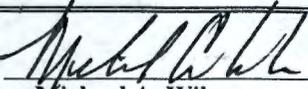
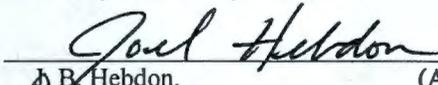
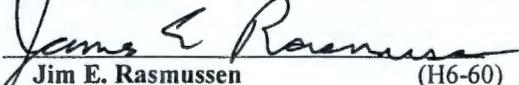


Meeting Minutes  
 April 27, 2004  
 Tri-Party Agreement Milestone Review

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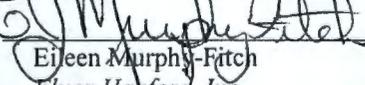
Approval:  Date: 8/9/04  
 Michael A. Wilson (H0-57)  
 Ecology IAMIT Representative

Approval:  Date: 7/23/04  
 J. B. Hebdon, (A5-12)  
 Chairperson and RL IAMIT Representative

Approval:  Date: 7/14/04  
 Jim E. Rasmussen (H6-60)  
 ORP IAMIT Representative

Approval:  Date: 7/12/04  
 Nick Ceto (B5-01)  
 EPA Chairperson and IAMIT Representative

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Minutes Prepared by:   
 Approval:  Date: 7/1/04  
 Eileen Murphy-Fitch (A4-25)  
 Fluor Hanford, Inc.

Aromi, E. S.	CHG	H6-63	Leary, K. D.	RL	A6-38
Bartus, D.	EPA	H0-57	Mattlin, E. M.	RL	A5-11*
Bazzell, K. D.	RL	A3-04	McCormick, M. S.	RL	A5-11
Bond, R.	Ecology	H0-57	McKarns, T. C.	RL	A5-15
Borghese, J. V.	FH	E3-65	McKenney, D. E.	FG	H8-44
Brown, M. E.	Ecology	H0-57*	Miskho, A. G.	FH	H8-40
Buxbaum, M.	FH	B3-53*	Morrison, R. D.	FH	A4-25*
Cameron, C.	EPA	B5-01	Murphy-Fitch, E. J.	FH	A4-25*
Clark, C. E.	RL	A5-15	Niles, K. S.	ODOE	
Charboneau, S. L.	RL	A5-11	Olinger, S.	RL	A6-437
Collins, M. S.	RL	A6-38	Piippo, R. E.	FH	A4-25
Cusack, L.	Ecology	H0-57*	Price, J.	Ecology	H0-57*
Cummins, G. D.	FH	H8-12	Rodriguez, H. M.	RL	A5-15
Dagan, E. B.	RL	A5-15	Romine, L. D.	RL	A6-33
Earley, L.	RL	A5-11	Schepens, R. J.	RL	H6-60
Faulk, D.	EPA	B5-01	Skinnarland, E. R.	Ecology	H0-57
Foley, B. L.	RL	A6-38	Sobotta, P.	NPT*	
Ford, B. H.	FH	E6-35	Sinton, G.	RL	A6-38
Fritz, L.	FH	H8-44	Thompson, S.	FH	H8-12
French, M.	RL	A6-38	VanMasen, E.	Ecology	H0-57
Gadbois, L.	EPA	B5-01	Veitenheimer, S. J.	RL	A4-79
Gay, R.	CTUIR		Watson, D.	FH	X3-79
Gallagher, R.	FH	H5-20	Wilde, R.	FH	H8-44
Hebdon, J. B.	DOE	A5-15	Williams, J. D.	FH	R3-62
Hedges, J.	Ecology	H0-57	Winterhalder, J. A.	FH	E6-35
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Hertzal, J. S.	FH	A4-25	Wilson, B. W.	Ecology	H0-57
Hildebrand, R. D.	RL	A6-38*	Administrative Record	EDMC	H6-08*
Hopkins, A.	FH	H8-25	*w/Attachments File		
Jackson, D. E.	RL	A4-52			
Jackson, G. W.	FH	H5-20			
Jackson, R.	FH	E6-35			
Jim, R.	YIN*				
LaRue, D. N.	BHI	H0-20			

**Tri-Party Agreement Milestone Review**  
**April 27, 2004**

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**Complete Remedial Actions (River Corridor Project portion of M-016)**

Presented by: Kevin Bazzell (RL)/Tom Logan (BHI)/ Mike Fox (BHI)

FY 2004 Tri-Party Agreement milestones continue to be completed on or ahead of schedule. Significant accomplishments for the quarter were the initiation of remediation at 118-B-1/118-C-1 Burial Grounds in March; regulatory approval for ERDF disposal of aluminum jacketed lead/cadmium pieces; started the 116-K-2 Mile Long Trench overburden removal in February 2004 with waste removal scheduled to begin April 19, 2004; completed the final backfill and regrading at 300-FF-2 Operable Unit (including 618-4 and 618-5 Burial Grounds) ahead of schedule; and, completed excavation of ERDF Cells 5/6. The 118-K-1 Burial Ground final design updates will be completed in August/September to support RFP issuance early in FY 2005.

