



# **Section B:1**

## ***Waste Management***

### **PROJECT MANAGERS**

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## SUMMARY

Waste Management (WM) consists of the Solid Waste Storage and Disposal, Project Baseline Summary (PBS) WM03, Work Breakdown Structure (WBS) 1.2.1; Solid Waste Treatment, PBS WM04, WBS 1.2.2; Liquid Effluents - 200 Area, PBS WM05, WBS 1.2.3.1; and the Waste Encapsulation and Storage Facility, PBS TP02, WBS 1.4.2.

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 included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope remains in Waste Management. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the WM Project, which has the majority of the work scope and funding.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, RL) shows all four milestones completed early.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of July 31, 2001. Other data is updated as noted.

## NOTABLE ACCOMPLISHMENTS

**Accelerate Readiness to Receive Spent Nuclear Fuel (SNF) K Basin Sludge** - A cost effective path forward was finalized for removal of the two PUREX towers from T Plant. Final preparations were made for the field portion of the Contractor Operational Readiness Review (ORR) to commence August 27, 2001.

**Mixed Low Level Waste (MLLW) Treatment** - The shipment of 51 cubic meters (m<sup>3</sup>) of solidified chromate solutions was completed to ATG for stabilization treatment. The waste was received into the Central Waste Complex (CWC) in 1992 from the Puget Sound Naval Shipyard. ATG has begun treating the waste through its stabilization process and expects to be completed in early September. Approval was received to ship three additional loads of hazardous debris to ATG for macro-encapsulation this fiscal year.

**TRU Waste Program Production** - Fiscal Year to Date (FYTD) production through July 2001: 764 Nondestructive Examination (NDE); 793 Nondestructive Assay (NDA); 343 Headspace Gas Analysis; 81 Glove box Repackaging; 16 Visual Examinations (VE); and 64.4 m<sup>3</sup> certified. The seventh and final planned shipment to the Waste Isolation Pilot Plant (WIPP) for FY 2001 was completed in August.

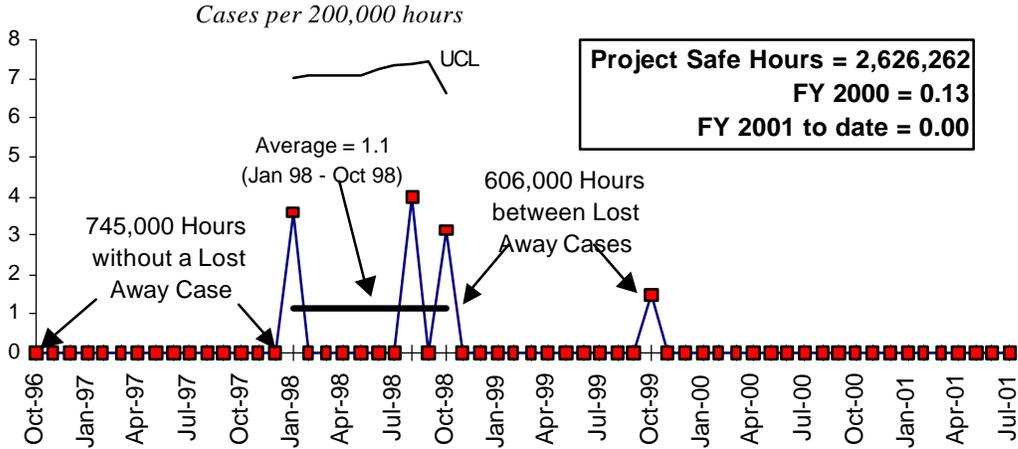
**Liquid Waste Processing** - From October 1, 2000, through August 20, 2001, 24.0 million gallons of wastewater were processed through the 200 Area Effluent Treatment Facility supporting the Environmental Restoration Contractor 200-UP-1 Groundwater. The Liquid Effluent Retention Facility has received over 154,000 gallons of wastewater through the Effluent Treatment Facility load-in facility via tankers. Also, the rebuilt thin film dryer rotor was installed in the 200 Effluent Treatment Facility.

**Support to River Corridor Project** - Transport and disposal of Remote-Handled Low Level Waste Hittman liners from the 324 D Cell commenced on August 15, 2001. The Sampling Analysis Plan (SAP) was developed and implemented for characterization of the two water towers in the 300 area.

