



# **Section I**

## ***200 Area Materials & Waste Management***

### **PROJECT MANAGERS**

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## INTRODUCTION

The 200 Area Materials and Waste Management consists of Project Baseline Summary (PBS) RL-CP02, Work Breakdown Structure (WBS) 3.3.2, except for ERDF.

NOTE: Unless otherwise noted, all information contained herein is as of the end of April 2002.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that one milestone was completed early.

## NOTABLE ACCOMPLISHMENTS

**Mixed Low Level Waste (MLLW) Treatment** — Received 42 cubic meters of macroencapsulated debris from ATG, Inc. for disposal in the mixed waste trench.

**Liquid Waste Processing** — Processed over 13.1 million gallons of wastewater through the 200 Area Effluent Treatment Facility (ETF) thus far in FY 2002 supporting a variety of generators, including the Environmental Restoration Contractor (200-UP-1 Groundwater). Successfully completed replacement of the ETF reverse osmosis membranes.

**Waste Encapsulation and Storage Facility (WESF) Operations** — Completed Beneficial Uses Shipping System (BUSS) cask inspection and testing necessary for Certificate of Compliance renewal. Completed re-etching and Quality Assurance verification of WESF capsule identification numbers.

**Plutonium Finishing Plant (PFP) Support** — The first three shipments including 44 drums of Sand, Slag and Crucible (SS&C) waste were received for storage in support of the Residues Project during April. Supported resolution of Defense Board issues related to the storage of a transuranic organic waste drum from the Solutions Project. The organic drum is scheduled for shipment to the Central Waste Complex in May. Provided support to PFP Facility Evaluation Board (FEB) evaluation in the areas of Transportation and Packaging and Waste Management.

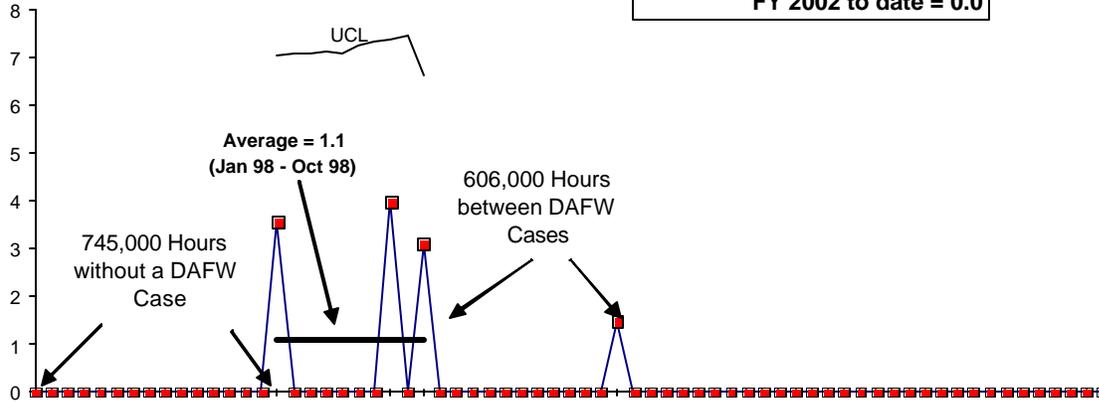
## SAFETY

At the end of April 2002, the project reached 3.6 million safe work hours. The last lost time injury occurred in October 1999. Fiscal year to date, there have been three OSHA recordable injuries, resulting in the Incident Rate (IR) standing at 0.8 at the end of March. The FH annual goal is 0.9. FY to date there have been 45 First Aid Only cases.

### Days Away From Work Case Rate

Cases per 200,000 hours

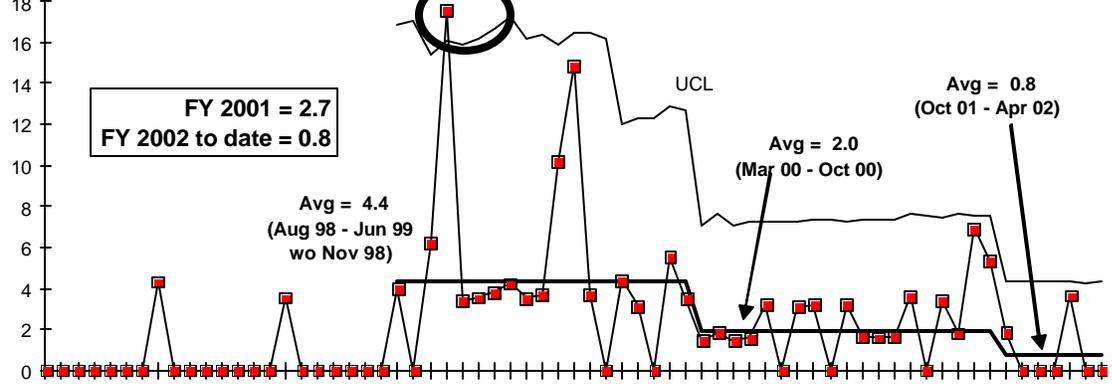
Project Safe Hours = 3,632,397  
FY 2001 = 0.0  
FY 2002 to date = 0.0



