

SUMMARY

The Spent Nuclear Fuel (SNF) mission consists of the Spent Nuclear Fuel Project WBS 1.3.1.1 (Project Baseline Summary [PBS] WM01) and the subsequent Canister Storage Building (CSB) Operations Project WBS 1.3.2.1 (PBS WM02), which doesn't start until FY 2004.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of May 31, 2000. All other information is as of June 19, 2000.

The second shipment of six Multi-Canister Overpacks (MCOs) was received from Joseph Oat, Inc. ahead of schedule. An additional receipt of eight MCOs is expected to be delivered to the Hanford Site June 22, 2000, which would bring the total of MCOs received to 18. Fabrication of the MCO baskets continued at the Hanford Site.

Fiscal year-to-date milestone performance (EA, DOE-HQ, and RL) shows that three out of four milestones (75 percent) were completed on or ahead of schedule and one milestone was completed late.

The Milestone Achievement details, found following cost and schedule variance analysis, which provides further information on all milestone types.

ACCOMPLISHMENTS

- Since October 2, 1999 the Project has achieved 1,200,000 safe work hours without a lost time incident.
- An additional six MCOs were delivered to the Hanford Site ahead of schedule.
- Tri-Party Agreement (TPA) Milestone M-034-05-T01, *Submit DOE Approved Report Debris to Ecology/EPA*, was submitted on May 22, 2000 completing this Milestone ahead of schedule.
- TPA Change Request, M-34-00-01, *Spent Nuclear Fuel Project – Sludge Acceleration Strategy*, was approved by Ecology and the Environmental Protection Agency on May 23, 2000.
- 114 of the 127 assessments needed for the Phase 3 Readiness Assessment have been completed. Of the 622 assessments needed for the Operational Readiness Review, 522 have been submitted to the responsible organizations.
- The first production run of 60 Mark 1A baskets was completed ahead of schedule.

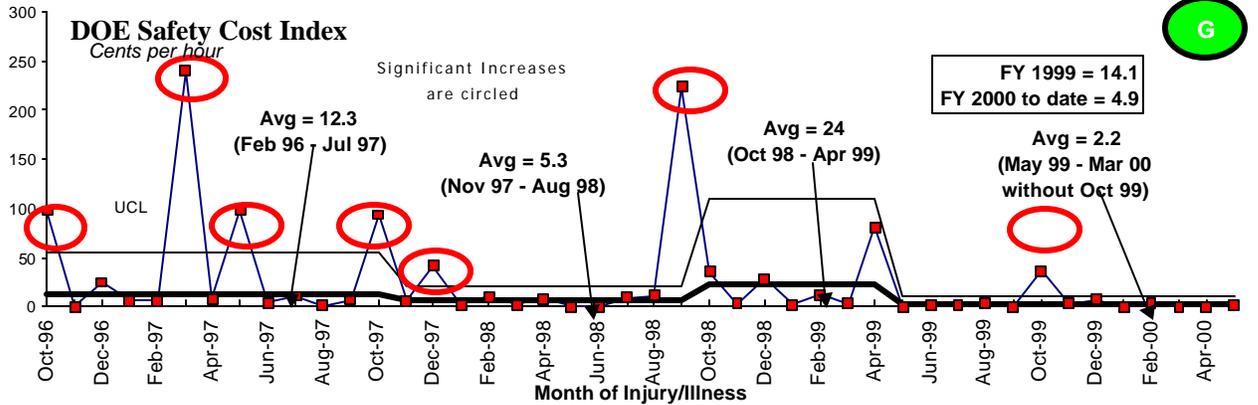
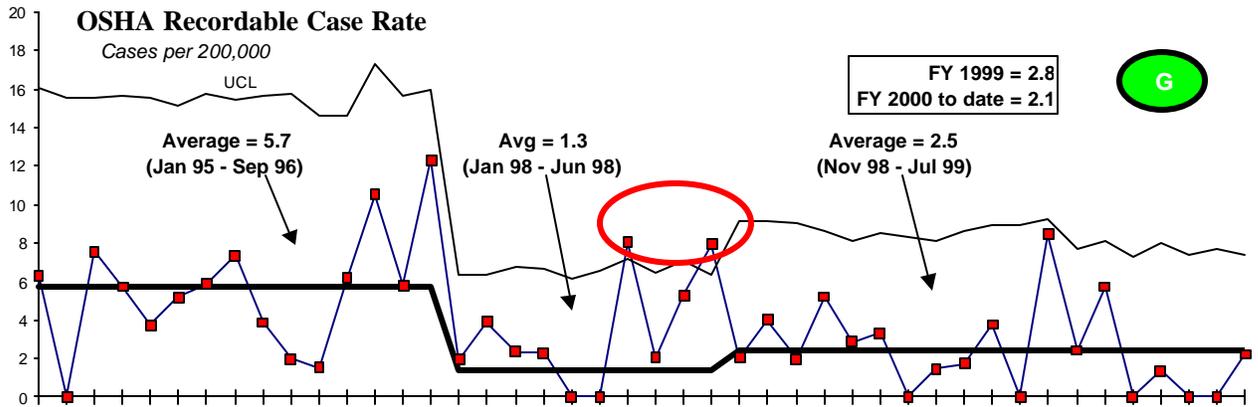
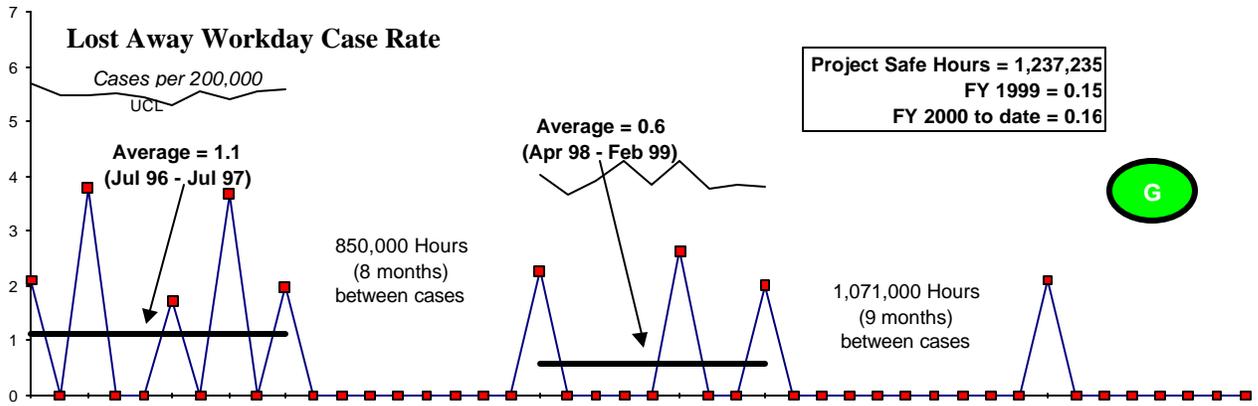
- Phase Startup Initiative (PSI) Phase I and II testing activities continued. Component tests of the Integrated Water Treatment System (IWTS) and the Fuel Retrieval System (FRS) were completed successfully.