## SAFETY

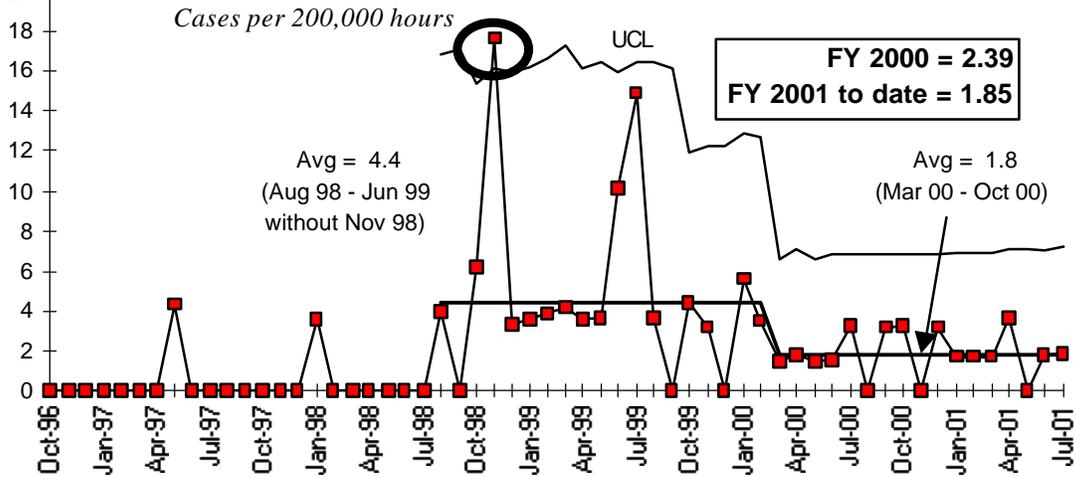
The Waste Management Project (WMP) has achieved 2.6 million hours without a lost away workday. During July, there were two OSHA Recordable Cases reported.

### Lost Away Workday Case Rate



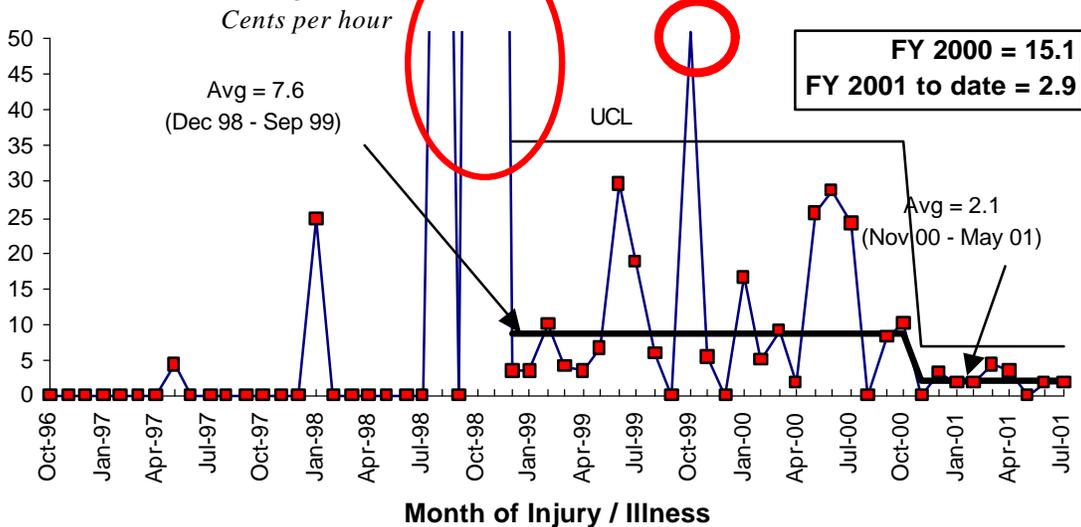
Green

### OSHA Recordable Case Rate



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### DOE Safety Cost Index



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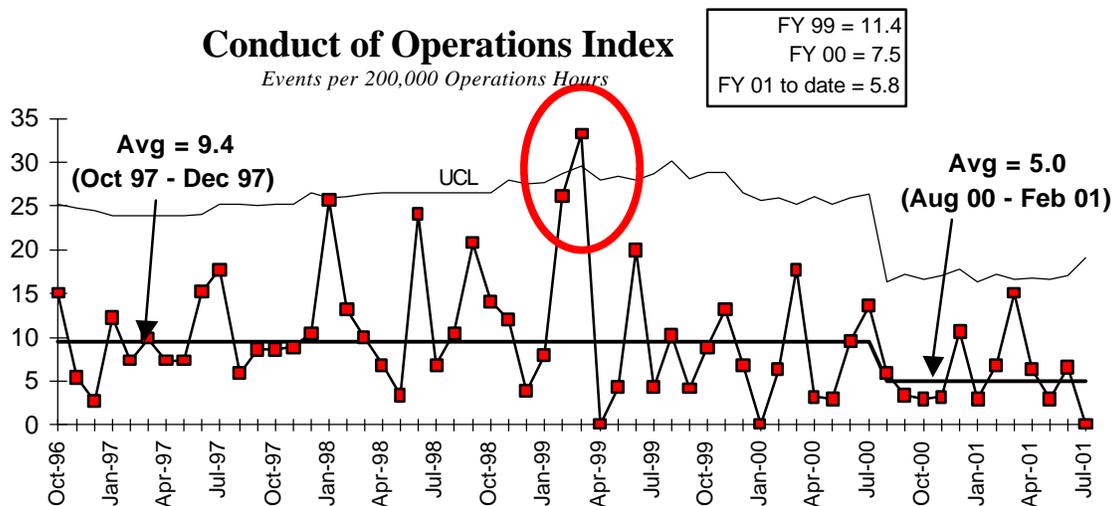
## ISMS STATUS