### OSHA Recordable Case Rate

Cases per 200,000 hours

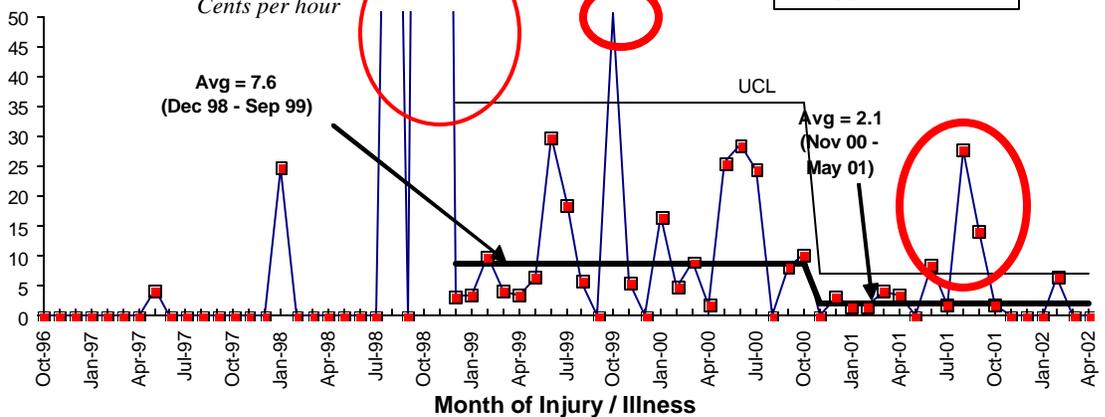
FY 2001 = 2.7  
FY 2002 to date = 0.8



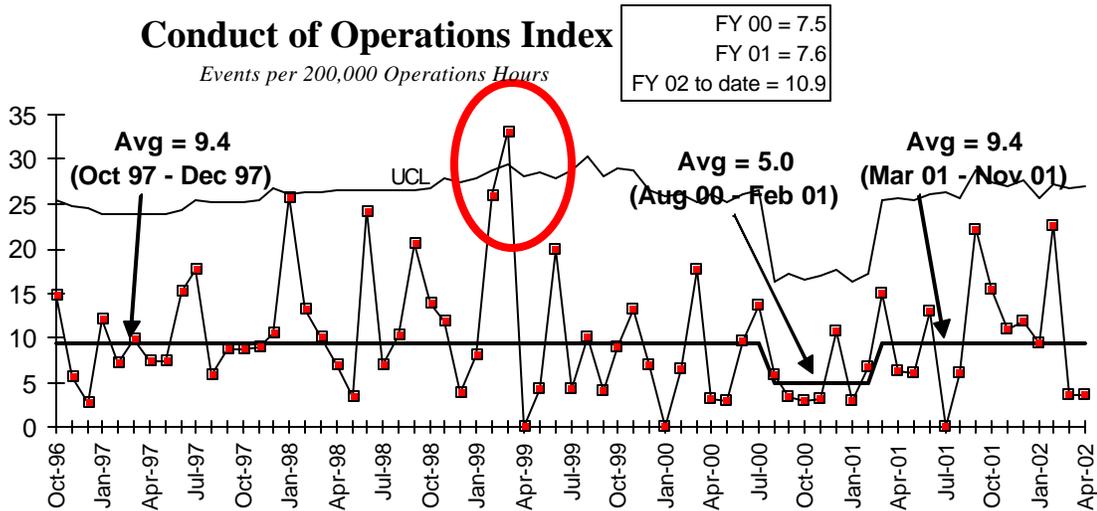
### DOE Safety Cost Index

Cents per hour

FY 2001 = 6.3  
FY 2002 to date = 1.2



## CONDUCT OF OPERATIONS



## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

No breakthroughs or opportunities for improvement are identified at this time.

## UPCOMING ACTIVITIES

**Accelerate Readiness to Receive SNF K Basin Sludge** — 1) Implement a recovery plan for the Readiness Assessment for movement of Shippingport (PA) fuel, 2) Support activities to receive and store K Basin sludge, and 3) Accelerate T Plant Canyon cell cleanout.

**MLLW Treatment** — Shipments scheduled in May should conclude returns of debris waste treated at ATG. Contract negotiations are progressing to allow additional non-thermal waste treatment during 4th quarter FY2002 and during FY2003. Efforts continue to secure technology demonstration funding to perform thermal desorption treatability tests at Perma-Fix.

