal Year 2002."

Received Ecology Notice of Deficiency comments on the Low Level Burial Grounds (LLBG) groundwater monitoring plan for the Hanford Site RCRA Permit.

Transmitted the 200-PO-1 Groundwater Operable Unit Sampling and Analysis Plan to DOE; DOE submitted the plan to regulators for review.

Completed aquifer sampling tube sample collection along the 100 Areas shoreline.

Measured petroleum product layer in well 199-N-18; the information was sent to DOE and FH.

Reported very high technetium-99 value in SX Tank Farm well (188,000 pCi/L). We installed four specific conductance probes in the well and recorded specific conductance continuously before, during, and after sampling. The vertical distribution of contaminants in the well appears to vary under different hydraulic conditions. The results will be used to determine the optimal time for sample collection.

Completed installation of two new monitoring wells at the 618-10 Burial Ground.

Transmitted a Description of Work to Fluor Hanford for 2003 RCRA well installation. Current plans are to install 6 RCRA wells at single shell tank farms in 200 East Area.

Some remote seismic monitoring sites failed due to insufficient solar power. Manual examination of records indicates no seismic activity was missed. Return of sunny weather alleviated this problem.

UPCOMING ACTIVITIES

- Complete 100-K Burial Grounds soil-gas probe installation and soil gas sampling.
- Complete October – December 2002 Resources Conservation and Recovery Act Quarterly Report and transmit to DOE.
- Complete revised Groundwater Quality Assessment Plan for the 216-U-12 Crib.
- Participate in Notice of Deficiency (NOD) comment workshops with DOE, FH, and Ecology, regarding the LLBG final status groundwater monitoring plan.
- Complete Data Quality Objectives (DQO) summary document for groundwater monitoring in the 100-BC-5 and 100-FR-3 Operable Units. Prepare sampling and analysis plans and obtain regulator approval.

MILESTONE ACHIEVEMENT

Type		Current Quarter Milestones			Fiscal Year-To-Date Milestones			Remaining	FY Total
		Scheduled	Completed	Delinquent	Scheduled	Completed	Delinquent		
DOE	HQ	0	0	0	0	0	0	0	
	F0	0	0	0	0	0	0	0	
	RL	2	2	0	3	3	0	5	
PNNL	Key	1	1	0	4	4	0	5	
Total		3	3	0	7	7	0	10	

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

- DOE-RL milestone: Submit Hanford Site Groundwater Monitoring for FY2002 Annual Report to DOE. Completed 2/27/03.
- DOE-RL milestone: Submit quarterly letter report for Resources Conservation and Recovery Act monitoring to DOE by e-mail. Completed on 2/13/03.
- PNNL Key milestone: Transmit 200-PO-1 Sampling and Analysis Plan to DOE for transmittal to Regulators. Completed on 1/31/03.

FY 2003 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FY TO DATE STATUS – (\$000)

B&R	WBS	Subactivity	Title	Type	SubAcct	Total Authorized Funds	Funding Rec'd To Date	BCWS FYTD	BCWP FYTD	ACWP FYTD	CV FYTD	CV %	SV FYTD	SV %
EW02J1400	3.4.3.1	RL-SS03	GW Monitoring	OE	28023	10,585	6,043	5,492	5,460	5,124	336	6.2%	-32	-0.6%

Note: Total Authorized Funds include \$548,685 for FY02 carryover.

Schedule Variance Analysis:

Description and Cause: There is no significant cumulative schedule variance to report.

Impact:

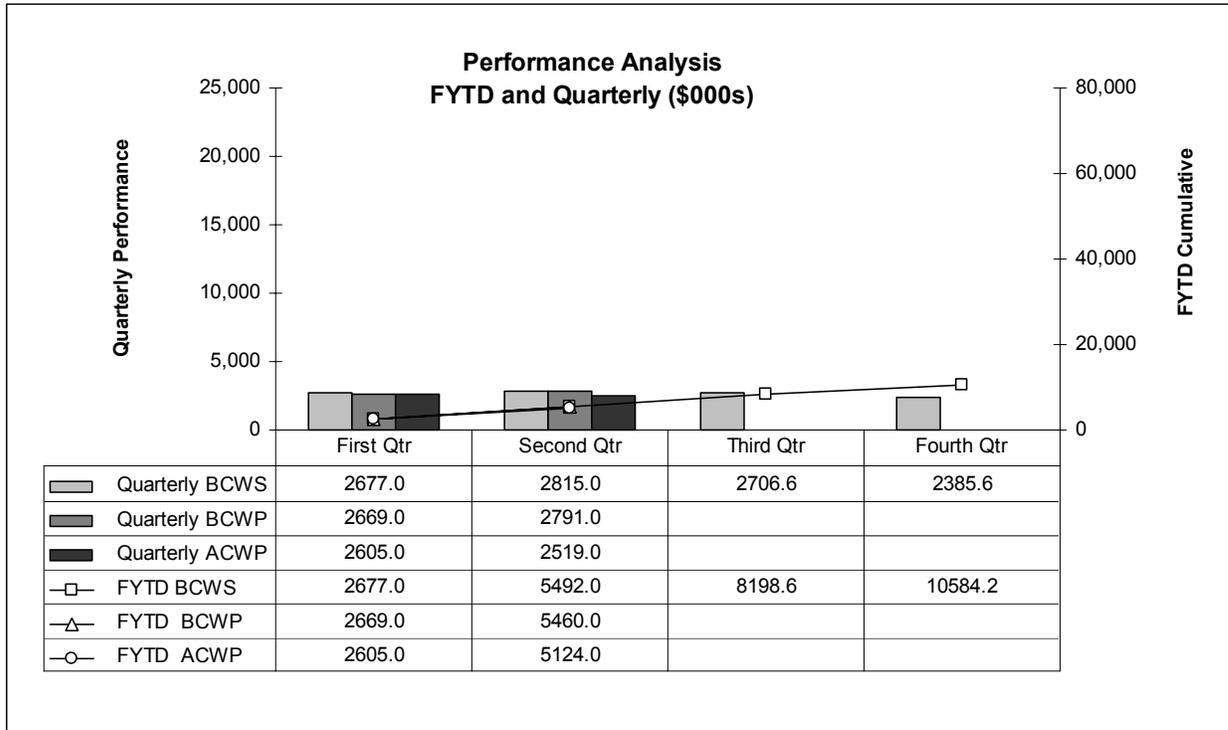
Corrective Action:

Cost Variance Analysis:

Description and Cause: Variance is due to outstanding subcontracts costs that have not been invoiced to Battelle.