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The WMP Voluntary Protection Plan (VPP) Steering Committee completed an employee survey concerning implementation of VPP tenets across the project. The data from the survey was collected, and provided to FH Safety personnel for statistical evaluation and the development of graphic displays of the information. Two members of the VPP Steering Committee attended the national VPP Participants Association conference August 27-30, 2001, to obtain information and ideas about VPP implementation strategies being used across the DOE complex as well as in commercial industry.

## CONDUCT OF OPERATIONS

Green



## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

Nothing to report at this time.

### Opportunities for Improvement

Nothing to report at this time.

## UPCOMING ACTIVITIES

**Accelerate Readiness to Receive Spent Nuclear Fuel K Basin Sludge** - 1) Complete Contractor ORR, 2) complete removal of four pieces of major equipment, and 3) initiate T Plant Canyon cell cleanout.

**MLLW Treatment** - ATG is continuing preparations for its thermal treatment unit Demo Tests.

**TRU Waste Retrieval** - Mobilizing for in-trench start August 27, 2001. Re-planning buried drum start-up based on SER conditions. March 2002 remains the target date.

**TRU Recertification Audit** - Respond as required to the Carlsbad DOE review of the corrective action plans prepared in response to the Recertification Audit.

**TRU NDA Performance Demonstration Cycle** - The WIPP NDA PDP cycle is underway at the Waste Receiving and Processing (WRAP) facility. The report of NDA results is due to be submitted by August 31, 2001.

**Liquid Waste Processing** - Continue groundwater processing at the 200 Area Effluent Treatment Facility.

**Nuclear Materials Stabilization (NMS) Project Support** - Continue to receive waste in support of Hanford ash processing through November 2001.

**Support to RCP** - Continue shipment and placement of D Cell Hittman liners from the 324 Facility in the Low Level Burial Ground (LLBG). Support the removal of a Curium/Americium source from the 327 Facility. Support completion of the uranium disposition projects. Support removal of the water towers and disposal of the 303K building.

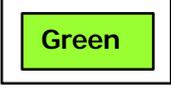
**Waste Encapsulation and Storage Facility (WESF) Operations** - Complete Hot Cell lay-up in September 2001. Begin capsule etching in October 2001.

**Land Disposal Restrictions (LDR) Report** - The Washington State Department of Ecology (Ecology) extended its comment period on the Report under the Tri-Party Agreement by 45 days and comments are now expected in late September. A lengthy Ecology LDR audit is currently beginning and is projected to last into October. WMP support will be required for this effort, although the focus and scope of the audit has not yet been communicated by Ecology.

## MILESTONE ACHIEVEMENT

M ILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	4	0	0	0	0	0	0	4
DOE-HQ	0	0	0	0	0	0	0	0
FO	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	0	0	0
Total Project	4	0	0	0	0	0	0	4

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.

Tri-Party Agreement / EA Milestones		
Number	Milestone Title	Status
M-91-13 (A1C-01-001)	Initiate Disposal of CH-LLWM	Due 06/30/01 – Completed September 15, 1999 
M-91-18 (WMP-01-001)	Transmit T Plant Sludge Storage Conceptual Design to Ecology	Due 06/29/01 – Completed June 11, 2001 
M-26-01K	Annual Hanford LDR Report	Due 06/30/01 – Completed June 28, 2001 
M-26-05H (WMH-00-006)	Prep Biennial Tritium Treatment Technology Evaluation report	Due 08/31/2001 – Completed July 25, 2001, with RL transmittal to Ecology and Environmental Protection Agency (EPA). FH transmitted the report to RL on July 13, 2001. 
DNFSB Commitments		
None.		

## 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 – 0

FY 1999 Overdue – 1

TRP-98-709	RL	Complete Hot Cell Deactivation WESF Facility (A-E)	03/31/99	09/30/01
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**Cause:** This milestone is not complete due to not being supported at the current funding level.

