



Section C:2

River Corridor

PROJECT MANAGERS

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SUMMARY

The River Corridor Project (RCP) consists of the following projects: 300 Area Liquid Effluent Facility (LEF) WBS 1.2.3.2, Project Baseline Summary (PBS) WM05; 300 Area/Special Nuclear Materials, WBS 1.4.4, PBS TP04; Transition Project Management, WBS 1.4.6, PBS TP12; Accelerated Deactivation, WBS 1.4.8, PBS TP10; 324/327 Facility Transition, WBS 1.4.10, PBS TP08; and Hanford Surplus Facility Program (300 Area Revitalization), WBS 1.4.11, PBS TP14.

NOTE: B Plant WBS 1.4.1, PBS TP01 work scope was completed in FY 2000 and contains no data. Therefore, the PBS has been eliminated from this and all future reports.

PBS WM05 is divided between WBS 1.2.3.1, Liquid Effluents (200 LEF) and WBS 1.2.3.2, 310 TEDF/340 Facility (300 LEF). The 310 TEDF/340 Facility work scope is now included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope has remained in Waste Management Project. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the Waste Management Project, which has the majority of the work scope and funding incorporated in its baseline.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of April 30, 2001. All other information is as of May 21, 2001.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that two milestones (67 percent) were completed on or ahead of schedule and one milestone is overdue.

NOTABLE ACCOMPLISHMENTS

The 324 Building Deactivation Project — Ten out of a total of twenty-two 3-82B Grout Containers have been loaded out and shipped. In addition, the on-site testing and training for the robotics platform continued; bids were received from Spent Nuclear Fuel vendors and the initial evaluations were completed.

327 Building Deactivation Project — While in minimum safety (min-safe) mode, normal operations for working with radioactive material resumed; legacy waste buckets were removed from the Shielded Environmental Radiometallurgy Facility (SERF) Cell, three cans were transferred from dry storage to A Cell, and the clean-up of I Cell began. Additionally, the burst test pit inspection was completed, and packaging of chemical waste materials within the facility continued.