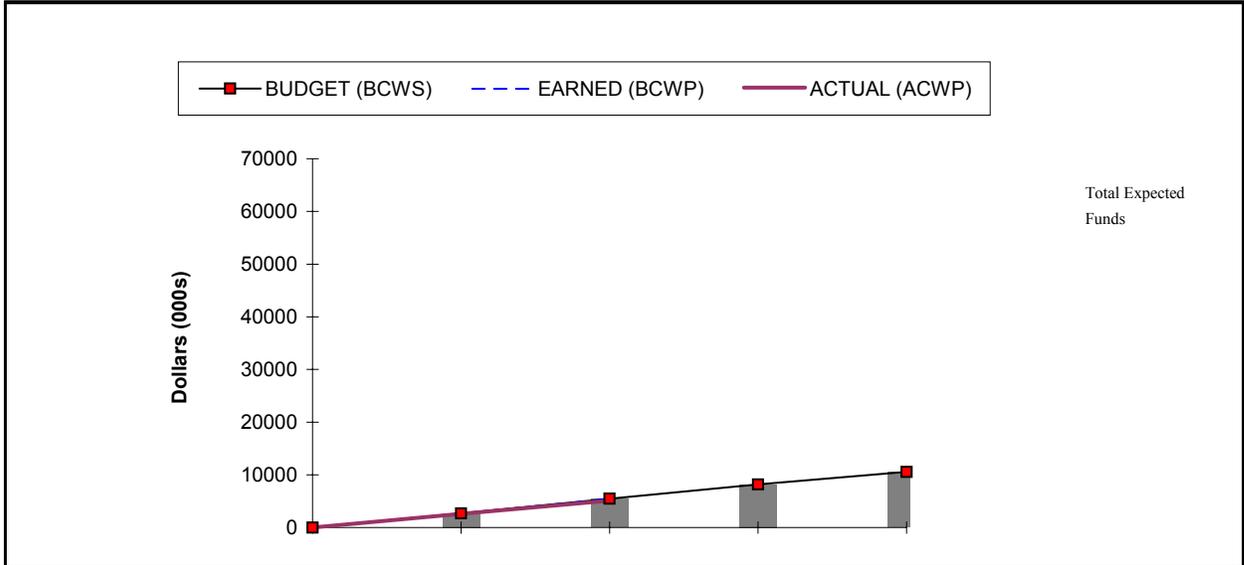
Impact: None

Corrective Action: None

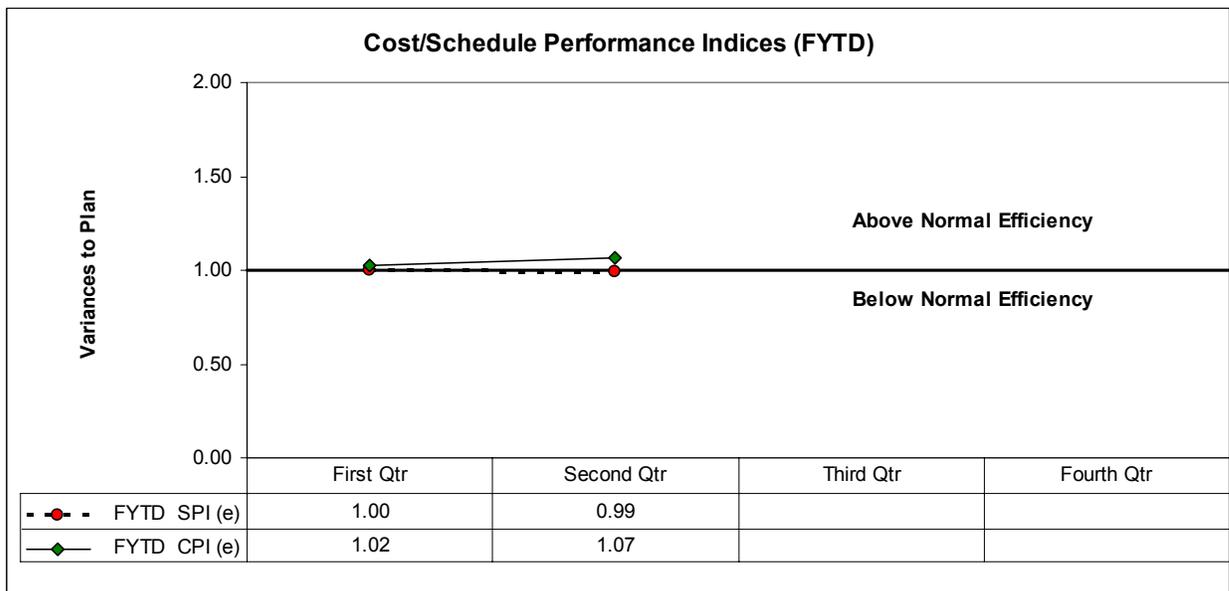


Cost / Schedule Performance

FY 2003 Cum to Date Status
 (DOLLARS IN THOUSANDS)



	First Qtr	Second Qtr	Third Qtr	Fourth Qtr	CUM Total
FINPLAN (New BA)	2895.0	3149.0	0.0	0.0	6044.0
BCWS	2677.0	2815.0	2706.6	2385.6	10584.2
BCWP	2669.0	2791.0			
ACWP	2605.0	2519.0			
COST VARIANCE	64.0	272.0			
SCHD VARIANCE	-8.0	-24.0			
CUM FINPLAN	2895.0	6044.0			
CUM BCWS	2677.0	5492.0	8198.6	10584.2	
CUM BCWP	2669.0	5460.0			
CUM ACWP	2605.0	5124.0			
CUM COST VARIANCE \$	64.0	336.0			
CUM COST VARIANCE %	2%	6%			
CUM SCHD VARIANCE \$	-8.0	-32.0			
CUM SCHD VARIANCE %	0%	-1%			



ISSUES

Technical Issues

Issue: None to report this quarter.