**Impact:** No overall impact is expected.

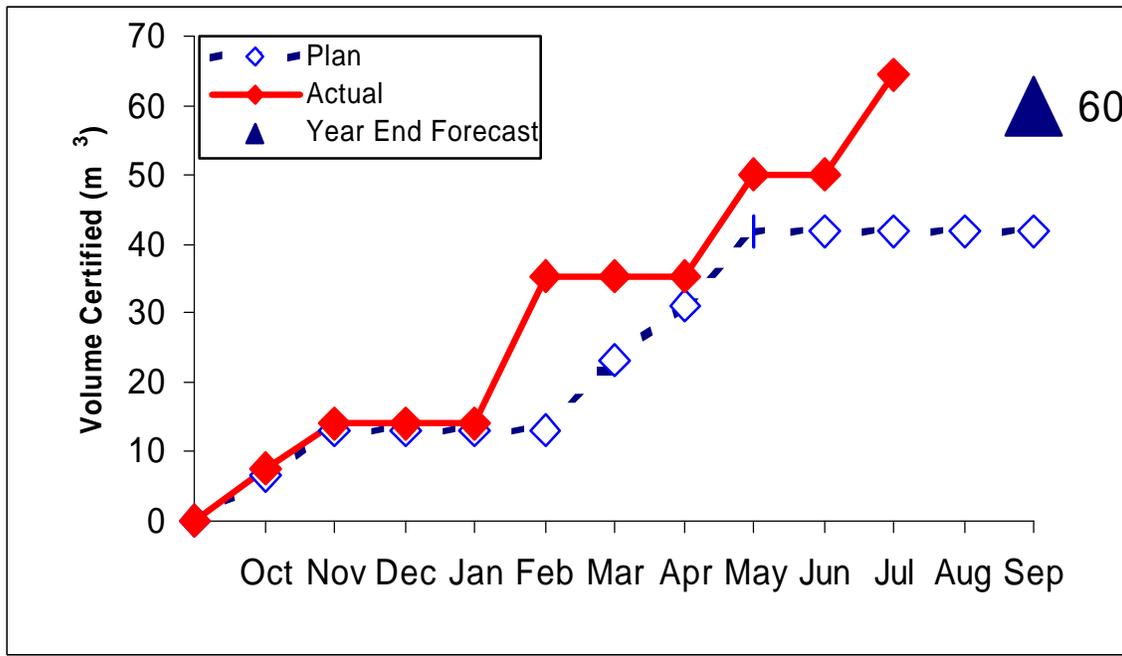
**Corrective Action:** Funding for this work scope [Return-on-Investment (ROI)] has been identified and a new forecasted completion date of September 30, 2001 established.

FY 2002 Tri-Party Agreement / EA Milestones		
Number	Milestone Title	Status
Nothing to report at this time.		
DNFSB Commitments		
Nothing to report at this time.		

## PERFORMANCE OBJECTIVES

### CERTIFY TRU WASTE

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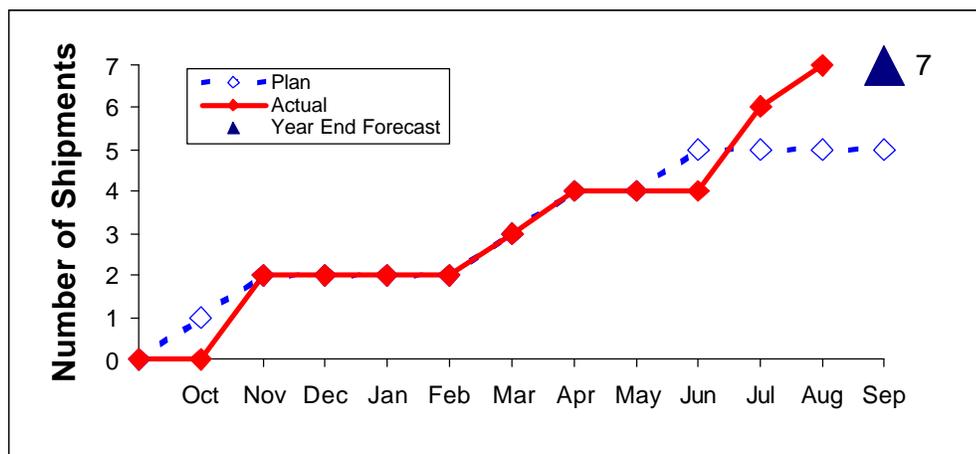


FISCAL YEAR 2001

Ahead of schedule (64 m<sup>3</sup> certified).