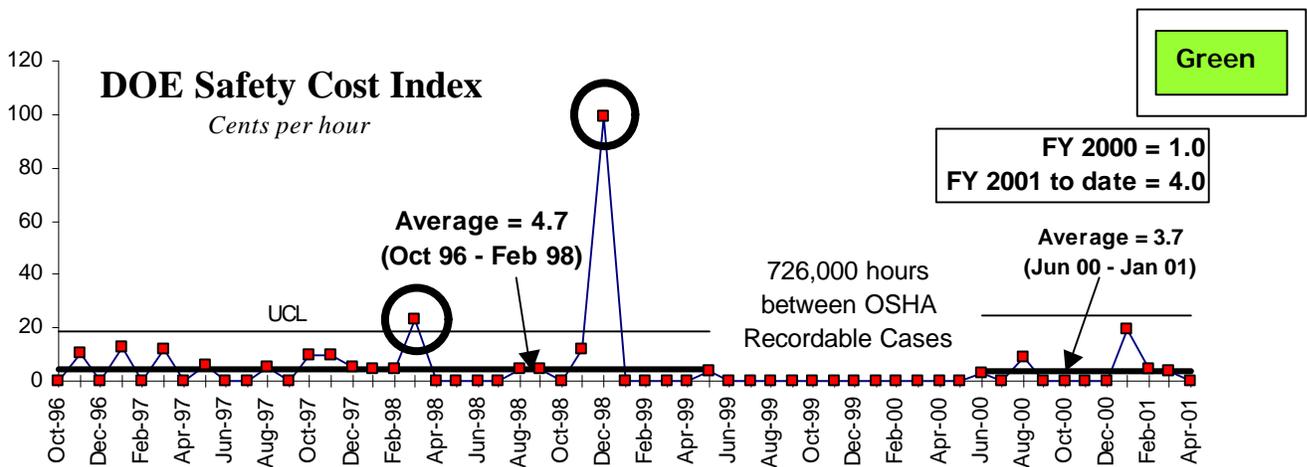
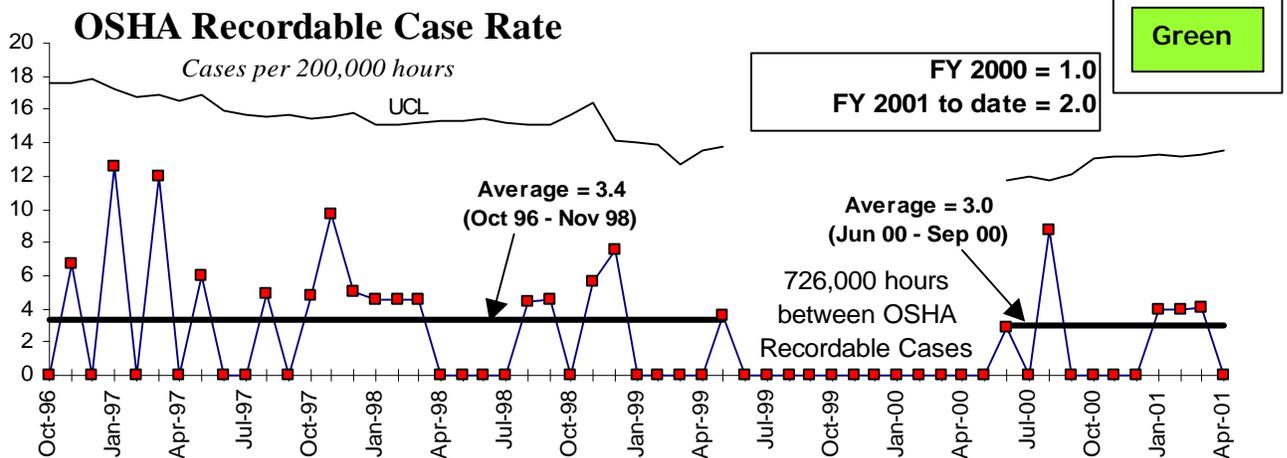
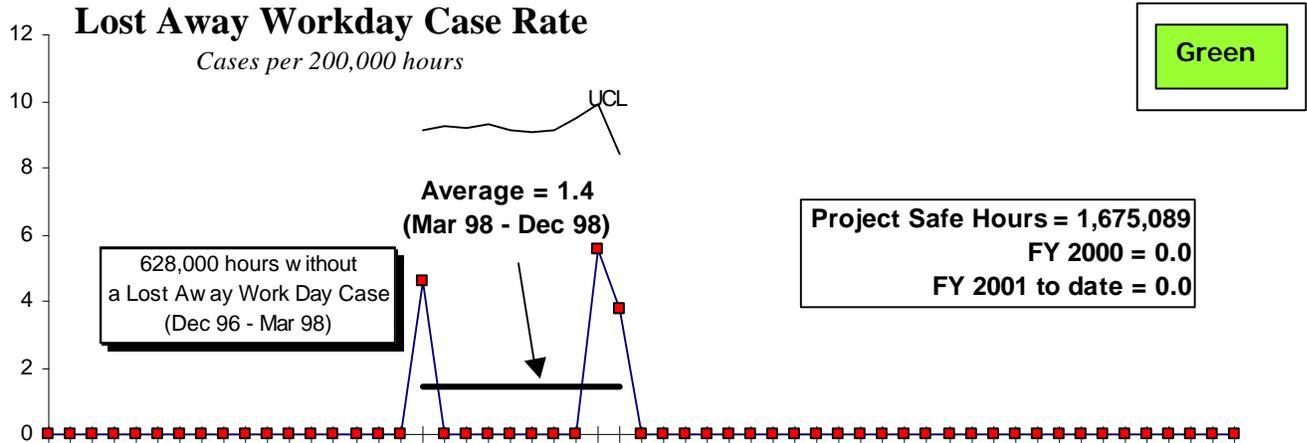
The 300 Area Treated Effluent Disposal Facility (TEDF) — During the month of April, the TEDF Facility treated 4.52 million gallons of wastewater, and completed resin removal in Ion exchange columns C and D. In addition, the 340 Facility High Efficiency Particulate Air (HEPA) filters and prefilters were replaced, and 30 gallons of oil were recycled for future use (supporting waste minimization).

Accelerated Deactivation Project — The Project has successfully completed shipment of all 421 billet boxes of excess uranium (approximately 235 metric tons), and 2.3 metric tons of uranium dioxide powder to the DOE Portsmouth Site in Ohio. Additionally, the contaminated Fuel Safety Analysis Report for Packaging (SARP) was approved, the road scan for movement of the crane for water tower demolition was completed; readiness activities for characterization of the 224-T Facility process cells was completed; and biological contamination clean-up of 242-B/BL Facility was also completed.

Equipment Disposition Project — Work plans for loading and shipping the tall cask car to Duratek are being developed. In addition, the Project Execution Plan for equipment disposition has been sent to RL and will be released as soon as RL's review is complete and any comments are incorporated.

SAFETY

The River Corridor Project (RCP) has achieved more than 1.6 million safe work hours since its last lost away workday case. The OSHA Recordable Case Rate for the last twelve months is 2.0, which is above the company goal of 0.9. The overall rating for RCP is green.