The status of Tri-Party Agreement Interim Milestones M-016-63 and M-094-01 was discussed. These milestones are workscope associated with the River Corridor Contract and as such, have not been assigned to an existing Hanford Site Contractor. Initial discussions have taken place at the Project Manager level. EPA stated that this milestone was delayed once, continues to be delayed, and is an action that is RL's. Delays in the award of the River Corridor Contract is not adequate justification for continuing to delay this workscope or extend the due date (currently September 30, 2004).

Development of the FY 2005 and FY 2006 detailed work plan was initiated. A meeting will be scheduled the week of May 19, 2004, to lay out the proposed scope of work and how it supports Tri-Party Agreement workscope. Funding levels and shortfalls will be identified and discussed in the June timeframe.

Presentation is attached.

**FFTF Transition (Tri-Party Agreement Milestone M-081)**

Presented by: Al Farabee, RL

Milestones are completed or on schedule. Eight Interim Storage Casks (ISCs) were loaded and transferred to secure onsite storage at PFP. Funding was provided for the fabrication of the first 10 of 22 ISCs needed to complete fuel offload. Efforts continue on the T-3 Safety Analysis Requirements Procedures (SARPs) Amendment and the project is proceeding with plans to store the Na bonded fuel in ISCs at the 200 Area Interim Storage Area (ISA) prior to shipment to INEEL or possibly direct shipment to the repository at Yucca Mountain. Work also continues on the shutdown of auxiliary plant systems, and the FFTF End Point Criteria Document.

Presentation is attached.

**324 Building Closure of Mixed Waste (MW) Units (Tri-Party Agreement Milestone M-089)**

Presented by: Kevin Bazzell

Work continued to safely maintain the 324 Facility in a minimum safe operations mode. Until the new River Corridor Contractor is in place and transition activities are completed, no significant 324 Building

Radiochemical Engineering Cells, High-Level Vault, Low-Level Vault, and Associated Areas mixed waste units closure activities are planned. Presentation attached.

**Facilities for Cs/Sr, Sodium and SCW (River Corridor Project portion of Tri-Party Agreement Milestone M-092)**

Presented by: Kevin Bazzell, RL/Al Farabee, RL

Cleaning of the residual sodium from the 337B Composite Reactor Component Test Activity vessel was completed and the vessel rinsed. Two associated vapor traps were also cleaned. There are no further special case waste (SCW) packaging/shipment activities planned at the 327 Building until after the River Corridor Contract is awarded. The 340 Facility SCW activities status is being reviewed by RL.

Presentation attached.

**Disposition of the 300 Area Surplus Facilities (Tri-Party Agreement Milestone M-094)**

Presented by: Kevin Bazzell, RL

The status of Tri-Party Agreement Interim Milestone M-094-01 (companion Tri-Party Agreement Interim Milestone M-016-63) was discussed. This milestone is for workscope associated with the River Corridor Contract and as such, has not been assigned to an existing Hanford Site Contractor. Initial discussions have taken place at the Project Manager level. EPA stated that this milestone was delayed once, continues to be delayed, and is an action that is RL's. Delays in the award of the River Corridor Contract is not adequate justification for continuing to delay this workscope or extend the due date (currently September 30, 2004).

Presentation attached.

**Spent Nuclear Fuel, M-034-00**

Presented by: Larry Earley, RL

Significant accomplishments include the shipment of 397.73 MTHM (52 MCOs) from the K-West Basin to the CVD between October 17, 2004 through April 14, 2004 bringing the cumulative total to 320 MCOs and 1741.75 MTHM. Degraded fuel has increased basin water activity, increased airborne contamination levels, and increased equipment problems. The resulting mask work has reduced productivity. Installation and testing of the K-East sludge removal system is complete. The Contractor ORR was started on April 27, 2004. Activities in support of sludge retrieval and disposition continue as well as those that support deactivation. Actions are underway to address fuel removal issues (increased deterioration of SNF).

One Tri-Party Agreement Interim Milestone and one Tri-Party Agreement target date will be completed late. Tri-Party Agreement Interim Milestone M-034-18B, Complete Removal of all K Basin SNF, due July 31, 2004, will be missed by approximately eight weeks. Tri-Party Agreement target date M-034-25-T01, Complete transfer of K-East Basin SNF to K-West Basin, due May 31, 2004, will be missed by approximately six weeks. Negotiations are underway with EPA on the acceleration of K Basins sludge treatment and disposal, basin remediation, and sludge retrieval.

**PFP Transition (M-083)**

Presented by: Stacy Charboneau, RL

The stabilization of nuclear materials officially completed on February 12, 2004. The last pipe overpack container of PFP mixed waste residues was shipped to CWC on March 11, 2004, completing Tri-Party Agreement milestone M-083-13. The largest and one of the most challenging (complex) gloveboxes in the Remote Mechanical C Line, was successfully cleaned out. PFP's stabilization and packaging was named as the "Project of the Year" by the Columbia River Basin Chapter of the Project Management Institute. The first 75 of the 9975 containers was shipped offsite.

Presentation attached.