**Waste Isolation Pilot Plant Waste Acceptance Criteria (WIPP WAC) Implementation** — The proposed revision of the WIPP WAC is required to be implemented by May 17, 2002. The revision requires significant changes in the non-destructive assay and transportation activities of the TRU Program affecting both WRAP and PFP TRU waste processing.

**TRU Program Recertification Audit** — The recertification audit of the Hanford TRU Waste Program is scheduled for June 24-28, 2002. The annual audit is required to maintain the certified status of Hanford's TRU Waste Program and retain the ability to certify and ship TRU waste to the Waste Isolation Pilot Plant.

**TRU Waste Retrieval** — Planning is underway for a TRU Retrieval mockup. The mockup will include clean drums and boxes in a configuration similar to the retrieval trenches, and will allow operations personnel to validate retrieval planning efforts prior to excavating TRU drums. Expect to incorporate the

Documented Safety Analysis (DSA) comments and receive the Safety Evaluation Report from RL approving the DSA by June 30, 2002.

**Plutonium Finishing Plant Support** — Continue to support residues processing with shipment of the new Sand, Slag and Crucible waste stream through FY 2003.

**300 Area Cleanup Support** — Continue support to the 324 Fuels Removal Project, 327 Facility Cleanout, and the 300 Area Accelerated Closure Project.

**Waste Encapsulation and Storage Facility (WESF) Operations** — Complete removal of chemical lines in the Aqueous Makeup Unit (AMU). Begin K-1 filter change. Support the accelerated capsule disposition initiative.

**Liquid Waste Processing** — Continue groundwater processing at the 200 Area Effluent Treatment Facility after completion of 242-A Cold Run Campaign. Two 242-A evaporator campaigns are scheduled for late summer.

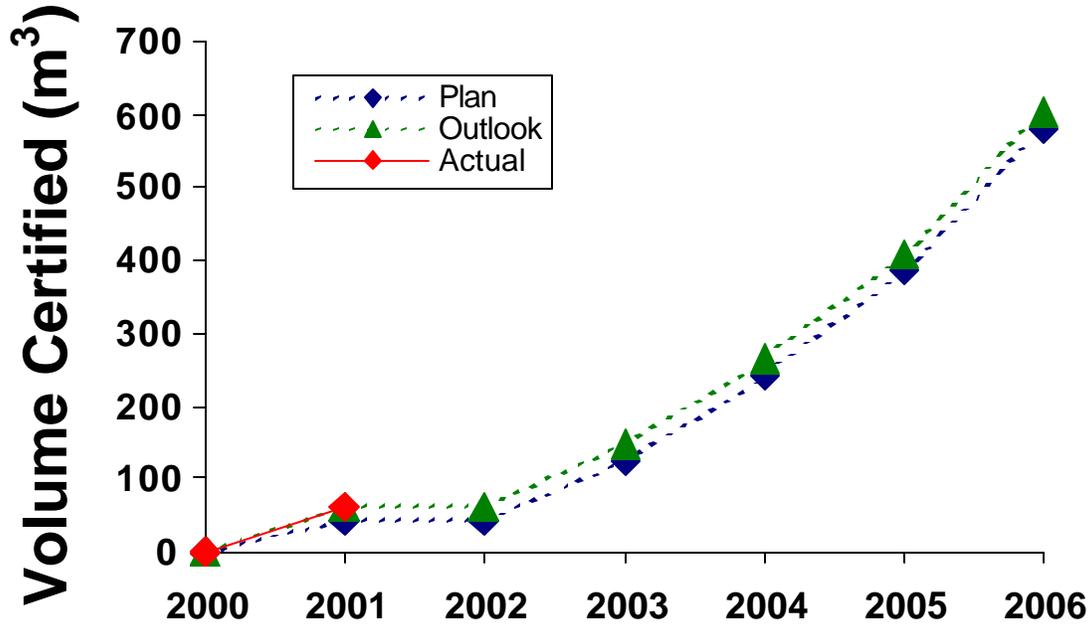
## MILESTONE ACHIEVEMENT FH Contract Milestones

Number	Milestone Title	Type	Due Date	Actual Date	Forecast Date	Status / Comment
M-19-00	Complete Treat/Disp 1,644 CM of CH-LLMW	TPA Enforceable	09-30-02	10-23-00	10-23-00	COMPLETE
M-7-1E	Complete T Plant preparation for storage of K Basins sludge	PI Base	10-30-02		12-31-02	On schedule for sufficient cell cleanout to support sludge storage.
M-7-2A	Complete ORR for K Basins Sludge Receipt	PI Base	10-30-02		10-30-02	ON SCHEDULE
M-91-12A	Treat 240 Cubic Meters by 12/31/2002	TPA Enforceable	12-31-02		12-31-02	TPA renegotiation scheduled to be completed in June 2002.
M-91-20	T Plant ready to rec. canister of K Basin floor pit sludge	TPA Enforceable	12-31-02		12-31-02	ON SCHEDULE
M-26-05J	Prep Biennial Tritium Treatment Tech Evaluation Report	TPA Enforceable	08-31-03		08-31-03	ON SCHEDULE
M-7-2B	Complete Readiness Assessment K Basins Canister & Fuel Sludge Receipts	PI Base	01-01-04		01-01-04	ON SCHEDULE
M-7-3B	De-Post T Plant Canyon as Airborne Radiation Area	PI Stretch	01-01-04		01-01-04	ON SCHEDULE