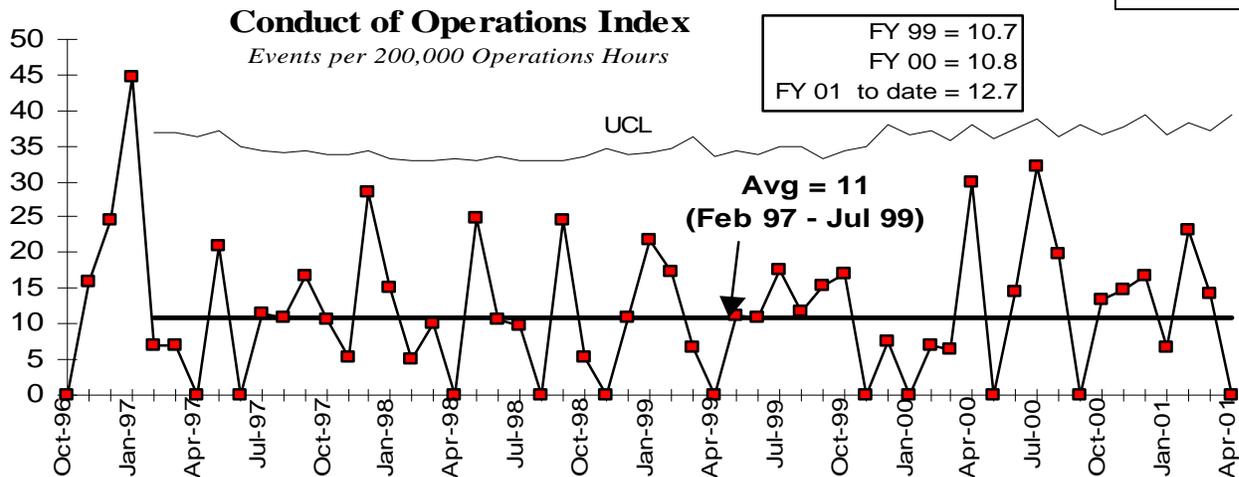
ISMS STATUS

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- An RCP Voluntary Protection Program (VPP) Steering Committee has been put in place to assemble the VPP Improvement Plan based on the self-assessment conducted earlier this spring, and the open actions contained in the VPP Strategic Plan. The draft VPP application was issued for comment on May 14, 2001, and progress continues on schedule to submit the application during June 2001. The final application submittal will be followed by a DOE field review planned for the end of the fiscal year.
- The RCP ISMS "Sustain and Maintain" process is in place. The VPP implementing mechanisms described in the draft application and currently out for review are being verified for alignment with the ISM System mechanisms.

CONDUCT OF OPERATIONS

Green



BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

- **Technical Review of 327 Hot Cell Removal** — Technology Management, supported by RCP, completed a review of the feasibility of intact removal of the hot cells from the 327 Facility. The review team found the concept of intact removal to be feasible, and had significant ALARA, cost, and schedule benefits. RCP concurs with the conclusions and recommendations for near term actions as first steps toward re-planning the deactivation baseline. Strategies and alternatives that would allow RCP to complete the most critical of the recommended near term actions are being identified.
- **Value Engineering for Configuration Management** — River Corridor Project sponsored a multi-contractor Configuration Management (CM) Value Engineering (VE) Study that identified opportunities to refine configuration management requirements for transitioning facilities that will result in cost savings. RCP specific procedures have

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been prepared that describe the steps for the creation of a configuration baseline and a graded approach for the documentation of changes made to RCP engineering documents, including drawings. Final review by the RCP Engineering Leadership Team is scheduled for May 23. The FH Chief Engineer has concurred with the approach.

- **Permit By Rule Treatment at 300 Area TEDF** — FH is investigating the potential to treat limited categories of liquid non-radioactive hazardous wastes using the existing capabilities of the 300 Area TEDF, by applying a permit exclusion available within the waste regulations. Depending upon the outcome of ongoing regulatory analysis, treatment of hazardous wastes at TEDF could provide a low-cost option for disposal of some wastes currently sent off-site. A decision on whether to proceed based on the outcome of the regulatory analysis and customer surveys is anticipated in September 2001. Preliminary regulatory evaluation results are promising, and appear to possibly allow treatment of more categories of waste than originally anticipated.