**Central Plateau (M-013, M-015, M-016, M-020, and M-024)**

Presented by : Larry Romine, RL/Bryant Charboneau, RL/Bryan Foley, RL

The feasibility study (FS) and proposed plan (PP) for the 200-TW-1, 200-TW-2 and 200-PW-5 OU's were transmitted to the regulators on March 27, 2004 completing Tri-Party Agreement Interim Milestone M-015-41C. The U Plant Waste Sites Draft PP was modified to reflect comments received from Ecology and from EPA legal. The 200-PW-1, 200-PW-3 and 200-PW-6 OU's Work Plan, Rev. 0, was submitted. Progress continues on the development of the data quality objectives (DQO) to support completion of the 200 Area NPL site ecological risk assessment (ERA) needs. A workshop was held with the RL, the HNRTC, and the HAB River and Plateau Committee to discuss the draft ERA DQO summary report.

Another DQO process was initiated in October for the evaluation of impacts at 100 N to aquatic and riparian ecoreceptors. RL has proposed to issue the final report on impacts to aquatic ecoreceptors at 100-N in October 2005 rather than October 2004 as required by the Record of Decision (ROD). The revised schedule will allow better coordination with the River Corridor Risk Assessment so that appropriate sample media are collected for both assessments. A NPL change notice was drafted to document the change from the ROD schedule.

Work continued on remedial actions to address an additional area of chromium contaminated groundwater in the 100-D Area. During the second quarter of FY 2004, over 75% of the water lines in the 100 D area were cut and capped eliminating this as the potential driver. Plans to extend the In-Situ Redox Manipulation (ISRM) barrier were deferred until the causes of the apparent reduction in barrier longevity are better understood. A focus group of outside experts was assembled to evaluate possible causes of the ISRM breakdown and to make recommendations for a mitigation plan. The group met at the beginning of March. Additional characterization of the barrier is anticipated as result of the focus group report.

Presentation attached.

**Land Disposal Restriction Report, M-026-01**

Presented by: Mike Collins

The CY 2003 Land Disposal Restriction (LDR) Report will be delivered to Ecology ahead of schedule. The consolidation of the Requirement Documents remains an open action from the March 14, 2002, Resolution Agreement.

Presentation attached.

### **Tritium Treatment Technology Evaluation, M-026-07A**

Presented by: Doug Hildebrand, RL

The Calendar Year 2004 Tritium Treatment Technology Report was submitted to the regulators ahead of schedule. No significant changes were identified in the development of tritium removal technologies. The reporting frequency for this Report was changed from biennially to every five years with a letter report submitted for the intervening years.

Presentation attached.

### **Acquisition of Facilities to TSD TRU/TRUM, LLMW (M-091)**

Presented by: Greg Sinton, RL

The Revised Transuranic Mixed (TRUM)/Mixed Low-Level Waste (MLLW) Project Management Plan was submitted to Ecology on March 30, 2004. The PMP was revised to show the existing milestone dates for thermal treatment as requested by Ecology. A thermal treatment request for proposal (RFP) will be issued for additional capacity. Once responses are received, the thermal treatment schedule will be re-evaluated. Through March 30, 2004, 45 m<sup>3</sup> has been thermally treated. Tri-Party Agreement Interim Milestone M-091-40, Retrieval and Designation of Contact-Handled (CH) Retrievably Stored Waste (RSW) and Treatment of Such Wastes..., is behind schedule but is forecast for on-schedule completion. Discussions continue on thermal treatment plans and the M-091-12 and M-091-12A milestones.

Presentation is attached.

### **Acquisition of Facilities Cs/Sr, Na, SCW (M-092-1/5)**

Presented by: Doug Hildebrand, RL

Accomplishments include the receipt of the Capsule Dry Storage Preconceptual Report developed by Transnuclear; the submittal of the WESF Draft RCRA Part B permit application, completion of the G-Cell window changeout. The Yucca Mountain high-level waste repository will have only a construction permit in place by 2008. DOE maintains that no decision can be made on the viability of direct disposal of the capsules to the repository until after that time. DOE is evaluating the priority of the dry storage path forward. The most likely option is to defer the Cs/Sr Dry Storage Project and allocate the associated funding to higher priority workscope, such as the acceleration of suspect TRU retrieval and mixed low-level treatment mandated by the proposed M-091 change package.

The 340 Complex portion of Tri-Party Agreement Milestone M-092-16, Complete Removal and Transfer and Initiate Storage of Phase III 300 Area Special Case Waste, was completed. The Report of Closure was submitted to the State of Washington, Department of Health (WDOH) for Permitted 340-A Building Tank solids removal activities pursuant to the Washington Administrative code 245-247-080(6)

Presentation attached.

### **Permitting/Closure Plans, M-020-00**

Presented by: Tony McKarns, RL

Status was provided on the Hanford Facility RCRA Permit. Significant accomplishments include closing the M-020-00A major milestone on April 13, 2004; Ecology approval of the procedural closure of 325 HWTUs Radioactive Liquid Waste Tank and submittal of numerous Class I, Class 2 modifications

covering groundwater, LERF/ETF, 300 Area Process Trenches, 183-H Solar Evaporator Basins, and the Waste Treatment and Immobilization Plant. .

Presentation attached.