SAFETY

The project has achieved over 1,200,000 safe work hours. The past eleven of twelve months for the DOE Cost Index and Severity Rate have been below average. Although the SNF Project experienced some safety performance degradations with the start of FY 2000, performance continues to improve. October 1999 had two Restricted Workday Cases, and one Lost Away Workday Case. This was a nearly significant increase (close to but not above the UCL) on the Occupational Safety and Health Act (OSHA) Recordable Case Rate.

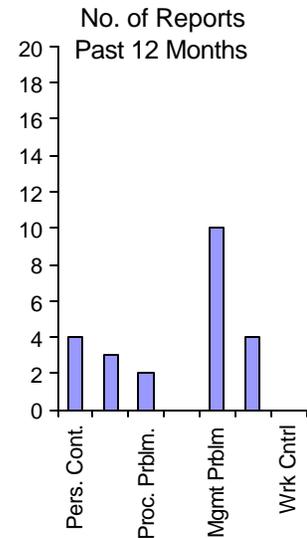
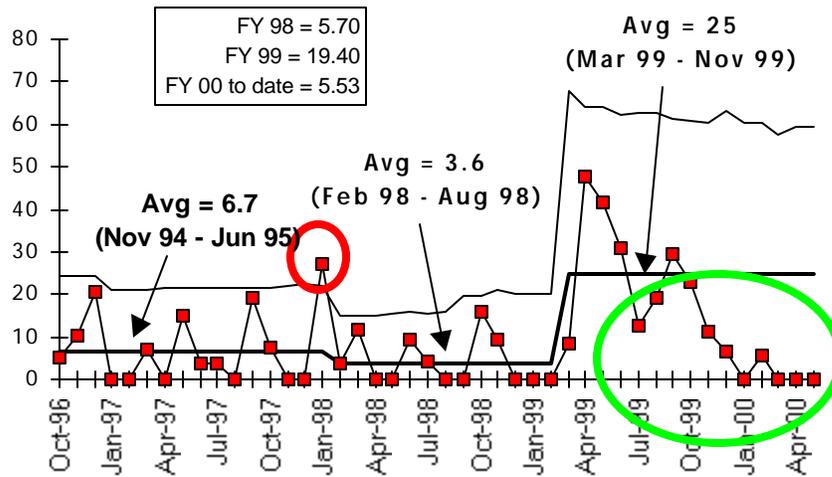
The project's safety record is improving in both OSHA recordables and DOE Cost Index. Lostaway overall has had only one case in the past year.