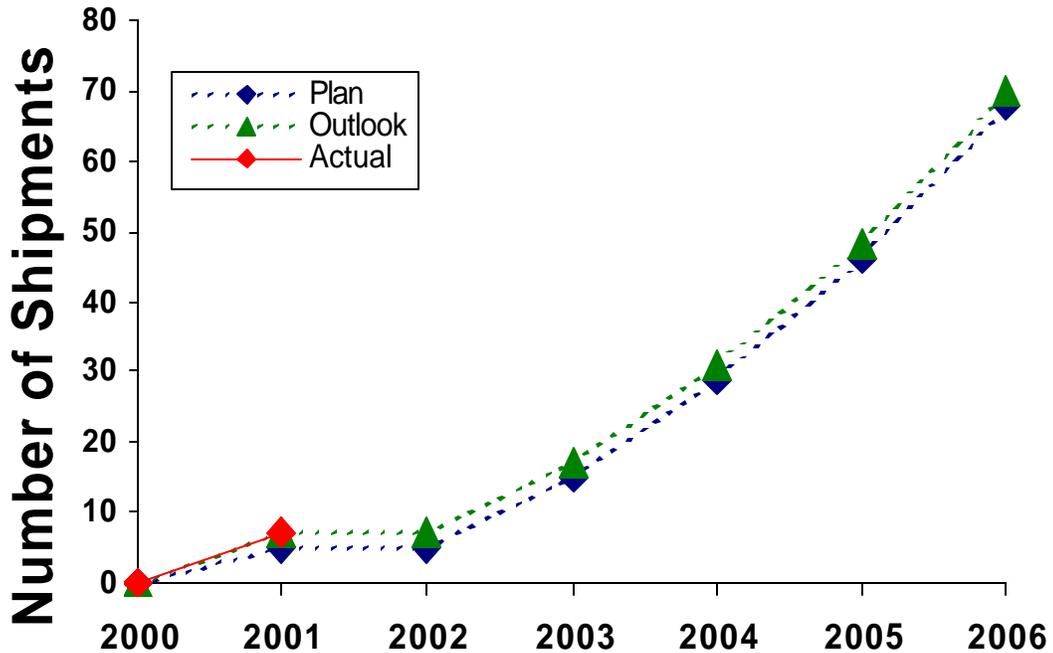
M-91-22	T Plant ready to rec. Canister & fuel wash sludge from K Basin	TPA Enforceable	02-29-04		02-29-04	ON SCHEDULE
M-91-07	Complete W -113 for Post 1970 CH TRU / TRUM Retrieval	TPA Enforceable	09-30-04		09-30-04	TPA renegotiation scheduled to be completed in June 2002.
M-1-2	Consolidate Sitewide SNF in 200 A Dry Storage	PI Base	02-28-05		02-28-05	ON SCHEDULE
M-26-05L	Prep Biennial Tritium Treatment Tech Evaluation Report	TPA Enforceable	08-31-05		08-31-05	ON SCHEDULE
M-5-2	Complete Thermal Treatment 600 m <sup>3</sup> MLLW by 12/31/05	PI Base	12-31-05		12-31-05	ON SCHEDULE
M-5-1B	Complete Treatment / Disposal 9820 m <sup>3</sup> of MLLW	PI Stretch	06-30-06		06-30-06	ON SCHEDULE
M-7-3C	Clear Remaining Stored Equipment from T Plant Canyon Deck	PI Stretch	06-30-06		06-30-06	ON SCHEDULE
M-4-1D	Retrieve 15,200 Suspect TRU Waste	PI Stretch	09-30-06		09-30-06	ON SCHEDULE
M-6-1A	Certify 580 m <sup>3</sup> of TRU waste	PI Stretch	09-30-06		09-30-06	ON SCHEDULE
M-6-1B	Complete 68 TRU Waste Shipments to WIPP	PI Stretch	09-30-06		09-30-06	ON SCHEDULE