### SHIP TRU WASTE

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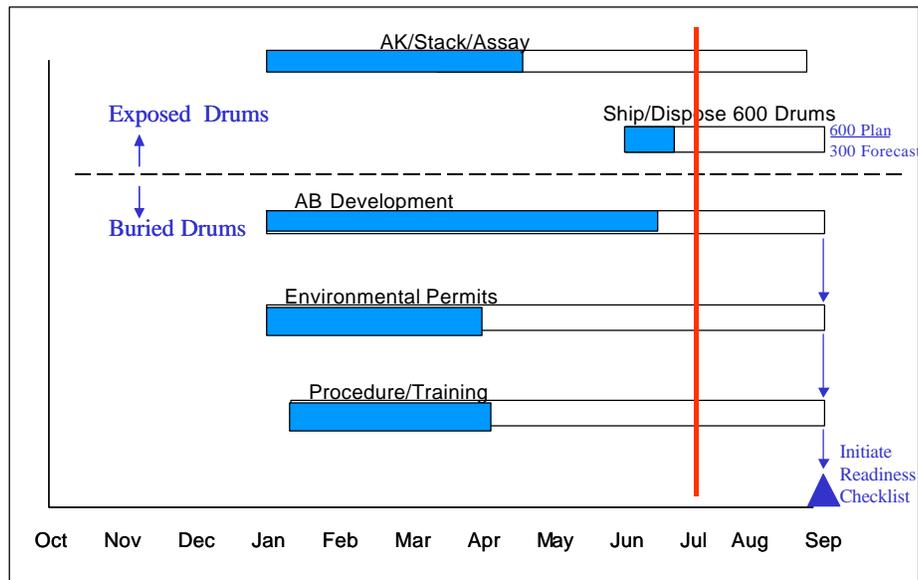


FISCAL YEAR 2001

Seven shipments complete as of the end of August.

## RETRIEVE TRU WASTE

Yellow

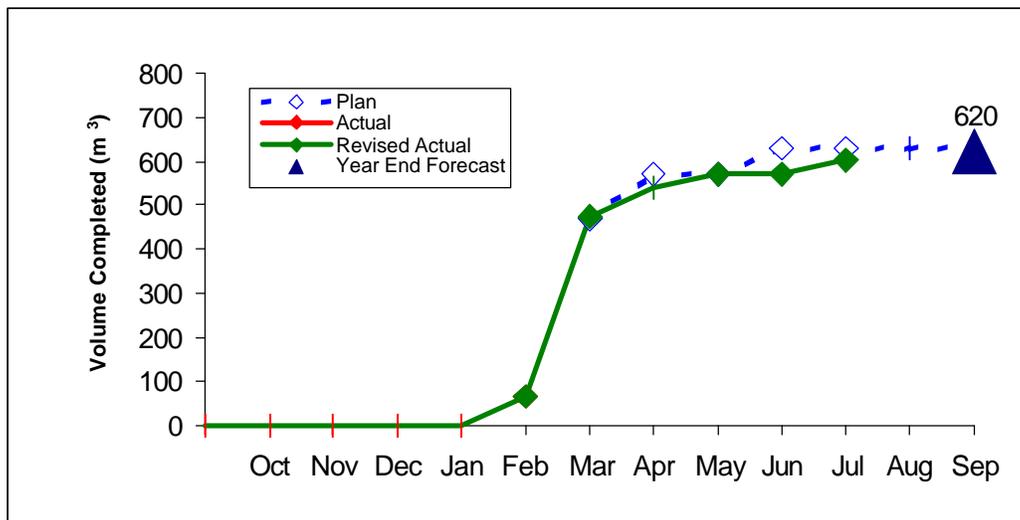


Behind schedule.

- SER received August 15, 2001. Mobilizing for in-trench start August 27, 2001. Recovery in the first quarter of FY 2002.
- Re-planning buried drum start-up based on SER conditions. Target remains March 2002.