Impact:

Corrective Action:

External Issues/ DOE Requests/Regulatory/DOE Issues

Issue: An issue rose regarding subcontracting auger borehole drilling for installation of soil gas probes. Duratek and FH provided cost estimates; the Duratek estimate was within our budget and the FH estimate was not. FH maintained they are responsible for this scope on the Hanford Site.

Impact: We will be over budget if we are required to subcontract to FH to perform the work.

Corrective Action: DOE was asked to provide direction; KM Thompson agreed that we can subcontract to Duratek to drill boreholes for installation of soil gas probes.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR Number	Class	BCR Description	Status
PGW-2003-001	I	Addition of sample collection and analysis for the 300 Area Process Trenches groundwater monitoring	Approved 3/26/03



SS04

Groundwater/Vadose Zone Integration

*WBS 3.4.4.2
Science & Technology*

*WBS 3.4.4.3
System Assessment Capability*

Project Managers

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INTRODUCTION

Science & Technology Project, Work Breakdown Structure (WBS) 3.4.4.2:

The Groundwater Protection Program Science and Technology (S&T) Project is working to fill gaps in Hanford Site's knowledge and data for the vadose zone, groundwater, river, inventory, and risk technical elements that are required to adequately predict the movement of contaminants in the subsurface and surface environment and to predict their ecological and human health impacts. The project has started a new phase to provide data needed to evaluate and select remedial alternatives.

System Assessment Capability, Work Breakdown Structure (WBS) 3.4.4.3 consists of:

Tasks to assess Hanford's impacts on groundwater, the Columbia River, and the users of those resources. Includes the conduct and reporting of assessments of alternative cleanup scenarios and development of assessment tools required to perform the assessments. Efforts during FY03 focus on preparation for performing the Composite Analysis required by DOE Order 435.1 to allow continued disposal of waste at Hanford.

NOTE: Unless otherwise noted, all information contained herein is as of March 30, 2003.

SUMMARY ACCOMPLISHMENTS

Science & Technology:

Completed rebaseline of FY03 activities for the S&T Project to eliminate \$290K of scope for a shortfall in carryover funding from FY02.

Initiated preparations for a May 6-7, 2003 workshop with Environmental Management Sciences Program (EMSP) managers and investigators, Hanford Site personnel, regulators, Tribal Nations, and stakeholders. The workshop will include sessions on subsurface transport and remediation focused on Hanford issues.

Mike Thompson (DOE Richland Operations) and John Zachara (PNNL) participated in an EMSP workshop at the Savannah River Site and presented highlights of Hanford's success at using EMSP results to meet Site milestones.

Conducted a meeting at Stanford University to develop a two-year research plan for integrated S&T Project and Environmental Management Sciences Program research on uranium geochemistry to enable predictions of uranium fate and transport needed for U-Plant regional closure and 300 Area monitored natural attenuation.

Completed development of multicomponent ion exchange models to allow future predictions of strontium and cesium source terms and reactive transport. These predictions will be used to support site-wide assessments with the SAC.

Initiated a task to provide scaled hydraulic properties and transport behavior from the vadose zone transport field experiments to support modeling the BC cribs with the SAC.

Completed a review draft of the FY03 vadose zone transport field experiment test plan and initiated permitting and preparations of the field site.

Completed studies of strontium-90 uptake by periphyton (an aquatic plant) and initiated studies of strontium-90 uptake by fish to provide ecological risk assessment data that will be used to reach a final record of decision for groundwater at 100-N Area.

System Assessment Capability:

The Composite Analysis Maintenance Plan and the FY02 Annual Status reports have been delivered to DOE-RL.

The assessment of composite impact was completed to support the Solid Waste EIS. Charley Kincaid met with the Washington State Department of Ecology staff to explain the approach and results of this analysis in preparation for the release of the EIS.

A two dimensional model of the BC-Cribs was developed and used to improve our understanding of the movement of technetium-99 at this site. S&T staff provided lessons learned from the recent field experiments to improve representation of flow and transport through the vadose zone.

Presented a paper at Waste Management 03 in February 2003 titled "Calculating Economic Risk After Hanford Cleanup". The paper was based on results of the initial assessment performed using the System Assessment Capability and was presented by M.J. Scott

UPCOMING ACTIVITIES

Science & Technology

Prepare and present a paper at the 4th Symposium on the Hydrogeology of Washington State in April 2003.

Continue laboratory and modeling investigations of T-TX-TY tank farm samples and uranium-transport experiments. Initiate laboratory studies on uranium-bearing samples from the 300 Area.

Plan work activities for the reactive flow and transport experiment at the Vadose Zone Transport Field Study site along Army Loop Road.

Continue strontium-90 uptake studies for fish to support 100-N ecological risk assessment.

Continue work on remediation technical element activities in the science and technology roadmap targeted at developing data to evaluate remediation alternatives for 100-NR-2.

System Assessment Capability:

Complete software modifications to meet requirements to support the Composite Analysis and other planned assessments.

Complete the Technical Scope and Approach document for the Composite Analysis. This document will summarize the assumptions used to develop the analysis and the modeling approach to be used in this analysis.

Prepare and present three posters at the 4th Symposium on the Hydrogeology of Washington State in April 2003.

MILESTONE ACHIEVEMENT

Type		Current Quarter Milestones			Fiscal Year-To-Date Milestones			Remaining	FY Total
		Scheduled	Completed	Delinquent	Scheduled	Completed	Delinquent		
DOE	HQ	0	0	0	0	0	0	0	
	FO	0	0	0	0	0	0	0	
	RL	0	0	0	0	0	0	0	
PNNL	Key	3	2	1	7	6	1	12	
Total		3	2	1	7	6	1	12	

Hanford Assessments:

Conduct Assessments milestone is behind schedule due to initiation of work delayed while staff supported preparation of the Solid Waste EIS.

FY 2003 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FY TO DATE STATUS – (\$000)

B&R	WBS	Subactivity	Title	Type	SubAcct	Total Authorized Funds	Funding	BCWS FYTD	BCWP FYTD	ACWP FYTD	CV FYTD	CV %	SV FYTD	SV %
							Rec'd To Date							
EW02J1410	3.4.4		GW Mgmt			6,573	3,358	2,809	2,415	2,363	52	2%	-394	-14%
EW02J1410	3.4.4.2	RL-SS04	Science & Tech.	OE	30998	4,623	2,323	1,889	1,645	1,550	95	6%	-244	-13%
EW02J1410	3.4.4.3	RL-SS04	System Asses.	OE	44666	1,950	1,035	920	770	813	-43	-6%	-150	-16%

Schedule Variance Analysis:

Description and Cause:

Science and Technology:

Delay in laboratory experiments because contaminated samples from T-TX-TY tank farm drilling by the Tank Farm Vadose Zone Project have not been received.