## PERFORMANCE OBJECTIVES

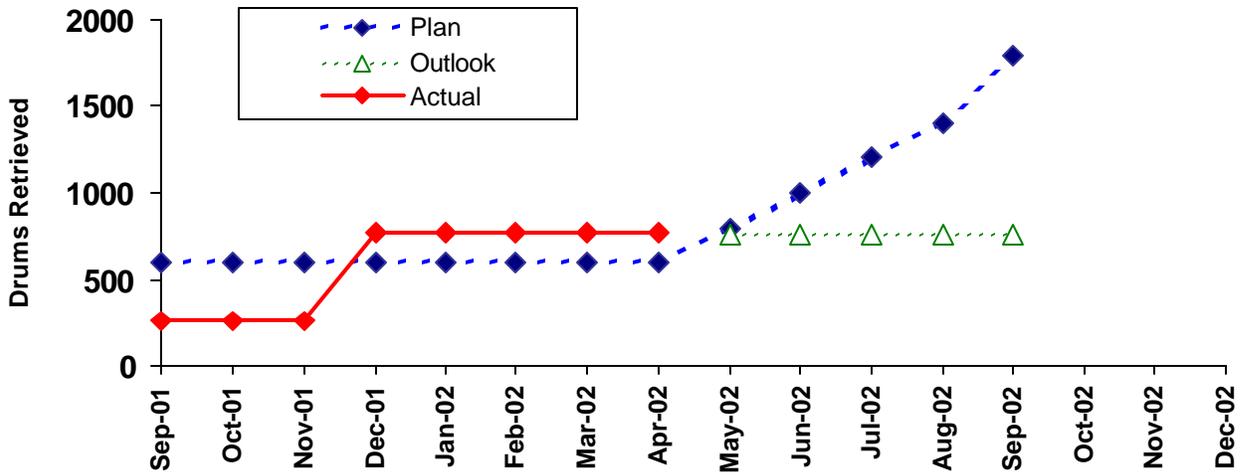
### CERTIFY TRU WASTE (FHI-M6)



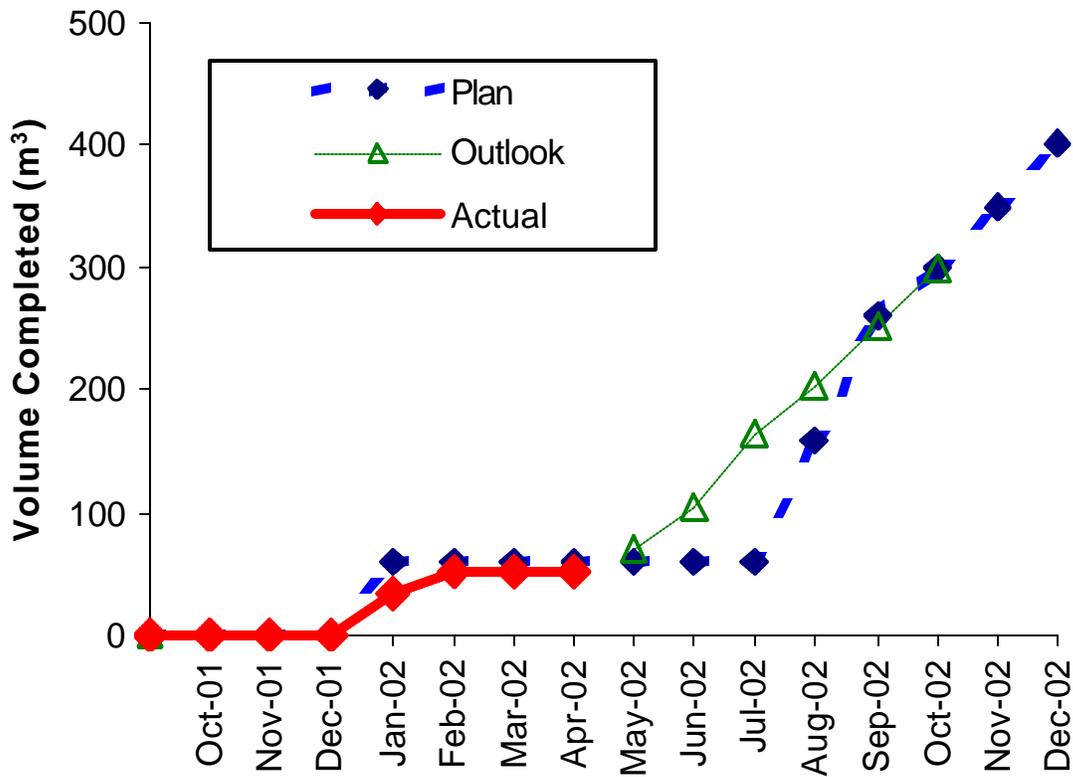
### SHIP TRU WASTE (FHI-M6)