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Opportunities for Improvement

- **New EM-50 Funds (\$450K) for Robust Manipulator Arm** — Via support from EM50, an AEA ARTISAN manipulator arm will be deployed in the 324 Building to support hot cell deactivation. The ARTISAN arm will augment the existing fleet of master slave manipulators by offering longer reach, higher payload capacity (200 pounds -vs.- 30 pounds), greater dependability, and improved access to difficult areas. ALARA/extremity-dose savings are expected due to an anticipated reduction in maintenance and repair. RCP personnel observed the Factory Acceptance Test for an ARTISAN arm at the Battelle Columbus - West Jefferson Laboratory, and expects that the advanced look will help to ensure successful procurement for Hanford. Delivery of the ARTISAN arm to Hanford is expected by the end of FY 2001. Following site testing and operations training, the ARTISAN will be deployed in the Shielded Materials Facility hot cells located in the 324 Building.

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UPCOMING ACTIVITIES

224-T - Begin 224-T initial entry and characterization by late May 2001. The slip from the original March 2001 date is a result of the Criticality Safety Evaluation Report and the Notice of Construction requiring more time than expected.

Uranium Disposition — Approximately 135 metric tons of surface-contaminated uranium fuel is to be buried at the LLBG by June 30, 2001 and approximately 5 metric tons of miscellaneous uranium scrap materials will be buried by September 30, 2001. In addition, the final disposition of thorium materials located within the 303-K Facility will be completed by September 30, 2001.

Tri-Party Agreement Milestone M-89-02 — The remaining B Cell low-level waste and transuranic debris will be moved away from the 300 Area by July 31, 2001, completing the M-89-02 work scope.

327 Authorization Basis — Implement technical update of 327 Authorization Basis by end of FY 2001. This was slipped from May 2001 due to resource limitations created by the new requirements of the 10CFR830 Nuclear Safety Rule.

300 Area Skyline Initiative - Demolish 3902A, 3902B, and 303-K by September 30, 2001.

Milestone Achievement

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M I L E S T O N E T Y P E	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			T O T A L F Y 2 0 0 1
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	0	0	0	1	0	0	0	1
DOE-HQ	0	0	0	0	0	0	0	0
RL	0	2	0	0	1	1	0	4
Total Project	0	2	0	1	1	1	0	5

Only TPA/EA milestones and all FY 2001 overdue and forecast late milestones are addressed in this report. Milestones overdue are deleted from the Milestone Exception Report once they are completed. The following chart summarizes the FY 2001 TPA/EA milestone achievement and a Milestone Exception Report follows. The last milestone table summarizes the first six months of FY 2002 TPA/EA milestones.

FY 2001 Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-89-02	"Complete Removal of 324 Building Radiochemical Engineering Cells (REC) B Cell Mixed Waste (MW) and Equipment,"	Due 11/30/00 — Progress continues to be made in accomplishing the milestone work scope; however, due to technical and operational issues the milestone was not met. A revised schedule was developed with the support of RL and Ecology. The scheduled date for the removal and shipment of mixed waste from B Cell, March 30, 2001, was met. Progress towards completing shipment of low-level waste remains on schedule by July 31, 2001, as agreed to with the regulators.
DNFSB Commitments		
	Nothing to report at this time.	

MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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Overdue – 1

TRP-99-901 1.4.10	EA	Complete Removal of 324 Radiochemical Engineering Cells (REC) B Cell Mixed Waste (MW) & Equip.	11/30/00	07/31/01
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Cause: Technical and operational issues delayed completion of this work scope.

Impact: Completion date of TPA milestone M-89-02 was not met.

Corrective Action: A revised schedule was developed with the support of RL and Ecology.

FY 2002 Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
MX-92-06-T01	"Complete Disposition for all Site Unirradiated Uranium"	Due 12/31/01 — On schedule.
DNFSB Commitments		
	Nothing to report at this time.	

PERFORMANCE OBJECTIVES

Outcomes	Performance Indicator	Status
Restore the River Corridor for Multiple Uses	FHI-M8 – 300 Area Cleanup	
	Measure 1: Accelerate 300 Area Cleanup	
	Expectation 1: Deactivate 324/327 Buildings	
	Base: Complete 26.5% remaining 324/327-baseline work.	7.2 percent of the remaining life-cycle work scope completed October 2000 through April 2001.
	Base: Complete B Cell cleanout and shipment of B Cell waste to 200 Area Burial Grounds.	Ten of the twenty-two 3-82B containers have been loaded out and shipped.
	Stretch: Complete additional 2.5% remaining 324/327-baseline work.	No additional work scope has been performed to date.
	Expectation 2: Disposition surplus facilities	
	Base: Disposition 3902A, 3802B & 303-K by September 30, 2001.	Tower demolition work is on schedule, but 303K work could be delayed by DOH issuance of the NOC.
	Stretch: Disposition 377 Bldg. by June 30, 2002.	Work was initiated on EE/CA #1, which includes the 377 building demolition scope, but EPA may not go forward with the required public comment process.
	Expectation 3: Disposition uranium billets, uranium dioxide, scrap materials in 200/300 Areas, and 303-K thorium-232 by September 30, 2001.	Completed shipment of uranium billets and UO2 to the DOE Portsmouth Site in Ohio.
Transition Central Plateau to	Measure 2: Support RCP Contract Transition	
	Expectation 1:	
	Stretch: Support RCP contract transition by July 1, 2002.	A draft plan for the transition plan was submitted to the VP, River Corridor Project on February 15, 2001.
	FHI-M3 – 200 Area Facility Disposition	
	Measure 1: Disposition Surplus Buildings and Rolling Stock	
	Expectation 1:	
	Base: Decontaminate & Decommission (D&D) 233-S & 233-SA Facilities by September 30, 2004.	Work will be initiated July 1, 2002.