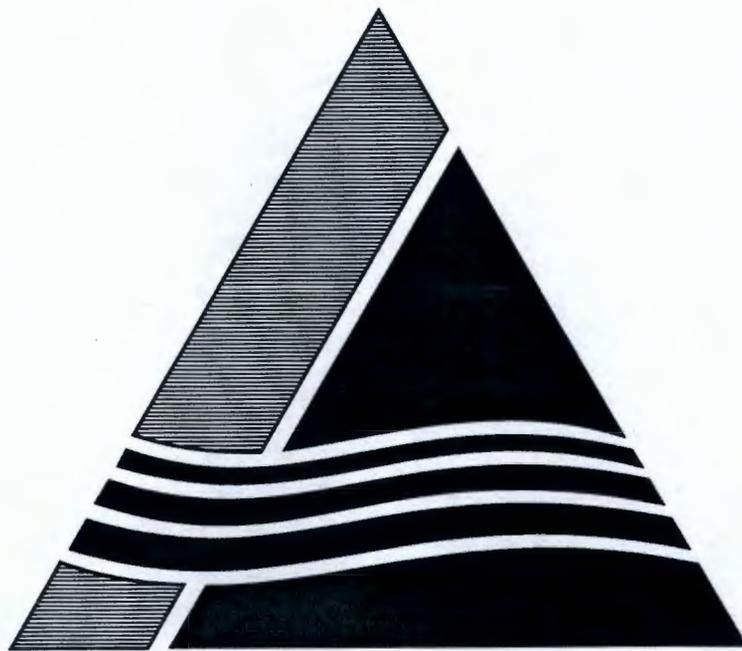
**Annual Biennial Assessments of Information and Data Access Needs with EPA and Ecology,  
M-035-09D**

The milestone will be completed on or ahead of schedule.

Richland Environmental Restoration Project

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# TPA Quarterly Review



*Tri-Party Agreement*

U.S. Department of Energy  
U.S. Environmental Protection Agency  
Washington State Department of Ecology

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April 27, 2004

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# **ENVIRONMENTAL RESTORATION PROJECT**

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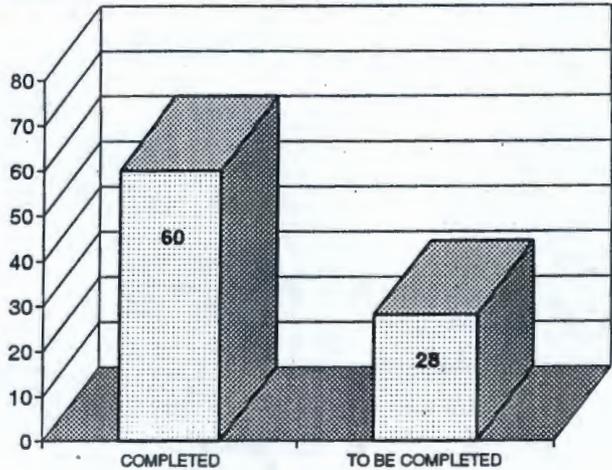
### **RIVER CORRIDOR**

- River Corridor Milestone Statistics
- River Corridor FY04 Milestone Status
- River Corridor Milestone Schedule
- River Corridor Change Requests
- River Corridor Project Status / Accomplishments
- River Corridor Issues
- River Corridor FY04 PBS Performance Summary

### **INTEGRATION ISSUES**

**ENVIRONMENTAL RESTORATION PROJECT**

**ERC River Corridor  
TPA Milestone Statistics  
(Major & Interim Milestones)**



	Compliance Due Date	To Be Completed as of 03/31/2004	Milestone Number	Compliance Due Date	Milestone Number	Compliance Due Date			
<b>M-16-00</b> Remedial Design / Remedial Action	<b>9/30/2018</b> (M-16-00B)	<b>19</b>	<i>M-16-03H (C)</i>	<i>06/30/04</i>	M-16-61	12/31/08			
			<i>M-16-26E (C)</i>	<i>09/30/04</i>	M-16-52	07/31/09			
			M-16-26F	02/28/05	M-16-51	12/31/10			
			M-16-48	07/31/05	M-16-47	12/31/11			
			M-16-46	07/31/06	M-16-53	12/31/12			
			M-16-45	12/31/06	M-16-55	12/31/12			
			M-16-60	12/31/06	M-16-62	12/31/12			
			M-16-50	07/31/07	M-16-00A	12/31/12			
			M-16-54	07/31/08	M-16-00B	09/30/18			
			M-16-49	12/31/08	M-16-03I	TBD			
			M-16-56	12/31/08					
			<b>M-93-00</b> Reactors on River Final Disposition	<b>TBD</b> (M-93-00)	<b>9</b>	<i>M-93-11 (C)</i>	<i>09/30/04</i>	M-93-24	09/30/06
						M-93-17	12/31/04	M-93-19	09/30/09
						M-93-25	09/30/05	M-93-22	09/30/11
M-93-18	12/31/05	M-93-20				09/30/12			
M-93-23	07/31/06	M-93-00				TBD			
<b>MILESTONES TO BE COMPLETED</b>		<b>28</b>	<b>3</b>	<b>MILESTONES COMPLETED IN FY04 (C)</b>					

**Milestones Removed from Above Table**

<b>M-16-00</b> Remedial Action	<b>2</b>	M-16-63	09/30/04	Not in ERC contract scope.
		M-16-64	09/30/10	Not in ERC contract scope.