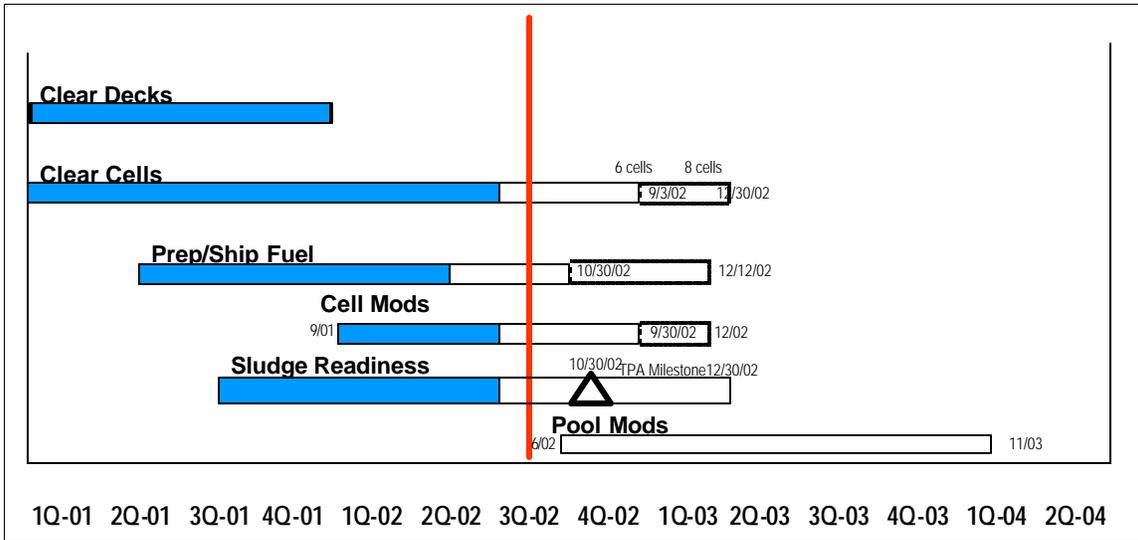
### RETRIEVE TRU WASTE (FHI-M4)



### TREAT AND DISPOSE MLLW (FHI-M5)



## ACCELERATE READINESS TO RECEIVE K-BASIN SLUDGE (FHI-M7)



## FY 2002 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FY TO DATE STATUS – (\$000)

		FYTD								
		BCWS	BCWP	ACWP	SV	%	CV	%	BAC	
PBS CP02	SW Storage & Disposal	\$ 5,775	5907	\$ 6,192	\$ 132	2%	\$ (285)	-5%	\$ 11,529	
WBS 3.3.2.1										
PBS CP02	MLLW Treatment	\$ 517	\$ 222	\$ 227	\$ (294)	-57%	\$ (4)	-2%	\$ 1,458	
WBS 3.3.2.2										
PBS CP02	SW Treatment	\$ 5,435	\$ 5,475	\$ 7,809	\$ 40	1%	\$ (2,334)	-43%	\$ 10,851	
WBS 3.3.2.3										
PBS CP02	TRU Program	\$ 7,031	\$ 7,268	\$ 6,477	\$ 237	3%	\$ 791	11%	\$ 13,337	
WBS 3.3.2.4										
PBS CP02	WESF	\$ 4,116	\$ 4,131	\$ 3,900	\$ 15	0%	\$ 231	6%	\$ 7,633	
WBS 3.3.2.5										
PBS CP02	200 A LWPF	\$ 8,399	\$ 8,624	\$ 8,154	\$ 225	3%	\$ 470	5%	\$ 15,836	
WBS 3.3.2.6										
PBS CP02	Project Management	\$ 11,213	\$ 11,034	\$ 9,849	\$ (179)	-2%	\$ 1,186	11%	\$ 19,158	
WBS 3.3.2.9										
<b>Total</b>		\$ 42,486	\$ 42,661	\$ 42,607	\$ 175	0%	\$ 54	0%	\$ 79,802	

### FY TO DATE SCHEDULE / COST PERFORMANCE

The \$0.2 million favorable schedule variance was primarily due to the progress on / completion of FY 01 carryover work scope and credit taken for the TRU Program for work completed in FY 2001. The favorable variance was offset by the T Plant Operational Readiness Review (ORR) for the spent fuel removal being stopped to resolve and implement assessment comments. Also, MLLW Treatment production is limited at ATG, Inc. while under Chapter 11.

The \$0.1 million favorable cost variance was primarily due to FY 2001 carryover workscope costing less than planned, contracts not being placed and credit taken for the TRU Program for work completed in FY 2001. Increased costs for the T Plant spent fuel removal ORR preparation and assessment corrective actions offset the favorable variance.

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: (+\$0.2M)

#### MLLW Treatment — 3.3.2.2/CP02

**Description/Cause:** The unfavorable schedule variance is a result of treatment production being limited at ATG while under Chapter 11.

**Impact:** The TPA milestone M-91-12A is unachievable.

**Corrective Action:** Some non-thermal activities have been identified and are proceeding. Formal notification to RL that TPA milestone M-91-12A is unachievable was submitted February 11, 2002.