PHMC Environmental Management Performance Report – July 2000
Section D – Spent Nuclear Fuel



CONDUCT OF OPERATIONS / ISMS STATUS

CONDUCT OF OPERATIONS Events per 200,000 hours



ISMS STATUS



- The ISMS Phase I/II verification for the SNF Project was completed on November 19, 1999.
- The Corrective Action Plans for the “Opportunities for Improvement” were developed and transmitted to RL on January 10, 2000.
 - The actions required to enable ISMS implementation to be declared March 31, 2000 are now complete. Documentation packages have been transmitted to the Environmental, Safety & Health organization. Three of the four packages were reviewed as part of the Project Hanford Management Contract (PHMC) Phase I verification. These items are complete. The remaining item needing RL verification deals with Chemical Management Implementation and is scheduled to be verified by June 30, 2000.

BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

- Baseline Change Request SNF-2000-009, which accelerates the completion of sludge removal by one year from August 2005 to August 2004 and reduces total project life cycle cost by \$16 million, was implemented.

Opportunities for Improvement

Phased Startup Initiative (PSI) — Results from the PSI are expected to improve the fuel production rates by approximately one month in FY 2001.

UPCOMING ACTIVITIES

Cold Vacuum Drying (CVD) Facility Testing — Testing at the CVD Facility continues to remain on the critical path. Completion of testing is scheduled for the end of July 2000.

Cask Loadout System (CLS) Testing — Complete startup testing by mid-July 2000.

Phased Startup Initiative (PSI) — Complete PSI Phases 1 and 2 in order to support start of Phase 3. Complete Phases 3 & 4 by mid-August 2000.

Storage Projects — Delivery of eight more Multi-Canister Overpacks (MCO) is expected by the end of June.

Fuel Removal Activities — Begin DOE Operations Readiness Review by mid-September 2000. Begin K West Basin fuel removal, drying and storage operations by November 30, 2000.

COST PERFORMANCE (\$M):

	BCWP	ACWP	VARIANCE
Spent Nuclear Fuel	\$139.8	\$144.9	- \$5.1

The unfavorable cost variance of \$5.1 million (4 percent) is primarily due to Hanford Site assessments higher than baseline and additional facility start up and engineering required as a result of first-of-a-kind equipment issues at K Basins and the CVD Facility.

SCHEDULE PERFORMANCE (\$M):

	BCWP	BCWS	VARIANCE
Spent Nuclear Fuel	\$139.8	\$139.7	\$0.1

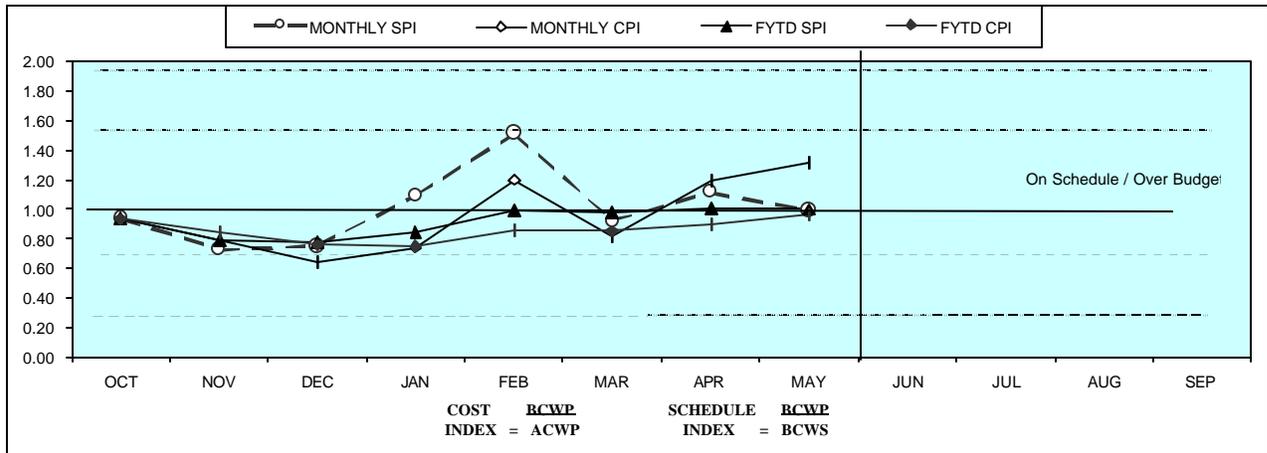
The favorable schedule variance of \$0.1 million (0 percent) is within the established thresholds.