Delay initiating work for remediation technical element to align work scope with Fluor baseline.

Impact: Reporting on laboratory experiments for the T-TX-TY Field Investigation Report will be delayed; however, report is scheduled for FY04, so no long-term impact is anticipated.

Corrective Action:

Met with River Protection Program (RPP) Tank Farm Vadose Zone Project staff to clarify field schedule; rebaseline science and technology project activities to align with Fluor baseline.

System Assessment Capability:

Delay in completing the Composite Analysis Technical Scope and Approach because staff have been diverted to unplanned work supporting the Solid Waste Environmental Impact Statement project.

Impact: Delivery of the document will be delayed by one month. This will not impact the overall schedule for the Composite Analysis.

Corrective Action: The Solid Waste EIS work is now complete and additional resources have been assigned to preparing the document thus the schedule variance should be made up in the next month.

Cost Variance Analysis:

Description and Cause:

Science and Technology: Cost variance due to subcontracting delays and pending laboratory invoices.

Impact: None

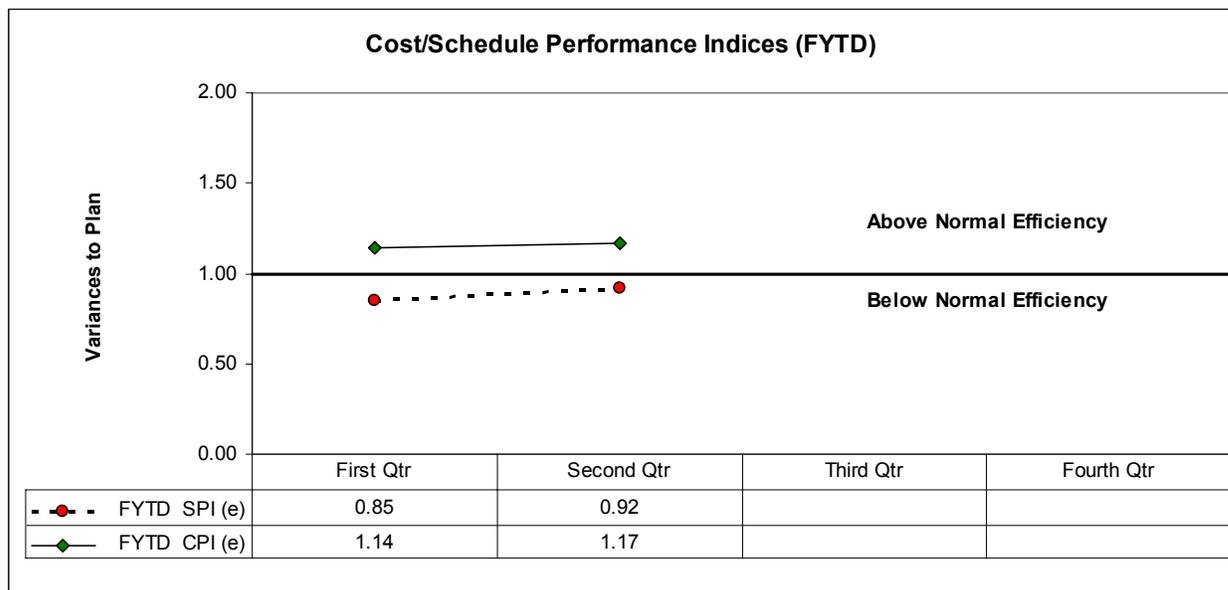
Corrective Action: None

System Assessment Capability: Expenses higher than planned in software development to meet Composite Analysis requirements. Careful software development should lead to lower costs in repairs during software testing.

Expenses higher than planned to develop Technical Scope and Approach document due to resource availability resulting in temporary resource replacement. Original planned resources are now available, therefore the cost variance will not increase.