## TREAT AND DISPOSE MLLW

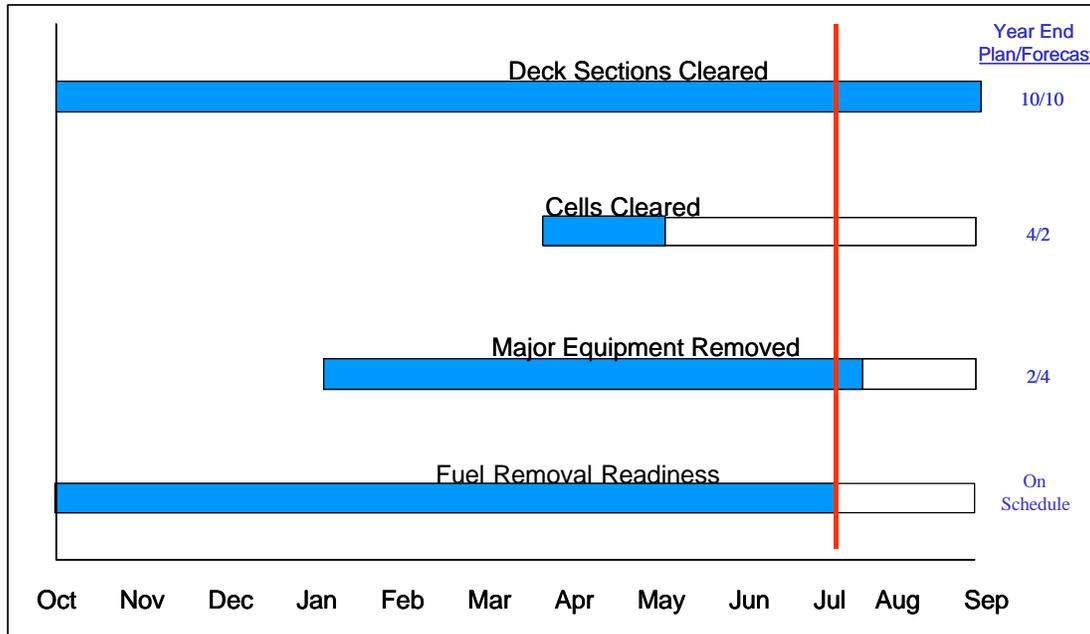
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On schedule. Actuals through mid-August are 622 m<sup>3</sup> and a year end forecast of 685m<sup>3</sup>.

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## ACCELERATE READINESS TO RECEIVE K-BASIN SLUDGE



### FISCAL YEAR 2001

- Clear ten deck sections – complete.
- Clear four cells – behind schedule; recovery beginning in the first quarter of FY 2002.
- Remove four major pieces of equipment – ahead of schedule; to be completed by September 30, 2001.
- Fuel removal readiness – ORR field start August 27, 2001; fuel movement on schedule for November 12, 2001 start.

## FY 2001 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS – (\$000)

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By PBS		FYTD								
		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
PBS WM03 WBS 1.2.1	Solid Waste Storage & Disposal	\$ 23,844	\$ 23,728	\$ 19,480	\$ (116)	0%	\$ 4,248	18%	\$ 29,655	\$ 25,299
PBS WM04 WBS 1.2.2	Solid Waste Treatment	\$ 31,166	\$ 30,278	\$ 34,726	\$ (888)	-3%	\$ (4,448)	-15%	\$ 39,963	\$ 42,840
PBS WM05 WBS 1.2.3	Liquid Effluents - 200/300 Area	\$ 21,584	\$ 21,486	\$ 19,250	\$ (98)	0%	\$ 2,235	10%	\$ 26,540	\$ 24,443
PBS TP02 WBS 1.4.2	WESF	\$ 8,380	\$ 8,378	\$ 8,126	\$ (2)	0%	\$ 252	3%	\$ 10,364	\$ 10,068
<b>Total</b>		<b>\$ 84,974</b>	<b>\$ 83,870</b>	<b>\$ 81,582</b>	<b>\$ (1,105)</b>	<b>-1%</b>	<b>\$ 2,287</b>	<b>3%</b>	<b>\$ 106,522</b>	<b>\$ 102,650</b>

\* Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM).  
Note: Above data includes RL contract for Steam.

## FY TO DATE SCHEDULE / COST PERFORMANCE

There is no significant schedule variance. The favorable cost variance is primarily due to vacancies and staff on leave in the Liquid Effluents 200/300 Areas.

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: (-\$1.1M)

#### **Solid Waste Storage & Disposal — 1.2.1/ WM03**

**Description /Cause:** The unfavorable schedule variance of \$0.1M (0 percent) was within the established threshold.

**Impact:** No Impact.

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

#### **Solid Waste Treatment — 1.2.2/ WM04**

**Description /Cause:** The unfavorable schedule variance of \$0.9M (3 percent) was within the established threshold.

**Impact:** No Impact.

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

#### **Liquid Effluents — 1.2.3.1/ WM05**

**Description /Cause:** The unfavorable schedule variance of \$0.1M (0 percent) was within the established threshold.

**Impact:** No Impact.

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

#### **WESF — 1.4.2/ TP-02**

**Description /Cause:** The unfavorable schedule variance of \$0.0M (0 percent) was within the established threshold.

**Impact:** No Impact.

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

### Cost Variance Analysis: (+\$2.3M)

#### **Solid Waste Storage and Disposal — 1.2.1/WM03**

**Description and Cause:** The favorable cost variance within WM03 is due to the FY 2000 fee accrual reversal, labor underruns due to involuntary reductions of force and restricted hiring, indirect variance distribution, and savings generated from the WM Program Management Account transfer from indirect to direct.

**Impact:** None.

**Corrective Action:** FY00 unearned fee has been used to fund the ATG settlement. A favorable yearend variance is forecasted.