Stretch: D&D 233-S & 233-SA by June 30, 2004. Expectation 2: Complete installation of new roofs on PUREX & B Plant by September 30, 2002. Expectation 3: Base: Disposition contaminated railcars by June 30, 2006. Stretch: Disposition contaminated railcars by August 31, 2005. Super stretch: Disposition contaminated railcars and heavy equipment by September 30, 2003.	Work will be initiated July 1, 2002. Work will be initiated February 1, 2002. Efforts continue to disposition one rail car in FY 2001. The project management plan has been issued. Nothing to report. Nothing to report.
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FY 2001 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS – (\$000)



		FYTD									
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC	
PBS TP04 WBS 1.4.4	300 Area/ Special Nuclear Materials	\$ 2,427	\$ 2,157	\$ 2,195	\$ (270)	-11%	\$ (38)	-2%	\$ 4,151	\$ 4,303	
PBS TP12 WBS 1.4.6	Transition Program Management	\$ 3,754	\$ 3,755	\$ 3,490	\$ 2	0%	\$ 266	7%	\$ 6,790	\$ 6,694	
PBS TP10 WBS 1.4.8	Accelerated Deactivation	\$ 1,799	\$ 1,711	\$ 2,437	\$ (88)	-5%	\$ (727)	-42%	\$ 2,970	\$ 3,846	
PBS TP08 WBS 1.4.10	324/327 Facility Transition	\$ 20,071	\$ 17,128	\$ 16,801	\$ (2,943)	-15%	\$ 327	2%	\$ 35,584	\$ 35,476	
PBS TP14 WBS 1.4.11	Hanford Surplus Facility Program (300Area Revitalization)	\$ 309	\$ 310	\$ 260	\$ 2	1%	\$ 50	16%	\$ 1,316	\$ 1,188	
Total		\$ 28,359	\$ 25,061	\$ 25,183	\$ (3,298)	-12%	\$ (122)	0%	\$ 50,811	\$ 51,507	

Notes: RL-Directed costs (steam and laundry) are included in the PEM BCWS. 310 TEDF/340 Facility performance data is reported under PBS WM05 (Waste Management).

WM05 information provided above (previously reported by Waste Management Project) addresses RCP work scope in the 310 TEDF/340 facility.

Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM).

FY TO DATE SCHEDULE / COST PERFORMANCE

The unfavorable schedule variance was due to SWDB shipment delays and crane repairs. The unfavorable cost variance is within established thresholds.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

Schedule Variance Analysis: (-\$3.3M)

300 Area/Special Nuclear Materials — 1.4.4/TP04

Description and Cause: The unfavorable schedule variance (\$270K) is due to delays finalizing the uranium disposition billet procedures, which in turn delayed delivery of the billet boxes by the support organization.

Impact: None.

Corrective Action: Working revised schedule.

324/327 Facility Transition — 1.4.10/TP08

Description and Cause: The unfavorable schedule variance (\$2,943K) is due to several factors, the primary contributor being B Cell Spent Fuel Removal preparation. The baseline does not reflect current single contractor methodology developed in the vendor forum, making it difficult to report progress against the current baseline. Other contributors include the completion of shipping B Cell waste to the central plateau and the D Cell work that requires an approved Notice of Construction (NOC) prior to start.

Impact: Tri-Party Agreement milestone M-89-02 ("Complete Removal of 324 Building Radiochemical Engineering Cells B Cell Mixed Waste and Equipment") was missed but is on target to be complete by the regulator agreed to revised date of July 31, 2001. Spent Fuel Removal preparation continues to support initiation of spent fuel removal from B Cell in July 2002.