ENVIRONMENTAL RESTORATION PROJECT  
**ERC RIVER CORRIDOR**  
**FY 2004 TPA MILESTONE SUMMARY**  
(Major & Interim Milestones)

*Status as of: March 31, 2004*

PBS	Milestone	Title	Compliance Date	Forecast/ Actual Date	Completed		Forecast			Unrecov erable	Deleted
					Ahead Schedule	On Schedule	Ahead Schedule	On Schedule	Behind Schedule		
0041	M-16-03H	Complete Remediation of Waste Sites in 300-FF-1 Operable Unit to Include Excavation, Verification, and Regrading, Including the 618-4 Burial Ground in Accordance with an Approved RDR/RAWP	06/30/2004	02/19/2004 (A)	X						
0041	M-16-26E	Complete Excavation and Removal of 100 B/C Process Effluent Pipelines	09/30/2004	11/05/2003 (A)	X						
0041	M-93-11	Complete 105-F Reactor Interim Safe Storage	09/30/2004	01/15/2004 (A)	X						
	M-16-63*	Submit a Schedule and TPA Milestones to Complete Interim Remedial Actions for 300-FF-2 Waste Sites and Confirmatory Sampling of 300-FF-2 Candidate Sites	09/30/2004								
<b>Total FY 2004 ERC River Corridor TPA Milestones</b>			<b>3</b>		<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\* M-16-63 scope is not in ERC contract; it will be included within the new River Corridor contract. RL is addressing this milestone with the regulators.

**ERC RIVER CORRIDOR**  
**FY 2005 TPA MILESTONE SUMMARY**  
(Major & Interim Milestones)

*Status as of: March 31, 2004*

PBS	Milestone	Title	Compliance Date	Forecast/ Actual Date	Completed		Forecast			Unrecov erable	Deleted
					Ahead Schedule	On Schedule	Ahead Schedule	On Schedule	Behind Schedule		
0041	M-93-17	Complete 105-D Reactor Interim Safe Storage	12/31/2004	09/30/2004 (F)			X				
0041	M-16-26F	Complete Backfill of 100 B/C Process Effluent Pipeline Excavations	02/28/2005	04/30/2004 (F)			X				
0041	M-16-48	Initiate Remedial Actions for Remaining Waste Sites for 100 F Area	07/31/2005					X			
0041	M-93-25	Submit an Engineering Evaluation of the Final Surplus Reactor Disposition to EPA and Ecology	09/30/2005					X			
<b>Total FY 2005 ERC River Corridor TPA Milestones</b>			<b>4</b>		<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>

Richland Environmental Restoration Project  
 TPA MILESTONE SUMMARY SCHEDULE -- RIVER CORRIDOR

100 AREA REMEDIAL ACTION	Fiscal 2004				Fiscal 2005				Fiscal 2006				Fiscal 2007				Fiscal 2008				Fiscal 2009				Fiscal 2010				Fiscal 2011				Fiscal 2012				Fiscal 2013							
	BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR							
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st	2nd	3rd	4th																																
100 B/C AREA			○			○																																						
			◇			○																																						
100 D AREA																																												
100 F AREA																																												
100 H AREA																																												
100 K AREA																																												
100 N AREA																																												
100-IU-2 / 100-IU-6																																												
100 COMMON																																												

○ MILESTONE    M TPA MAJOR MILESTONE    T TARGET MILESTONE    ◇ FORECAST    ⊗ UNRECOVERABLE    ⊙ "AT RISK"    ⊕ RCRA PERMIT COMMITMENT

Richland Environmental Restoration Project

TPA MILESTONE SUMMARY SCHEDULE -- RIVER CORRIDOR

300 AREA REMEDIAL ACTION/ FACILITIES	Fiscal 2004				Fiscal 2005				Fiscal 2006				Fiscal 2007				Fiscal 2008				Fiscal 2009				Fiscal 2010				Fiscal 2011				Fiscal 2012				Fiscal 2013							
	BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR				BY QTR											
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st	2nd	3rd	4th																																
300-FF-1																																												
300-FF-2																																												

**M-16-03H 02/18/04(A)**  
Complete Remediation / Regrading of 300-FF-1 & 618-4 BG

M-16-63 is not in ERC contract scope.

**M-16-63**  
Submit Schedule & TPA MSs to Complete Interim RA for 300-FF-2 Waste Sites & Confirmatory Sampling of 300-FF-2 Candidate Sites

**M-16-60**  
Complete Interim RA for at Least 3 of Following High Environmental Priority 300-FF-2 Waste Sites (316-4, 618-2, 618-3, 618-5, 618-7) & Confirmatory Sampling of 300-7, 300-8

M-16-64 is not in ERC contract scope.