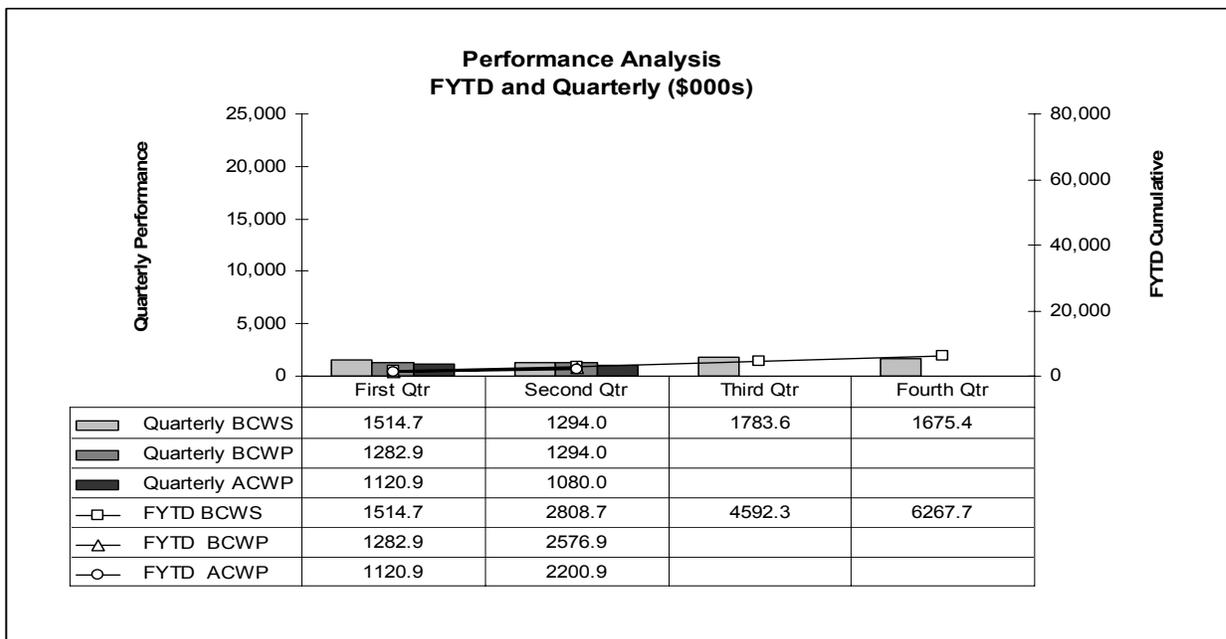
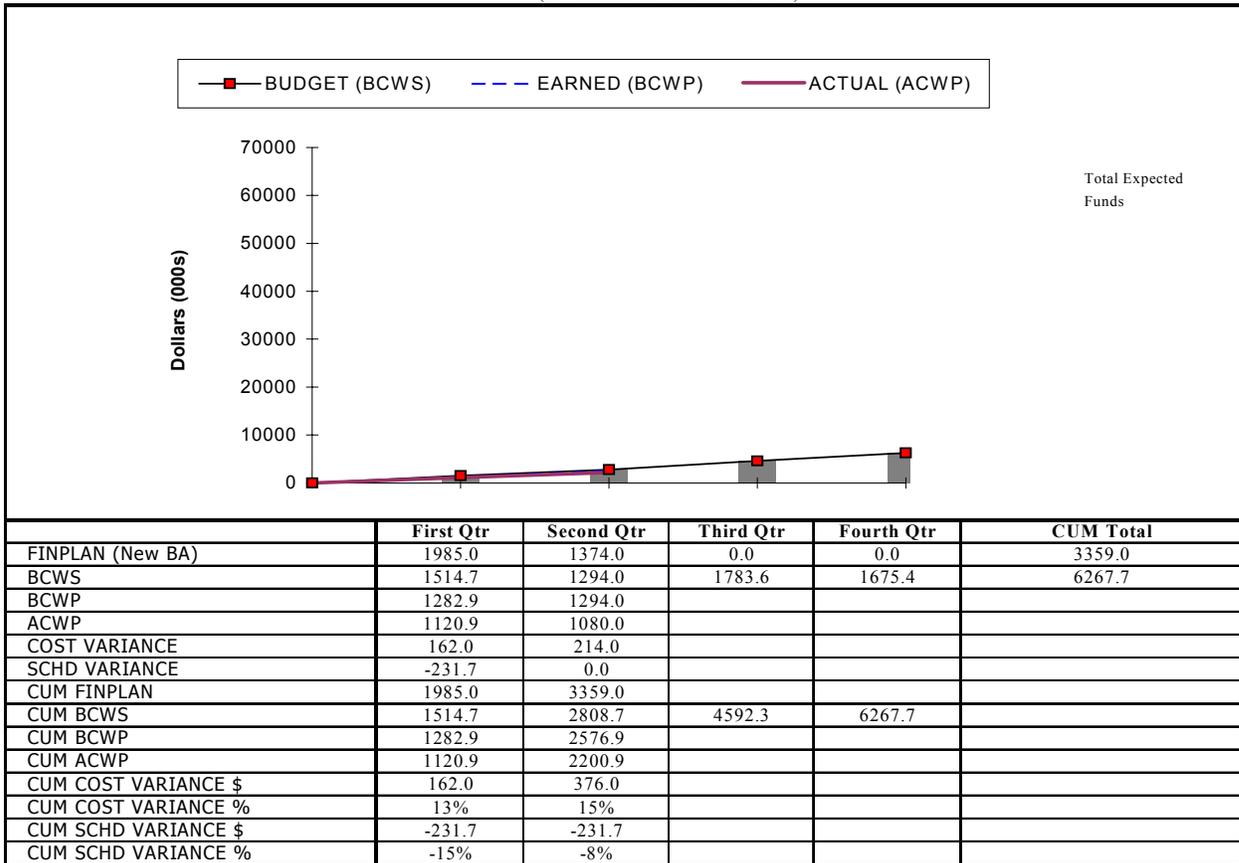
Impact: None

Corrective Action: None



Cost / Schedule Performance

FY 2003 Cum to Date Status
 (DOLLARS IN THOUSANDS)



ISSUES

Technical Issues

Issue: None to report this quarter

Impact:

Corrective Action:

External Issues/ DOE Requests/Regulatory/DOE Issues

Issue: None to report this quarter

Impact:

Corrective Action:

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

Currently, there are no baseline change requests required.



SS-D

Safeguards and Security

*WBS 3.4.6.3
PNNL Safeguards & Security*

Project Manager
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INTRODUCTION

PNNL Safeguards & Security Project, Work Breakdown Structure (WBS) 3.4.6.3, consists of execution and management of the Safeguards and Security Program for the Laboratory.

The Safeguards and Security Program provides expertise, oversight, guidance, and training related to the appropriate protection of personnel and physical and intellectual property of the government, other clients, and Battelle. In addition, the control, accountability, and inventory management of nuclear materials is provided.

The SAS program for the Pacific Northwest National Laboratory (PNNL) is currently included in the Hanford Site SAS budget/activity. Unlike the end-state of the Hanford SAS activities associated with the Hanford EM mission, PNNL activities in the national security area are projected to continue to grow in both the short term as well as the long term. At present, there is no defined end-state for the Laboratory. In addition, any changes to national security assets managed by the Laboratory (i.e., increase or addition of new projects) as well as requirements changes, could affect funding needs.

NOTE: Unless otherwise noted, all information contained herein is as of March 30, 2003.

SUMMARY ACCOMPLISHMENTS

The Safeguards and Security (SAS) Program provided ongoing support to the Laboratory and its programs in the following areas:

- Physical Security
- Information Security
- Cyber Security
- Personnel Security
- Material Control and Accountability
- SAS Program Management

In addition, the following highlights were also accomplished:

A "satisfactory" rating was received for the Periodic Safeguards and Security Survey conducted by DOE RL safeguards and Emergency Services. This is the highest rating possible.

Security Conditions 2 ("SECON 2") measures were implemented as a result of the conflict in Iraq. These measures have since been downgraded to SECON 3.

An annual review, performance test, tamper indicating device review, physical inventory of nuclear material, and Material Balance Area Custodian training was conducted of a Laboratory project's subcontractor.

The key deliverable to update the Laboratory's Cyber Security Program Plan was completed as scheduled.

The deliverable to update the Security Education and Awareness Program Plan was completed as scheduled. This plan documents the existing program and identifies specific future enhancements to increase employee involvement in security awareness.