FY 2000 COST/SCHEDULE PERFORMANCE – ALL FUND TYPES
CUMULATIVE TO DATE STATUS – (\$000)

		FYTD									
By PBS		BCWS	BCWP	ACWP	SV	%	CV	%	PEM	FYSF	EAC
PBS WM01	Spent Nuclear	\$ 139,694	\$ 139,783	\$ 144,913	\$ 89	0%	\$ (5,131)	-4%	\$ 197,222	\$ 201,257	\$ 201,257
WBS 1.3	Fuel Project										
Total		\$ 139,694	\$ 139,783	\$ 144,913	\$ 89	0%	\$ (5,131)	-4%	\$ 197,222	\$ 201,257	\$ 201,257

COST/SCHEDULE PERFORMANCE INDICES
(MONTHLY AND FYTD)

Yellow



FY 2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.94	0.73	0.75	1.09	1.52	0.92	1.12	0.99				
MONTHLY CPI	0.93	0.79	0.64	0.74	1.20	0.82	1.19	1.31				
FYTD SPI	0.94	0.79	0.78	0.85	0.99	0.98	1.00	1.00				
FYTD CPI	0.93	0.84	0.76	0.75	0.86	0.85	0.90	0.96				
MONTHLY BCWS	\$8,574	\$19,209	\$15,681	\$12,081	\$15,753	\$20,085	\$19,582	\$28,731	\$14,268	\$12,278	\$15,776	\$15,206
MONTHLY BCWP	\$8,049	\$13,968	\$11,770	\$13,221	\$23,909	\$18,511	\$21,838	\$28,517				
MONTHLY ACWP	\$8,626	\$17,581	\$18,370	\$17,831	\$19,906	\$22,611	\$18,286	\$21,703				
FYTD BCWS	\$8,574	\$27,783	\$43,463	\$55,544	\$71,297	\$91,382	\$110,963	\$139,694	\$153,962	\$166,240	\$182,016	\$197,222
FYTD BCWP	\$8,049	\$22,016	\$33,786	\$47,008	\$70,917	\$89,428	\$111,265	\$139,783				
FYTD ACWP	\$8,626	\$26,207	\$44,577	\$62,408	\$82,314	\$104,925	\$123,210	\$144,913				

COST VARIANCE ANALYSIS: (- \$5.1M)

WBS/PBS

Title

1.3.1/WM01

Spent Nuclear Fuel Project

Description/Cause: The unfavorable cost variance of \$5.1 million (4 percent) is primarily due to Hanford Site assessments higher than baseline and additional facility start up and engineering required as a result of first-of-a-kind equipment issues at K Basins and the CVD Facility.

Impact: The unanticipated site cost impacts, i.e., Corrective Action Management, Hanford Security, and fee allocation, are being compensated with appropriate site actions. In addition, Baseline Change Requests (BCRs) have been developed and reviewed and are on hold pending source availability for

engineering, testing and administrative support. An \$8 million fiscal year end expense funding shortfall has been identified to FH and RL budget staff.

Corrective Action: Approve pending BCRs.

SCHEDULE VARIANCE ANALYSIS: (\$0.1M)

WBS/PBS

Title

1.3.1/ WM01

Spent Nuclear Fuel Project

Description /Cause: The favorable schedule variance of \$0.1M (0 percent) is within the established thresholds.

Impact: None.