**M-16-64**  
Complete Interim RA for Following 300-FF-2 Waste Sites (300-259, 303-M SA, 303-M UOF, UPR-300-46, UPR-300-17, 618-1)

**M-16-61**  
Complete Interim RA for Remaining High Environmental Priority 300-FF-2 Waste Sites (316-4, 618-2, 618-3, 618-5, 618-7)

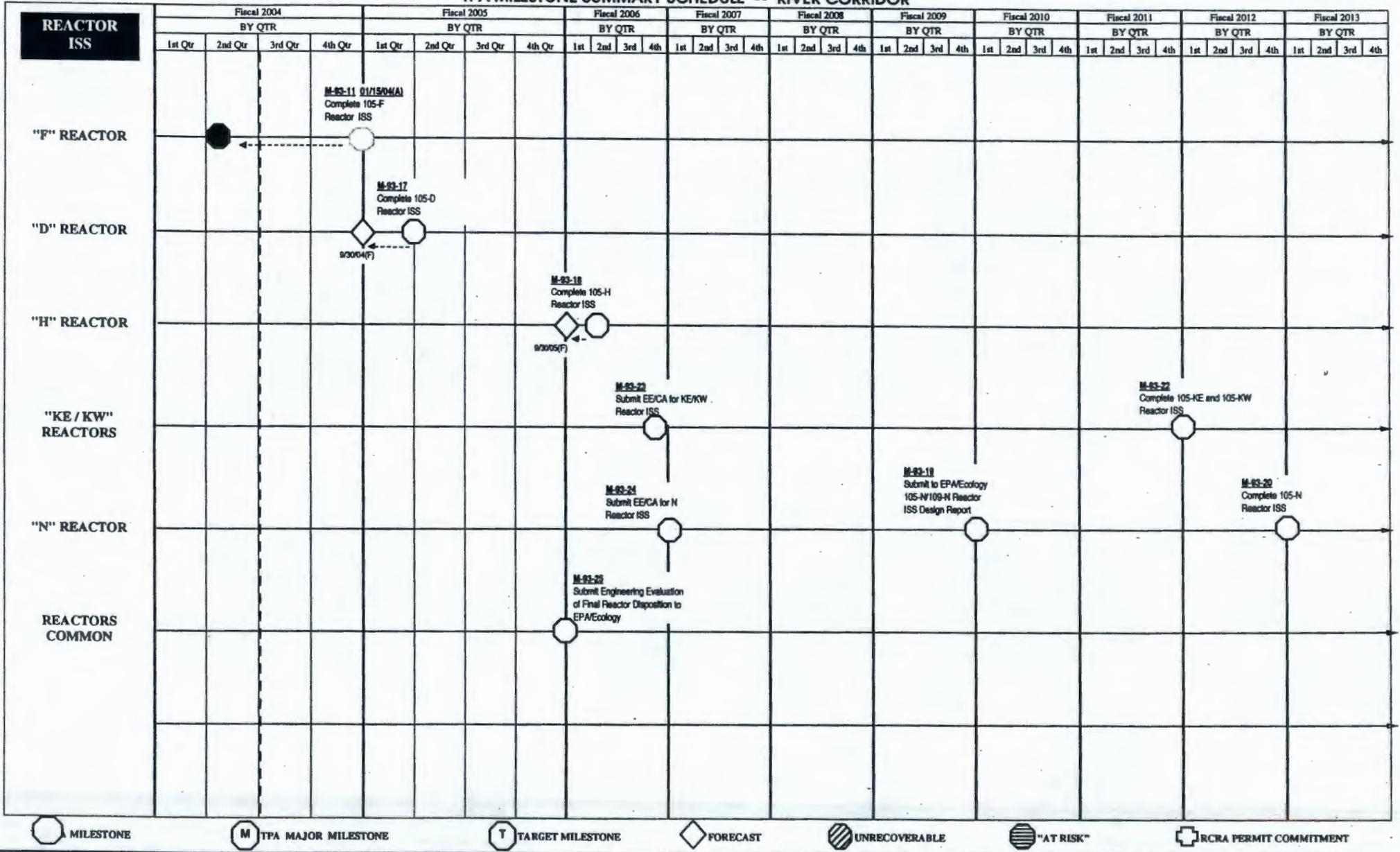
**M-16-62**  
Complete Interim RA for Following 300-FF-2 Waste Sites (300-8, 300-18, 300-VTS, 316-4, 600-47, 600-259, 618-2, 618-3, 618-5, 618-7, 618-8, 618-13)

○ MILESTONE      M TPA MAJOR MILESTONE      T TARGET MILESTONE      ◇ FORECAST      ▨ UNRECOVERABLE      ● "AT RISK"      ⊕ RCRA PERMIT COMMITMENT

M-16-03I (TBD) - Complete Treatment of Drummed Waste from 618-4 Burial Ground  
 M-16-00B - 09/30/2018 - Complete All Interim 300 Area Remedial Actions to Include Confirmatory Sampling of all Candidate Sites Listed in 300-FF-2 ROD

Richland Environmental Restoration Project

TPA MILESTONE SUMMARY SCHEDULE -- RIVER CORRIDOR



M-93-00 (TBD) - Complete Final Disposition of All 100 Area Surplus Production Reactor Buildings

## ERC RIVER CORRIDOR TPA CHANGE REQUESTS (December 2003 - March 2004)

There were no ERC River Corridor change requests approved during December 2003 - March 2004.