The operational deliverable to plan and conduct one of two performance tests of the MC&A system was completed as scheduled. No weaknesses were identified.

Coordination for upgrading areas/locations to limited areas on behalf of existing and future projects needs was completed.

The FY 2003 Nuclear Materials Inventory Assessment was completed and provided to DOE RL for submittal to DOE-HQ. This report provides current use and disposition plans for the nuclear material inventory, as well as an inventory of the radioactive materials at PNNL. This report is used by a number of program offices at HQ for planning and management of DOE's material inventory.

Safeguards and Security is reviewing new regulations (Code of Federal Regulations [CFR's]) that delineate new laws regarding the protection of biological select agents. A physical security program will be implemented for these types of biological materials to include risk, threat, vulnerability assessments, and implementation of a secure physical security envelop.

UPCOMING ACTIVITIES

Continue to provide expertise, oversight, guidance, and training related to the appropriate protection of personnel and physical and intellectual property of the government, other clients, and Battelle. In addition, provide for the control, accountability, and inventory management of nuclear materials.

The DOE Office of Independent Oversight and Performance Assurance (DOE OA) is preparing to conduct the inspection of the Hanford Site and Pacific Northwest National Laboratory (PNNL) Safeguards and Security Survey during the third quarter. The data call was completed during the second quarter.

The Information Classification and Control Policy (ICCP) group within DOE is proceeding with plans for an oversight review of the Classification, Declassification, and Unclassified Controlled Nuclear Information (UCNI) programs of the Richland Operations Office (RL) to include PNNL in April. The data call was completed during the second quarter.

MILESTONE ACHIEVEMENT

Type		Current Quarter Milestones			Fiscal Year-To-Date Milestones			Remaining	FY Total
		Scheduled	Completed	Delinquent	Scheduled	Completed	Delinquent		
DOE	HQ	0	0	0	0	0	0	0	
	FO	0	0	0	0	0	0	0	
	RL	2	2	0	3	3	0	7	
PNNL	Key	1	1	0	1	1	0	4	
Total		3	3	0	4	4	0	11	

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

- PNNL-03-05 (5.1) Update the PNNL Cyber Security Program Plan (Key Deliverable) was completed as required (3/31/03).
- PNNL-03-10 (6.2) Update the Security Education and Awareness Program Plan documenting the existing program and identifying specific future enhancements to increase employee involvement in security awareness (Deliverable) was completed as required (2/28/03).

- PNNL-03-13 (7.1) Plan and conduct one performance test of the MC&A system (Operational Report/Deliverable) was completed as required (3/31/03).

Note: Two of the "Key Deliverables" for this FY are contingent upon new requirements being issued as well as implementation funding being received.

FY 2003 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FY TO DATE STATUS – (\$000)

B&R	WBS	Subactivity	Title	Type	SubAcct	Total Authorized Funds	Funding	BCWS FYTD	BCWP FYTD	ACWP FYTD	CV FYTD	CV %	SV FYTD	SV %
							Rec'd To Date							
FS.30	.02 - .09	RLSS-D	PNNL SAS Program	OP	44805	9,259	6,023	4,425	3,814	3,804	10	0.3%	0	0
WN.05	.05	RLSS-D	PNNL SAS Program	OP	44805	1,222	611	611	611	611	0	0.0%	0	0
							6,634	5,036	4,425	4,415	10	0.2%	0	0

Note: The RL SS-D funding included WN05 SAS WFO for Q1 only, per K. Massey (RL).

Schedule Variance Analysis:

Description and Cause: There is no schedule variance. This activity is level of effort support.

Impact: N/A

Corrective Action: N/A

Cost Variance Analysis:

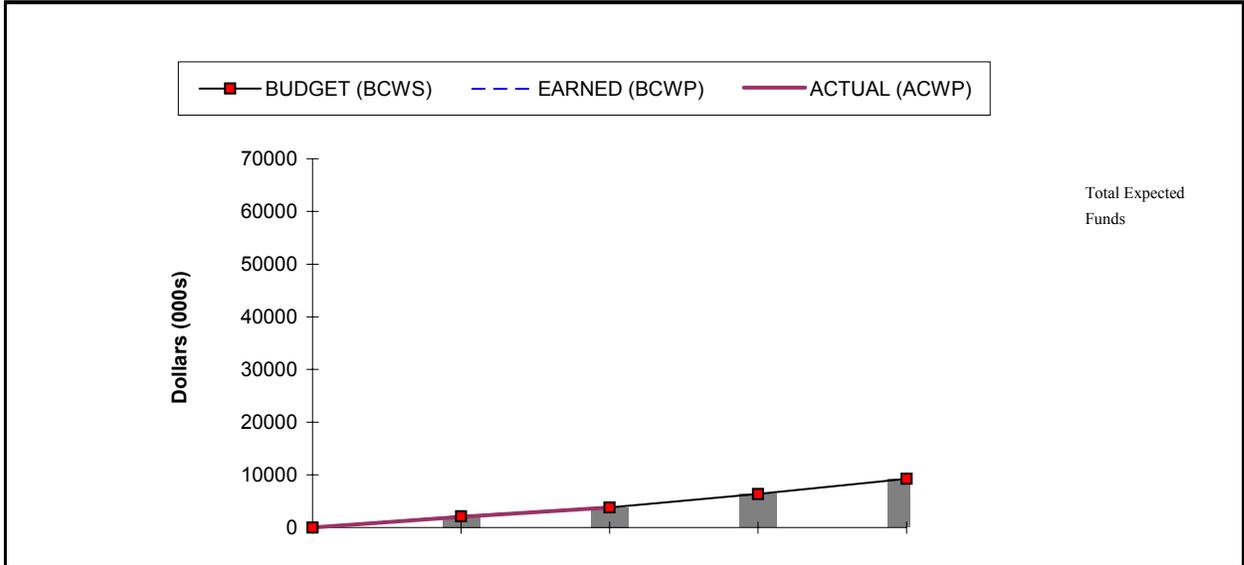
Description and Cause: The favorable cumulative cost variance is due to tasks deferred to later in the year based on initial unknown funding levels (PNNL was directed to work towards a modified "target" budget due to the Continuing Resolution. The "modified" target resulted in a temporary ~\$.7M reduction [to "Total Authorized Funds"] that is anticipated to be returned to PNNL after the CR is resolved. Modified FY 2003 CR target = \$9.8M vs. \$10.481M planned).