Corrective Action: None

ISSUES

There are no technical, DOE, Regulator or external issues identified at this time. However, internal DOE budget reprogramming may be required to remedy SNF's projected FY 2000 expense funding shortage.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS (\$000)

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY00 COST IMPACT \$000	SCH	TECH	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
SNF-2000-001	6/13/00	CAM/DTS Cost Allocation	\$1,311	N	Y				In preparation.
SNF-2000-010	1/31/00	SNF Project FY2000 MYWP Revised Rate Impacts	\$2,147	N	N	5/15/00	5/15/00	6/5/00	RL CO approved 6/5/00.
SNF-2000-013	3/6/00	Delayed Scope for TGA Sample Disposal		Y	N	3/28/00	4/27/00	5/19/00	RL CO approved 5/19/00.
SNF-2000-014	3/20/00	FY2000 Budget Authority Increase	\$1,300	N	N	3/28/00	4/27/00	5/19/00	RL CO approved 5/19/00.
SNF-2000-016	3/24/00	Defer Site-Wide SNF Project Activities to Align with Site-Wide Prioritization	(\$1,300)	Y	Y	4/27/00	4/27/00	5/29/00	RL CO approved 5/29/00.
SNF-2000-019	5/9/00	FRS/IWTS Phased Startup Initiative Adding Phased III and IV to Baseline	\$2,500	Y	Y				In preparation.
ADVANCE WORK AUTHORIZATIONS									
		Nothing to report							

SPENT NUCLEAR FUELS – WBS 1.3 MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2000
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	2	0	0	0	0	0	0	2
DOE-HQ	0	0	0	0	0	0	0	0
RL	1	0	1	0	0	1	0	3
Total Project	3	0	1	0	0	1	0	5

Status as of 6/19/2000

Green

Tri-Party Agreement / EA Milestones

Number	Milestone Title	Status
M-34-14A (S06-97-009)	“Complete K West Basin Cask Facility Modules”	Due 2/29/00 — Completed on schedule.
M-34-04 (S01-99-124)	“Submit Remedial Design Report/Remedial Action Work Plan for the K Basins”	Due 3/31/00 – Completed over 1 month early (2/10/00).
M-34-05 (T01)	“Submit Report on Quantities, Character, and Management of K Basins Debris”	Due 5/31/00 – Completed on Schedule.
M-34-16 (S00-01-900)	“Initiate removal of K West Basin Spent Nuclear Fuel”	Due 11/30/00 - On schedule.
M-34-06-T01	“Initiate K West Basin Spent Nuclear Fuel Canister Cleaning Operations”	Due 12/31/00 - On schedule.

DNFSB Commitments

	Nothing to report.	

MILESTONE EXCEPTION REPORT

Nothing to report.

PERFORMANCE OBJECTIVES

Readiness for Fuel Movement (RC-1-1.a-I) ¾ Contractor completion of construction and operational testing, Management Self-Assessment (MSA), and Independent Operational Readiness Review (ORR) by September 14, 2000 to begin moving fuel by November 30, 2000. Start of fuel movement is currently on track for November 30, 2000.

Green

Phased Startup Initiative (PSI) (RC-1-1.a-II) ¾ Complete PSI Phases 1 and 2 by April 15, 2000. This includes successful Cold Testing of Integrated Water Treatment System (IWTS) & Fuel Retrieval System (FRS). This activity is behind schedule due to required changes to the IWTS Control System Software. This accelerated non-critical path testing activity continues to allow KW Basin system problems to be uncovered and fixed much earlier than the baseline schedule.

Red

Accelerate Fuel Movement (RC-1SS-1) ¾ Accelerate start of fuel movement by two months. Pre-positioning of fuel processed in PSI Phase III will allow early loading of Multicanister Overpacks (MCOs). Assumes no problems during first fuel movement and no ORR or MSA discrepancies.

Green

Phased Startup Initiative (PSI) (RC-1SS-2) ¾ Complete Phases 3 & 4 by August 15, 2000. This includes completion of FRS/IWTS system testing using SNF (real fuel) and Completion of Construction Documentation Phase II (CCD2). PSI Phases III & IV are currently being restructured to reflect the delay caused by the IWTS Control System software failure.

Yellow

KEY INTEGRATION ACTIVITIES

- Spent nuclear fuel (SNF) final disposition interface activities, including Office of Civilian Radiation Waste Management (OCRWM) Quality Assurance (QA) Program implementation, ongoing with National SNF Program.
- K Basins sludge removal and Shippingport (PA) Pressurized Water Reactor Core 2 SNF removal implementation activities ongoing with Waste Management Project.
- 324 Building (B Cell) SNF removal acceptance criteria and conceptual design reviews ongoing with River Corridor Project.
- Neutron Radiography Facility, Training, Research and Isotope Production, General Atomics (TRIGA), and Fast Flux Test Facility (FFTF) SNF relocation planning ongoing with FFTF Project.
- Input provided to Bechtel Hanford, Incorporated (BHI) on recovery actions required if SNF is discovered during upcoming reactor basins deactivation.
- Completed assessment and documentation for the Canister Storage Building's readiness to support the receipt of Immobilized High Level Waste (IHLW) from Occurrence Reporting Program (ORP).