## ERC RIVER CORRIDOR PROJECT ACCOMPLISHMENTS

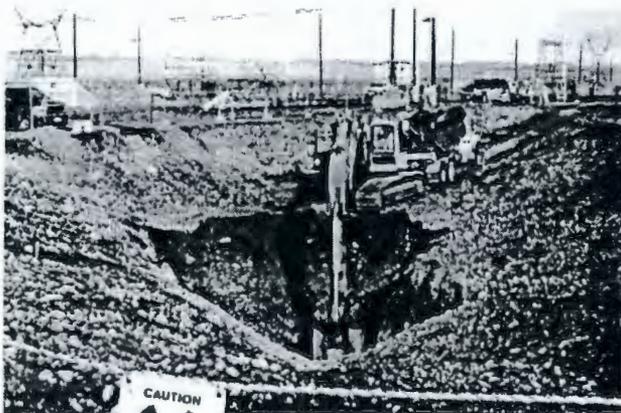
### Remedial Action (M-16-26F, M-16-48, M-16-52, M-16-03H, M-16-60)

- Awarded 100 B/C Burial Grounds and Remaining Sites contract in December. Initiated remediation at 118-B-1/118-C-1 Burial Grounds in March. Received regulator approval for ERDF disposal of aluminum jacketed lead/cadmium pieces.
- Continued backfill of 100 B/C pipelines; scheduled to be completed by April 30.



Staging Area for 100 B/C Pipeline Backfill

- Received regulator approval for 100 F Area Burial Ground Air Monitoring Plan. Initiated preparation of 100 F Area Remaining Sites design and RFP package development in January.
- Completed planned remediation activities at KE/KW Condensate Cribs; completed backfill in March.



116-KW-1 Condensate Crib Remediation

- Completed backfill of five small sites (K Area) in February.
- Started overburden removal in 116-K-2 Mile Long Trench in February. Waste removal began on April 19.
- Plan to complete 118-K-1 Burial Ground final design updates in August/September to support RFP issuance early FY05.
- Revised/issued new RFP in January for 116-N-1 Crib remediation; bid evaluation completed in March.
- Submitted drafts for 300-FF-2 RDR/SAP/ESD in February for regulator review; comments received in March.

- Completed final backfill and regrading at 300-FF-1 Operable Unit (OU) (including 618-4 and 618-5 Burial Grounds) on February 19, satisfying TPA Milestone M-16-03H, (due June 30), more than four months ahead of schedule. Revegetation was also completed for the entire 300-FF-1 OU and 618-5 Burial Ground.

### Waste Operations (M-16-03I)

#### ERDF Operations/Transportation:

- Completed off-site treatment of depleted uranium chips-in-oil drummed waste (from 618-4 Burial Ground). Treated waste will be returned and disposed in ERDF.
- Completed bench-scale tests in January for treatment of 183-H Solar Basin waste. During February, waste treatment was delayed due to problems encountered while dumping the first container. Resumed treatment in March by utilizing revised work methods to address dust issues and facilitate release of waste from drums.
- Through March, a total of 4,739,166 tons of waste have been disposed in ERDF since operations began in July 1996; 221,402 tons disposed in FY04.

#### ERDF Cells 5/6 Expansion Project:

- Excavated 1,336,500 bank cubic yards (BCY) through February; 48,800 BCY to go, 96.5% complete. Remaining soil to be excavated will be used for berm construction and operational cover after liners are installed (will avoid unnecessary double handling by subcontractor). With exception of the remaining soil left to avoid double handling, Cells 5/6 excavation was completed on February 26.



ERDF Cells 5/6 Excavation

- Suspended use of Articulated Dump Trucks (ADTs) when an ADT rolled the dump bed portion (leaving cab in an upright position) during second shift operations on January 26. Mass excavation, using ADTs, was resumed on February 11, when ERC approved the construction subcontractor's Corrective Action Plan.
- Completed 90-day test pad monitoring test period on February 24 with good test results. RL and EPA were briefed on test results. Initiated admix production and placement in March.
- Completed north and south berm construction.
- Initiated lysimeter liner installation in March.
- Continued work on low voltage electrical system.

# ERC RIVER CORRIDOR PROJECT ACCOMPLISHMENTS

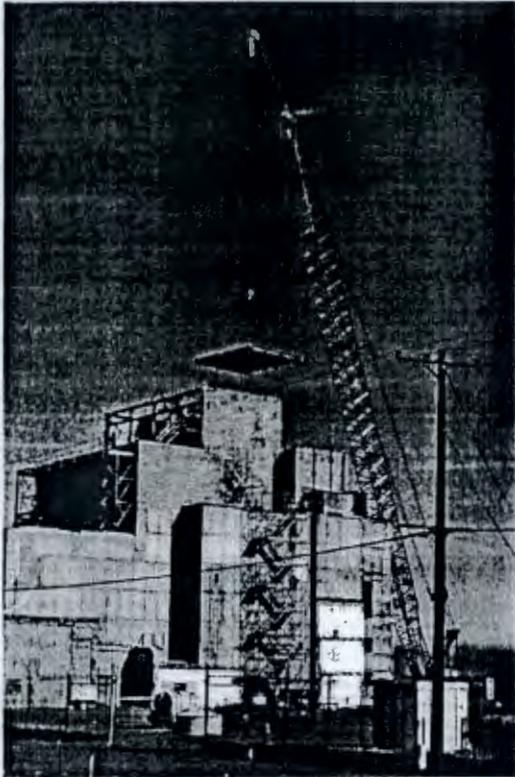
## Facilities Decommissioning (M-93-11, M-93-17, M-93-18)

### H Reactor:

- Completed demolition of transfer pits in December 2003.
- Completed FSB demolition/loadout in March.
- Awarded contract in March for gas wing explosive demolition.
- Submitted RFP package to Procurement in February for SSE design/construction.