#### **Solid Waste Treatment — 1.2.2/WM04**

**Description and Cause:** The unfavorable cost variance within WM04 is due to a contract modification that required payment to ATG upon shipment of waste, rather than the previous agreement of payment on return of waste. The prepayment caused a large variance. Also contributing to the variance is the settlement of claims by ATG.

**Impact:** None.

**Corrective Action:** A Baseline Change Request (BCR) was approved at the end of July and will be implemented in the August baseline. The pre-payment variance will be eliminated as waste is returned from ATG.

**Liquid Effluents — 1.2.3/WM05**

**Description and Cause:** The favorable cost variance within WM05 is primarily due to labor underruns, reduced sample analyses, indirect variance distribution, and a reduced need for crane and rigging support.

**Impact:** None.

**Corrective Action:** Liquid Effluents is forecasting a favorable year-end cost variance.

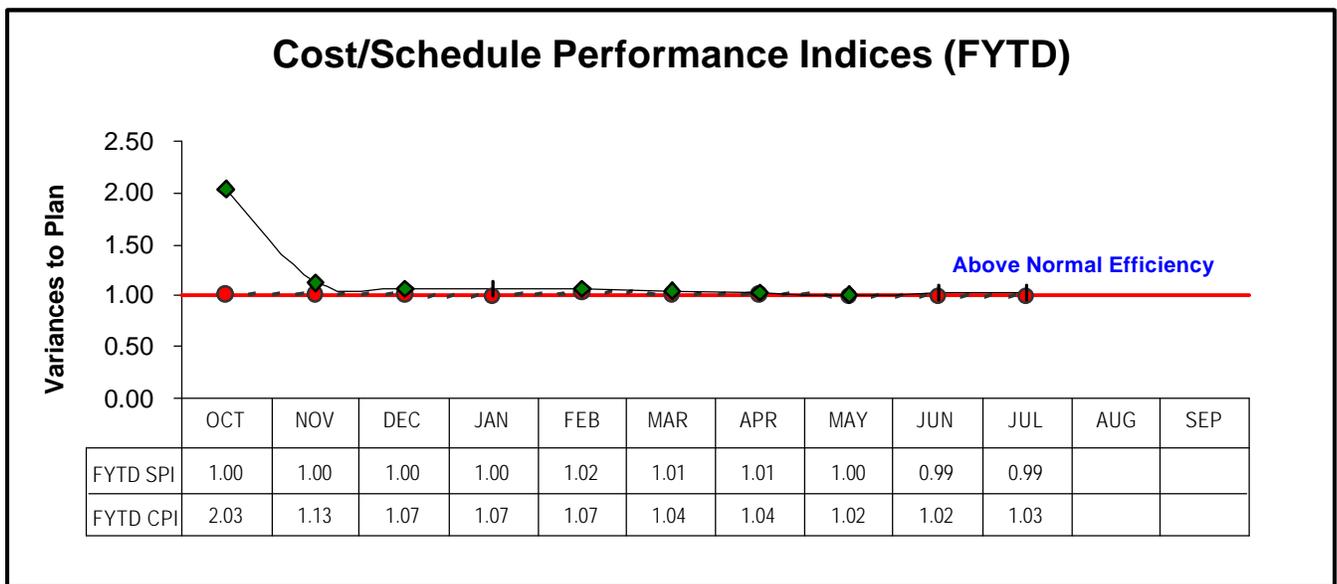
**WESF — 1.4.2/TP02**

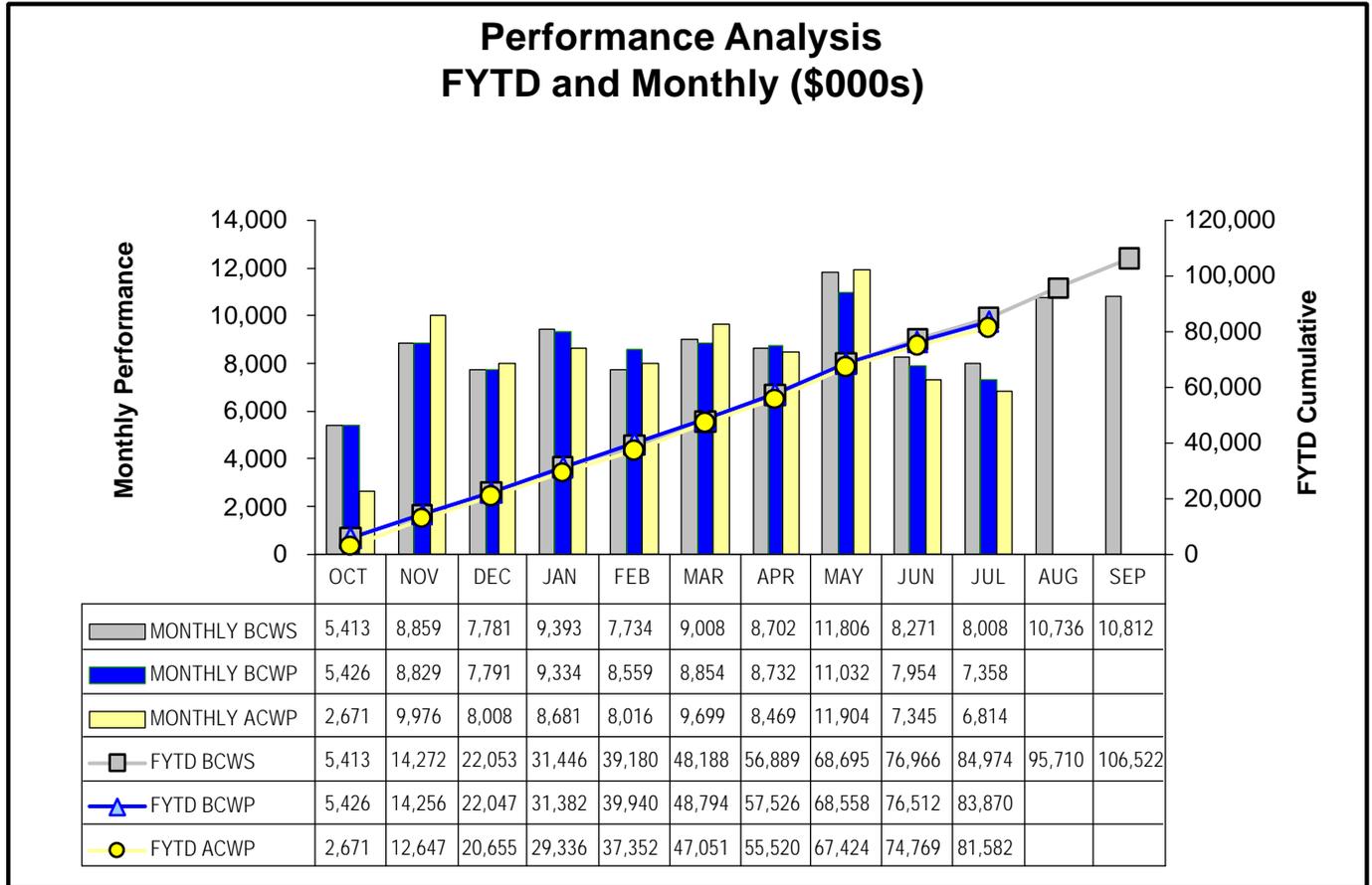
**Description and Cause:** The favorable \$0.3M cost variance within TP02 was within the established threshold.

**Impact:** None.

**Corrective Action:** None.

## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)





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

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	Funds	FYSF	Variance
<b>1.2 Waste Management</b>			
TPO2, WM03-WM05			