Corrective Action: Spent Fuel removal project work scope is being updated to reflect a single contract methodology, which is targeted for implementation by June 30, 2001. Although delayed from the original TPA milestone date, waste shipments to the central plateau are on schedule to be complete by July 31, 2001, and completion of D Cell work scope is expected by September 29, 2001.

All other schedule variances are within threshold.

Cost Variance Analysis: (-\$0.1M)

Accelerated Deactivation — 1.4.8/TP10

Description and Cause: The unfavorable cost variance (\$727K) is primarily a result of labor overruns in the 2714U Waste Drum Characterization activity due to more complex than planned drum opening, sampling, and repackaging.

Impact: Costs are projected to reach ~\$833K which will create a potential overrun of \$644K.

Corrective Action: Alternative funding sources are being evaluated to cover this expanded work scope.

Transition Project Management — 1.4.6/TP12

Description and Cause: The favorable cost variance (\$266K) is primarily due to time phasing of planned contract and fee assessment accruals.

Impact: No Impact.

Corrective Action: Contract costs and fee assessment accruals are expected to increase later in the year.

Hanford Surplus Facility Program — 1.4.11/TP14

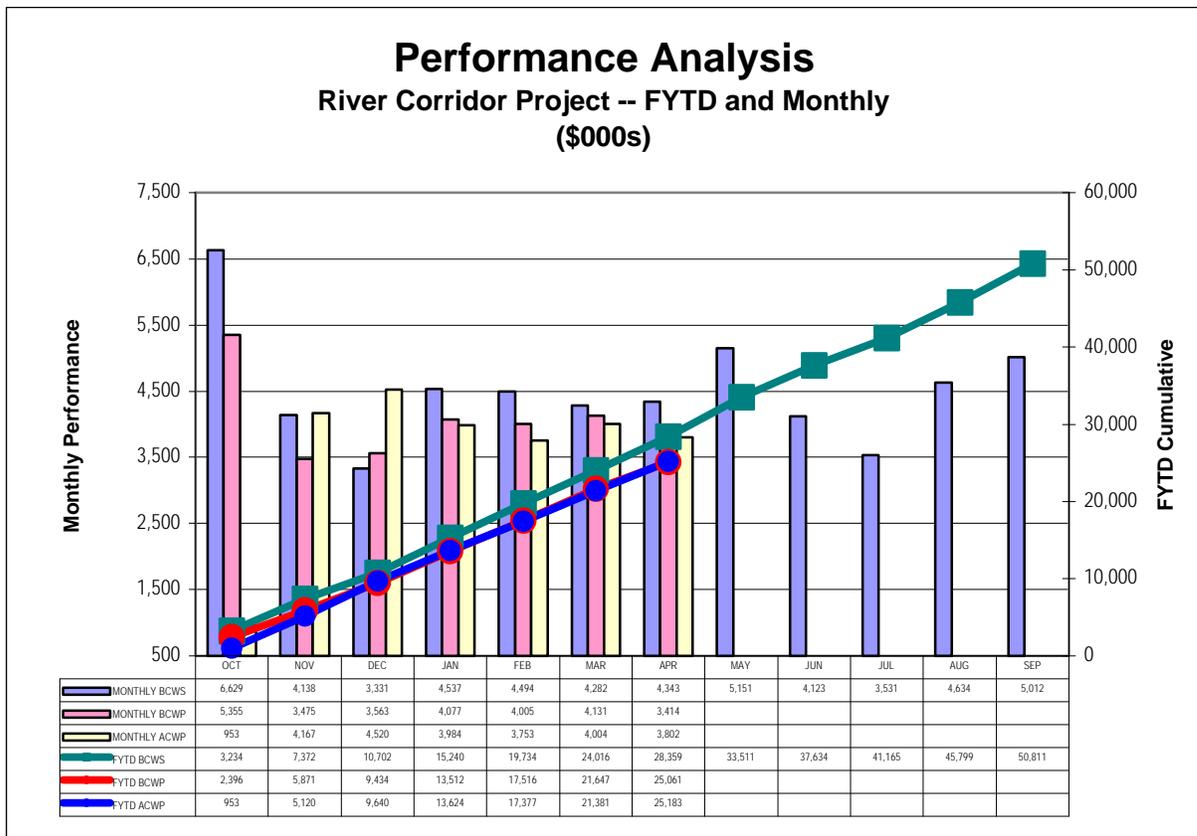
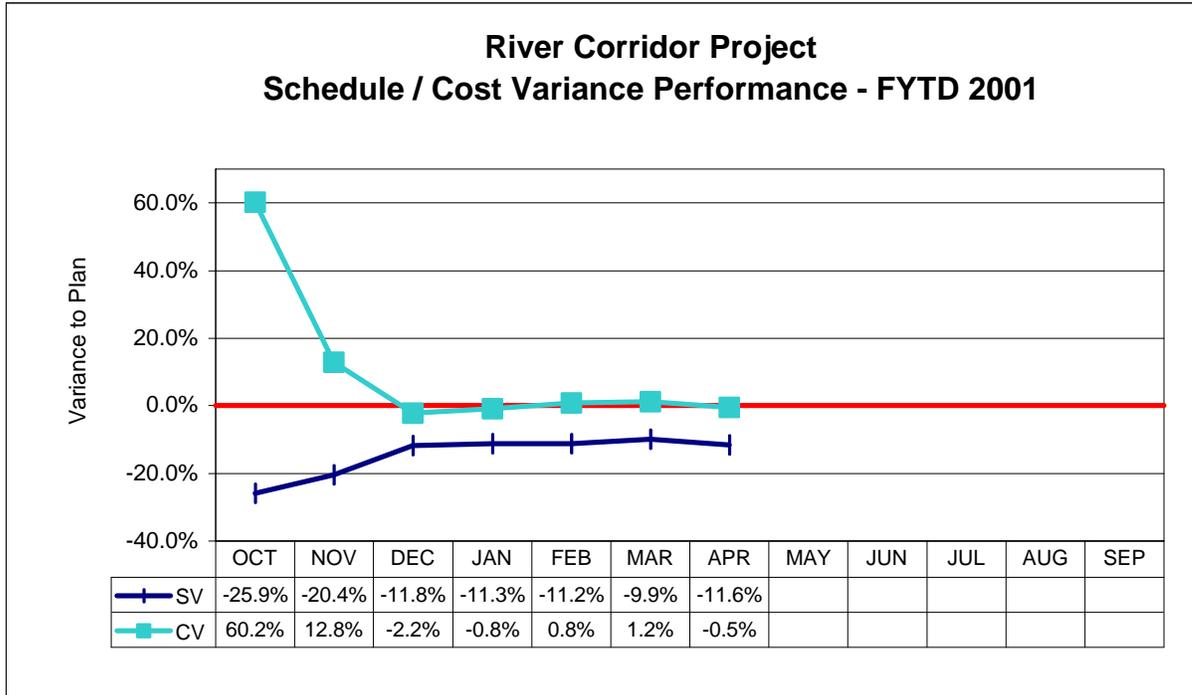
Description and Cause: The favorable cost variance (\$50K) is due to costs for contract support not being incurred as planned.