Impact: Some tasks have been temporarily suspended or deferred due to the reduced funding target. Some regulatory compliance activities may not be completed until funding is restored. Non-compliance with DOE Safeguards and Security requirements may result.

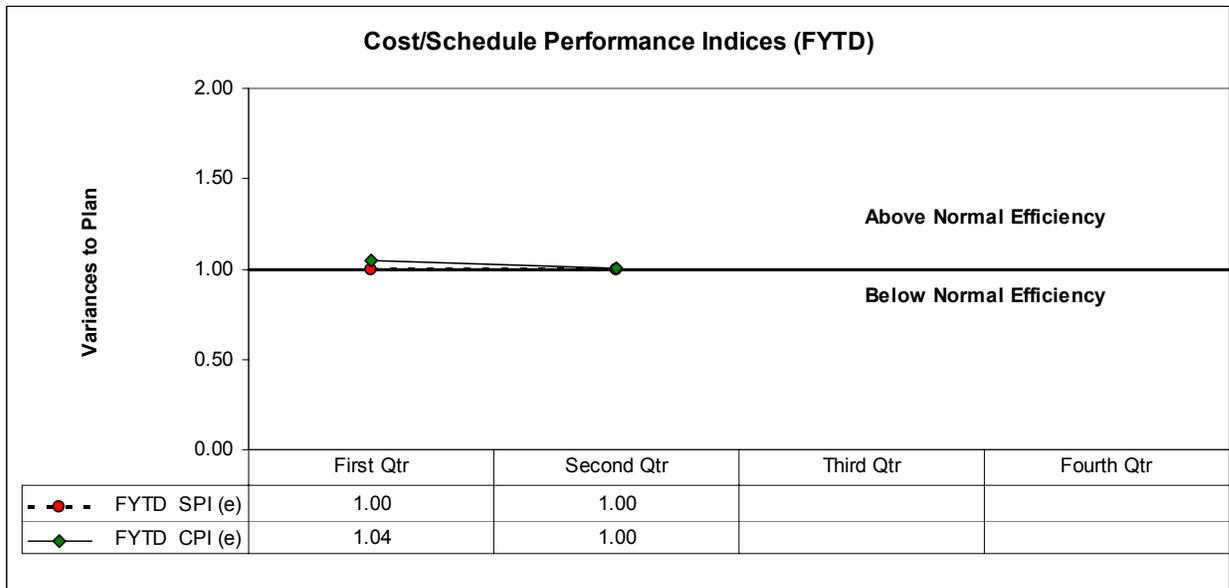
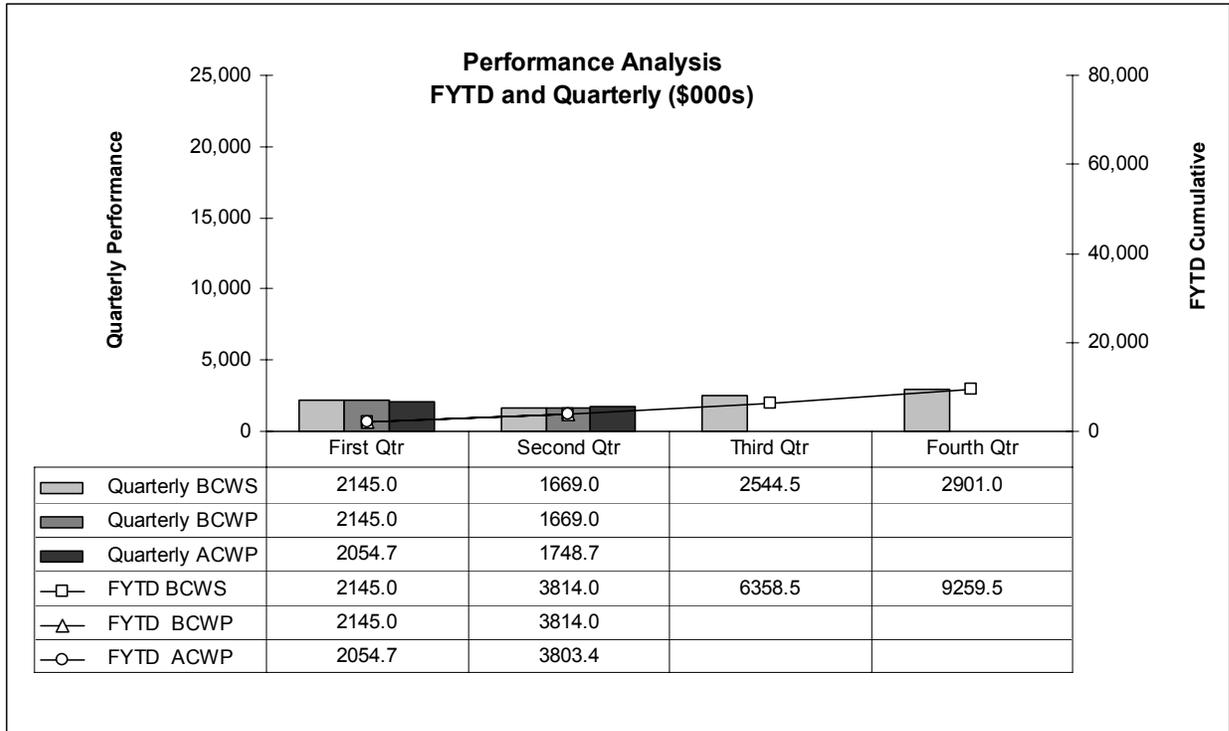
Corrective Action: Continuing Resolution resolved. Full funding restored to PNNL SAS.