Post 2006      - Operating	\$ 98,580	\$ 94,716	3,864
<b>Total</b>	<b>\$ 98,580</b>	<b>\$ 94,716</b>	<b>\$ 3,864</b>

[Status through August 2001]

NOTE: Includes 300 Area Liquids and RL costs.

## ISSUES

### Regulatory / Technical / External / DOE Issues

Nothing to report at this time.

### DOE Requests

RL support requested to complete the RL ORR by November 5, 2001, and to resolve ORR pre-start conditions in a compressed time frame.

## BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY01 COST IMPACT \$000	S C H	T E C H	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
WM-2001-027	6/12/2001	ATG Settlement	\$3,608			6/21/2001	6/25/2001	07/28/01	Approved
WM-2001-031	8/7/2001	MO-720 Roof Repairs	\$158			8/13/2001	TBD	NA	Pending
WM-2001-032	8/7/2001	Macroencapsulation of Debris Waste	\$225	X		8/13/2001	8/16/2001	NA	Approved
WM-2001-034	6/13/2001	Risk Analysis/Overpack drums	\$117		X	8/13/2001	8/16/2001	NA	Approved
ADVANCE WORK AUTHORIZATIONS									

## KEY INTEGRATION ACTIVITIES

- **SNF Project Support** — Prepare T Plant to receive SNF K-Basin sludge.
- **Liquid Effluents** — Continue support of UP-1 Groundwater treatment at the 200 Area Effluent Treatment Facility.
- **RCP Support** — Continue support to RCP for the removal of waste from the 324 and 327 buildings as well as removal of uranium elements and excess facilities from the 300 area.
- **NMS Project Support** — Continue support to the NMS Project for the removal of waste from the Plutonium Finishing Plant.