Impact: No Impact.

Corrective Action: The full contract costs are expected later in FY 2001.

All other cost variances are within established thresholds.

SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)



FUNDS MANAGEMENT FUNDS VS SPENDING FORECAST (\$000) FY 2001 TO DATE



	Project Completion *			Post 2006 *			Line Items *		
	Funds	FYSF	Variance	Funds	FYSF	Variance	Funds	FYSF	Variance
The River									
1.4 River Corridor									
TP01,TP04,TP08,TP10,TP12,TP14,WM05	48,616	46,878	1,738	5,637	5,268	369			
Line Item							0	0	0
Total River Corridor Operating	\$ 48,616	\$ 46,878	\$ 1,738	\$ 5,637	\$ 5,268	\$ 369			
Total River Corridor Line Item							\$ -	\$ -	\$ -

* Control Point

ISSUES

Technical Issues

Issue: BHI has verbally informed RCP that they may not be able to support the demolition of the 303-K facility this fiscal year.

Impact: The delay will result in RCP missing the RCRA Part B permit condition of clean closure certificated as being submitted by September 30, 2001, and the Performance Incentive (PI) associated with the demolition of 303-K.

Corrective Action: BHI is evaluating its ability to do the demolition in early September, which will meet the PI, but will require an extension to the RCRA Part B permit closure. Concurrently, RCP issued a verbal request to Fluor Federal Services to determine its ability to do the demolition in early August, and the associated cost of the work.

REGULATORY ISSUES

Issue: The Washington Department of Health (WDOH) Notice of Construction (NOC) for 224-T was submitted on March 23, 2001, after WDOH reversed an earlier position that a NOC was not needed for entering 224-T.

Impact: The delay will likely extend the completion of the entries into the hottest part of the summer.

Corrective Action: Entry preparations and readiness activities are complete. The WDOH NOC Rev 1 (with WDOH comments incorporated) was submitted to RL on Friday, May 18, 2001. RCP requested that RL submit it to EPA and WDOH by May 24, 2001. There is a verbal agreement that WDOH will approve the NOC. *(No further status to be provided.)*

Issue: The NOC for the D Cell Pipe Trench delayed D Cell equipment size reduction planned to begin in April 2001.