Cost / Schedule Performance

FY 2003 Cum to Date Status
 (DOLLARS IN THOUSANDS)



	First Qtr	Second Qtr	Third Qtr	Fourth Qtr	CUM Total
FINPLAN (New BA)	2650.3	3984.0	0.0	0.0	6634.3
BCWS	2145.0	1669.0	2544.5	2901.0	9259.5
BCWP	2145.0	1669.0			
ACWP	2054.7	1748.7			
COST VARIANCE	90.3	-79.7			
SCHD VARIANCE	0.0	0.0			
CUM FINPLAN	2650.3	6634.3			
CUM BCWS	2145.0	3814.0	6358.5	9259.5	
CUM BCWP	2145.0	3814.0			
CUM ACWP	2054.7	3803.4			
CUM COST VARIANCE \$	90.3	10.6			
CUM COST VARIANCE %	4%	0%			
CUM SCHD VARIANCE \$	0.0	0.0			
CUM SCHD VARIANCE %	0%	0%			



ISSUES

Technical Issues

Issue: None to report this quarter

Impact:

Corrective Action:

External Issues/ DOE Requests/Regulatory/DOE Issues

Issue: SC vs. EM Oversight of PNNL SAS Program.

Impact: The Laboratory's SAS Program is funded by DOE EM and is included as part of the Hanford Site's SAS program funding. The Laboratory, however, is an Office of Science multiprogram laboratory. The EM funding model assumes work scope is declining (i.e., sites are being "cleaned up") and will eventually no longer be required. The Laboratory's mission and associated activities, however, is growing. This funding structure (i.e., through EM) provides for the potential redirection of funds away from the Laboratory and its programs to non-science related programs such as the Hanford Site SAS activities supporting clean up. A variety of issues with this funding model have the potential to impact the Office of Science (SC) mission.

Corrective Action: Receiving SAS funding and direction from DOE SC rather than from other parts of DOE who are not responsible for the Laboratory's mission success, will result in a more efficient and effective SAS program focused on the success of the Laboratory and its science mission (vs. competing with clean-up entities). It should negate the need to compete with clean-up entities for SAS funding and may aid in elimination of requirements established for non-science mission oriented entities.

Oversight and funding roles and responsibilities must be clarified. A clear, single line of management responsibility, accountability and authority from the federal mission program manager (DOE Office of Science) to the Contractor (Battelle) with appropriate role clarity between parties should be established and must include SAS. This includes responsibility for the SAS program budget as well as the SAS program direction (variances, approvals, etc.) as necessary.

- DOE SC (through the Site Office) should be responsible for the SAS program direction and variances, approvals, etc., as necessary.
- DOE SC (through the Site Office) should be responsible for the SAS program budget.

Reassigning oversight and funding responsibilities to SC would reinforce our standing as an Office of Science multiprogram laboratory for DOE, and affirm the proposed SC Site Office as the focal point for oversight interaction with the Laboratory (DOE's Action).

Status: The DOE Site Office has submitted a letter to DOE Headquarters outlining the transfer of funding from DOE Environmental Management (EM) to DOE Office of Science (DOE SC) for the FY 2005 year and beyond.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

None to report this Quarter



EMPR Glossary

GLOSSARY

Actual cost of work performed (ACWP): The actual cost incurred and applied or distributed for the work performed within a given time period. It includes all labor categories, material, any other direct costs, subcontract work, and function overhead.

Approved baseline: The budget authorized to perform the workscope that has been agreed upon by the customer and the contractor(s). It is portrayed in the Multi-Year Work Plan with all approved changes. This baseline may or may not be fully funded, and could be more or less than the compliance baseline.

Budget at completion (BAC): The sum of budgets established to complete a program and/or project or any component of a program and/or project.

Budgeted cost of work performed (BCWP): The value for completed work measured in terms of the planned budget for that work. It is synonymous with earned value.

Budgeted cost of work scheduled (BCWS): The time-phased budgeted value of work scheduled to be accomplished over a given time period. The BCWS for a total cost account through its entire period of performance is equal to the BAC for the cost account.

Carryover Workslope: The estimated dollar amount of the workslope that was not completed during the fiscal year and which will be carried over and completed in the next fiscal year.

Compliance baseline: The budget that is required to perform the workslope necessary to be in compliance with State and Federal regulations, enforceable agreement milestones, and DNFSB milestones. The level of activity required to be in compliance assumes sufficient funding. **Note:** Because approved baselines are considered to be compliant, this column will likely be eliminated.

Contract Inherited: The assumed budget for the planned scope of work at the time a new contract is signed by the company responsible for performing the work.

Cost variance (CV): The difference between BCWP and ACWP ($CV = BCWP - ACWP$). At any time, it shows whether the work actually performed has cost more or less than the amount budgeted for the same work.

Cost Performance Indicator (CPI): The CPI is the ratio of BCWP to ACWP, or $(BCWP/ACWP)$.

Earned value (EV): The periodic, consistent, and objective measurement of work performed in terms of the budget planned for that work. The EV is synonymous with the BCWP and it is compared to the BCWS to obtain schedule performance and to the ACWP to obtain cost performance.

GLOSSARY (CONTINUED)

Estimate at completion (EAC): Cost allocated to the work breakdown structure element to date, plus the estimate of costs for authorized work remaining. Authorized work remaining includes any undistributed budget.

Fiscal Year Spending Forecast (FYSF): The estimated total that will be spent from October through September (current Fiscal Year).

Funding carryover and new Budget Authorization (BA): This funding represents both the funding allocated to perform workscope planned in the prior fiscal year, not completed, and approved to be performed in the current fiscal year, as well as new BA to perform the approved baseline workscope.

Funding target: The level of funding that is anticipated (as a result of the Integrated Priority List process) in a given Fiscal Year based on an assumed funding level for the Site.

Multi-Year Work Plan – 10/1/XX: The Project's approved cost/schedule/technical baseline at the beginning of the fiscal year.

Project Execution Module (PEM): The Project Execution Module (PEM) of the Integrated Planning, Accountability, and Budgeting System-Information System (IPABS-IS) replaces the Progress Tracking System (PTS) as EM Headquarters' centralized system for reporting financial, milestone, performance, and other execution-year information for PBSs, sub-PBSs, TTPs, and line item construction projects. In addition, this module collects mid-year and year-end actual performance information against the agreed upon management commitments for the current execution year.

Schedule Performance Indicator (SPI): The SPI is the ratio of BCWP to BCWS, or (BCWP/BCWS).

Schedule variance (SV): The difference between BCWP and BCWS ($SV = BCWP - BCWS$). At any time, or for a given period of time, it represents the difference between the planned dollar value of work actually accomplished and the value of the work scheduled to be accomplished.

Work breakdown structure (WBS): A product-oriented family tree division of real estate, hardware, software, services, and data products that organize, define, and display all of the work to be performed in accomplishing the program and/or project objectives.