## Cost Variance Analysis: (+ \$0.1 M)

### SW Treatment — 3.3.2.3/CP02

**Description/Cause:** The unfavorable cost variance is due to the increased costs for the T Plant Readiness Assessment preparation and assessment corrective actions, offset by FY 2001 carryover workscope costing less than plan.

**Impact:** T Plant will be over-run at year end.

**Corrective Action:** Actions have been implemented to resolve cost impacts to the WM Project.

### TRU Program— 3.3.2.4/CP02

**Description/Cause:** The favorable cost variance is due to BCWP taken in October for three WIPP shipments completed in FY 2001 and FY 2001 carryover work scope costing less than plan.

**Impact:** There is no significant project impact at this time.

**Corrective Action:** No corrective action needed.

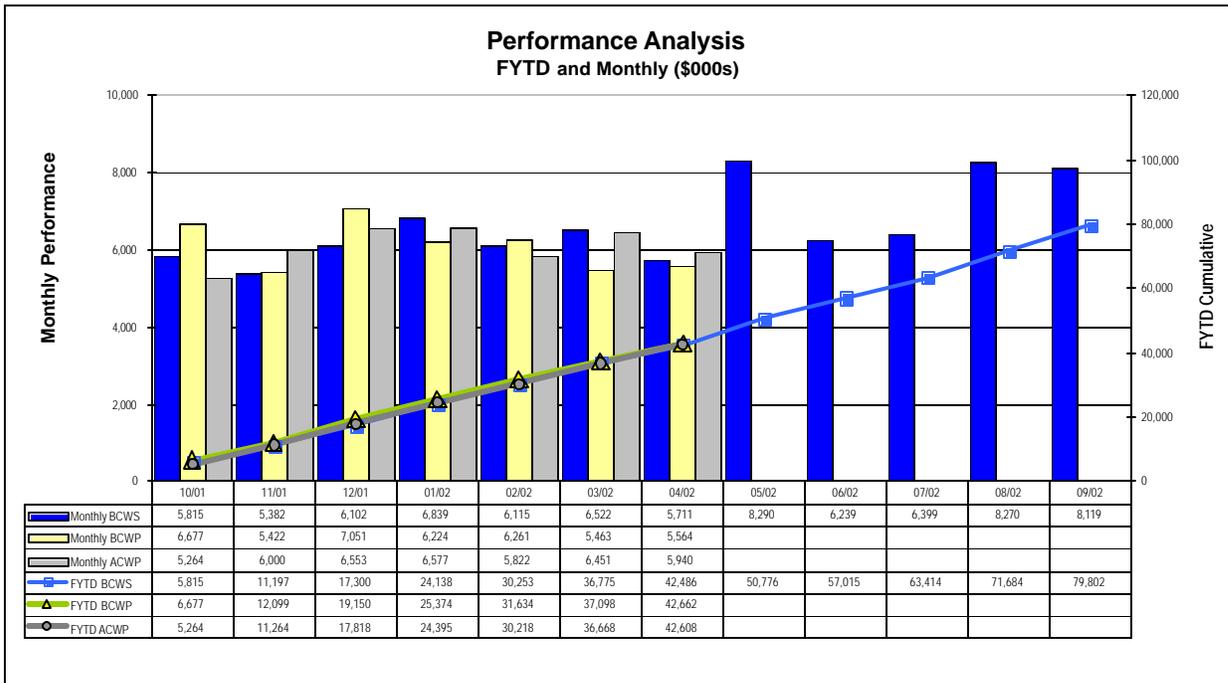
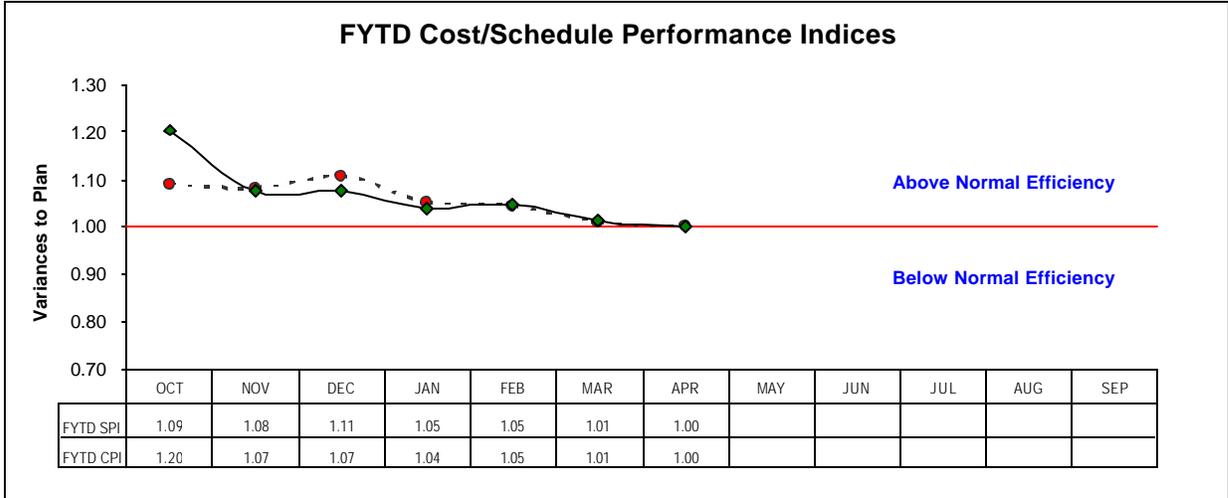
### Project Management — 3.3.2.9/CP02