Impact: D Cell work will continue to be delayed until the NOC is issued. D Cell delays will impact work in the pipe trench (August 2001), which will impact spent nuclear fuel shipments (July 2002).

Corrective Action: Current estimate is for the NOC to be issued by the end of May 2001, with potential to be delayed as far as July 2001.

Issue: The Nuclear Safety Management Rule (10 CFR Part 830) requires the submittal of compliant safety basis documentation.

Impact: A gap analysis will be required for all facility safety basis documents against the rule requirements. Identified gaps were to be closed and the safety basis documents submitted by April 2003. Implementation continues to divert resources from other safety basis activities.

Corrective Action: A Baseline Change Request (BCR) was submitted to provide funding for the gap analysis and to plan for actions to close gaps. Implementation of a DOE approved USQ process is complete, gap analysis documents have been prepared or initiated for most facilities. Based on gaps identified during the gap analysis safety basis documents will require revision. *(No further status to be provided.)*

EXTERNAL AND DOE ISSUES

Issue: The cultural resources review of the 300 Area water towers (skyline demolition) project concluded that demolition of water tower 3902A would have an adverse effect on preserving the history of Hanford. In a March 22, 2001, letter to DOE, the Washington Deputy State Historic Preservation Officer concurred with the review, and recommended that alternatives to the tower's demolition be explored.

Impacts: Preparations for water tower demolition have been proceeding uninterrupted, but a final decision was required before contract commitments were made to vendors in mid-May.

Corrective Action: The historical review/final decision has been made: approval was granted to proceed with demolition of 3902A tower. *(No further status to be provided.)*

DOE Requests

Issue: An opportunity exists for transfer of Pacific Northwest National Laboratory (PNNL) facilities into Project Baseline Summary TP-14, pending resolution of the current DOE-HQ guidance to EM (pipeline suspension). PNNL has funds for FY 2001/2002 Surveillance and Maintenance identified for transfer to FH, but these funds may no longer be available when the suspension ends.

Impact: Efficiencies realized through combining these facilities into TP-14 may be jeopardized.

Corrective Action: A Memorandum of Agreement (MOA) to begin the transfer process was approved by PNNL and FH, and transmitted to RL on 3/23/01. Pre-transfer activities for facilities are anticipated by June 30, 2001.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY01 COST IMPACT (\$1,000)	SCH	TECH	DATE To FH CCB	FH CCB APRVD	RL APRVD	CURRENT STATUS
FSP-2000-002	11/2/99	Mark-42 Project Completion	\$304		X	04/05/00			Additional funding requested Draft Prepared FH Approved 5/7/01 FH Approved 5/7/01 5/8/01 Reviewed by RCP Board 5/1/01 Delivered to FHCCB
FSP-2001-001	10/9/00	Baseline Adjustment to TP08	(\$496)		X				
FSP-2001-033	1/30/01	Increased Scope/Cost for 2714U Drums @ T Plant	\$644		X	5/1/01	5/7/01	N/A	
FSP-2001-044	3/22/01	Imple. of Nuclear Safety Rule 10CFR830	\$392		X		5/3/01	N/A	
FSP-2001-050	4/21/01	Revised Path Forward for 303-K Bldg. Demolition	\$100	X	X				
FSP-2001-051	5/1/01	Assignment of Unassigned Waste Sites - RCP	\$30		X				
ADVANCE WORK AUTHORIZATIONS									

KEY INTEGRATION ACTIVITIES

- Collaboration With the 324 B Cell Cybernetix Procurement Project Team and PNNL-** RCP and PNNL Robotics staff continued to interface regarding concurrent procurement contracts for robotic systems from Cybernetix of Marseille, France. RCP purchased a Cybernetix robotic system to support hot cell deactivation, and PNNL/Office of River Protection (ORP) purchased a system to support upgrades to the 200 Area tank waste transfer pits. RCP's process for addressing UL certification requirements helped to reduce the ORP procurement process and schedule. RCP's

robotic system arrived at Hanford on March 15, 2001. The PNNL/ORP robotic system arrived at Hanford on April 9, 2001. Lessons learned on both systems will continue to be shared between contractors. *(No further status to be provided.)*

- **340 Facility HEPA Filters Replaced - 340 Facility HEPA Filters Replaced** - The 340 Facility exhaust HEPA filters and prefilters were successfully replaced on schedule with the assistance of a Hanford site integrated team. The integrated team included employees from CH2M HILL Hanford Group, DynCorp Tri-Cities Services, Inc., the FH Plutonium Finishing Plant, FH Radiation Control, and the 300 Area RCP. *(No further status to be provided.)*