**Description/Cause:** The favorable cost variance is a result of contract work not being required for the Solid Waste Environmental Impact Statement and the Canyon Disposition Initiative; labor efficiencies; and a passback of forfeited fee.

**Impact:** This results in a savings for the Waste Management.

**Corrective Action:** No corrective action needed.

## COST / SCHEDULE PERFORMANCE (MONTHLY AND FYTD)



## FUNDS MANAGEMENT

### FYTD FUNDS VS. SPENDING FORECAST (\$000)

	FH Funds Reallocation	FYSF	Variance
<b>3.3.2 Waste Management</b>			
CP02	\$ 80,879	\$ 80,954	\$ (75)
Total	\$ 80,879	\$ 80,954	\$ (75)

**NOTES:** (1) FH Reallocation reflects an FYSF adjusted for scope deletions, deferrals, and identified savings to address funding shortfalls, additional unplanned scope, and cost increases.

## ISSUES

### Technical Issues

**Issue:** Recovery of T Plant Readiness to move Shippingport Fuel.

**Impact/Status:** A recovery plan has been developed and implemented. Key elements include enhanced staffing, increased matrixed support, and the use of onsite and offsite mentors.

**Corrective Actions:** Management Self-Assessment (MSA) in progress. Declare readiness for contractor operational readiness review to be conducted in June 2002. (J. A. Van Vliet).

**Issue:** T Plant Canyon Cell Cleanout and Modification Progress.

**Impact/Status:** Cell cleanout is on schedule. Cells 3L, 10L, and 15L have been cleaned out. Sludge storage level support systems have been placed in Cells 3L and 10L. Secondary containment systems are scheduled to be put into the two cells the week of May 27.

**Corrective Actions:** Complete modification, including sludge secondary containment systems, of first cell by June 30, 2002 (B. V. Burrow/ W. W. Rutherford). Utilize overtime to maintain progress (B. V. Burrow) until second shift operations implemented in August 2002 (B. V. Burrow/F. A. Blowe, Jr.).

### External Issue

**Issue:** Lack of MLLW Treatment Capacity.

**Impact/Status:** ATG's financial status has adversely impacted production rates. Alternative treatment plans must be identified.

**Corrective Actions:** Working with ATG to develop a new 4<sup>th</sup> quarter FY 02 contract with option for FY 03 based on repricing by ATG. LLW compaction contract will complete this fiscal year (W. J. Hoogendoorn/L. T. Blackford). Evaluate use of DOE Broad Spectrum contract by May 31, 2002 (L. T. Blackford). Continue onsite treatment/disposal efforts (L. T. Blackford).

## DOE Requests

**Issue:** Buried TRU Drum Retrieval Behind Schedule.

**Impact/Status:** Retrieval Documented Safety Analysis submitted; discussions with RL ongoing. DSA, Safety Evaluation Report and Readiness Review level critical to schedule.

**Corrective Actions:** Implement staffing and procurement decisions based on April 18, 2002 Fiscal Year Spending Forecast (R. D. Greenwell). Resolve DSA comments and incorporate outcome in Project Plan (R. D. Greenwell).

**Issue:** Resolve CWC Fire Hazards Analysis (FHA) and Safety Basis Concerns Identified in Fire Protection System Assessment

**Impact/Status:** RL reported three significant issues from the assessment related to: 1) sprinkler systems, 2) authorization basis document deficiencies, and 3) disconnects between FHA and safety analyses. Unreviewed Safety Question (USQ) evaluations have been completed and interim actions implemented.

**Corrective Actions:** Complete analysis of the final assessment report and submit a Justification for Continued Operations (JCO) by May 22, 2002. (R. D. Greenwell).

## REGULATORY/DOE ISSUES

Nothing to report at this time.

## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR No./ Level 4 WBS	Date Originated	Description	Impact		Date Approved	Status
			Days	Dollars (\$000s)		
CP02-02-010	4/2/02	CWC Unvented Drums		65	4/3/02	Implemented in April
CP02-02-011	4/16/02	CWC Fire Protection Assessment		83	4/16/02	Implemented in April
FH-02-006	2/27/02	BPA Electrical Rate Increase		285	4/19/02	Implemented in April
FH-02-011	2/28/02	10CFR830 Phase II compliance		1,700	5/9/02	Pending