### F Reactor:

- Issued S&M Plan on January 21, which satisfied completion of TPA Milestone M-93-11, "Complete F Reactor ISS" (due 9/30/04), more than eight months ahead of schedule.



Initiating D Reactor SSE

### D Reactor:

- Completed readiness-to-proceed evaluation with SSE subcontractor. Commenced steel erection for SSE on March 31.

### 1304-N Emergency Dump Tank / 1300-N Basin:

- Completed demolition/loadout of above-grade portion of tank in February. Below-grade stem wall demolition 75% complete through March.

### 1714-N Storage Facility:

- Removed 26 tons of lead and shipped to ERDF for disposal during March.

### Other:

- Initiated EE/CA preparation for 105-N/109-N and 100 K Area ancillary facilities (accelerated scope).



1304-N Emergency Dump Tank Prior to Demolition



Preparing to Demolish 1304-N Concrete Walls and Steel Tank Floor

## Risk Assessment and Site Closure

### 100/300 Area:

- Received RL approval on December 12 of the *100/300 Area River Corridor Baseline Risk Assessment: Basis and Assumptions on Project Scope* report.
- Initiated development of the General Work Plan for the River Corridor Baseline Risk Assessment in January.
- Completed historical data collection and analysis draft information on February 26.
- Completed river shore radiation (gamma) surveys at 100 F and 300 Areas; 100 D/H Areas 95% complete; 100 K Area in process.
- Received RL approval on January 21, and finalized *Public Communication Plan for the 100 Area and 300 Area Component of the River Corridor Baseline Risk Assessment*, and *Trustee Communication Plan for the River Corridor Baseline Risk Assessment Project*.

### 100 B/C Pilot:

- Issued Rev. 0 of the *Conceptual Site Model for 100 B/C Pilot Project Risk Assessment*, in March
- Completed consultation efforts with the Tribes on scenario and sampling development.

## **ERC RIVER CORRIDOR ISSUES**

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There are no ERC River Corridor issues at this time.

# ERC RIVER CORRIDOR PERFORMANCE SUMMARY

## RIVER CORRIDOR

### FY 2004 ERC PBS PERFORMANCE SUMMARY FYTD MARCH 2004 (\$K)

	FY04 DWP		CURRENT	EAC	FYTD			FYTD SCHEDULE VAR			FYTD COST VAR		
	BCWS	BCWS			BCWS	BCWP	ACWP	\$	%	SPI	\$	%	CPI
RA	32,590	41,855	37,111	17,775	19,540	15,026	1,765	9.9%	1.10	4,514	23.1%	1.30	
WASTE	33,793	38,222	39,283	17,711	16,784	17,868	-927	-5.2%	0.95	-1,084	-6.5%	0.94	
FDP-0041	23,052	25,281	23,565	11,073	11,222	9,948	149	1.3%	1.01	1,274	11.4%	1.13	
FDP-0040	62	62	63	2	2	2	0	0.0%	1.00	0	0.0%	1.00	
FDP Total	23,114	25,343	23,628	11,075	11,224	9,950	149	1.3%	1.01	1,274	11.4%	1.13	
RISK	2,170	3,524	3,571	1,624	1,758	1,618	134	8.3%	1.08	140	8.0%	1.09	
PMS	28,333	30,005	24,695	14,409	14,334	11,014	-75	-0.5%	0.99	3,320	23.2%	1.30	
ERC TOTAL	120,000	138,949	128,288	62,594	63,640	55,476	1,046	1.7%	1.02	8,164	12.8%	1.15	

#### Schedule Variance Summary:

Through March, the ER Project is \$1.0M (+1.7%) ahead of schedule. The positive schedule variance is attributed to 300 Area backfill/regrade completed significantly ahead of schedule; B/C Burial Ground remediation ahead of schedule due to revised work approach; offset by delays in ERDF expansion admix production/placement and ERDF Operations/Transportation.

#### Cost Variance Summary:

At the end of March, the ER Project had performed \$63.6M worth of work, at a cost of \$55.5M. This results in a favorable cost variance of \$8.2M (+12.8%). The positive cost variance is attributed to 300 Area backfill/regrade subcontract award less than plan; favorable settlement for previous site subcontract litigation; fewer resources required by DR ancillary facilities D&D, F Reactor, and 100 Area S&M; prior-year rebill accounting adjustments; offset by increased uranium chips-in-oil drum treatment costs.

## INTEGRATION ISSUES

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This section of the quarterly review discusses Central Plateau milestones and workscope that potentially affect River Corridor milestones.

The Fluor Hanford (FH) Groundwater Project is directing evaluations that will support selection of the final remedial action for 100 N Area soil sites. These evaluations include an evaluation of impacts to aquatic and riparian ecoreceptors, an evaluation of the phytoremediation technology, and an evaluation of the apatite sequestration technology. All three evaluations will be completed in October 2004 or later, and are not expected to affect the volume or duration of soil excavation under the existing 100-NR-1 and 100-NR-1/100-NR-2 RODs. Therefore, there is currently no identified impact of Central Plateau workscope for 100 N Area milestones or workscope.

Additionally, BHI is leading the Columbia River Baseline Risk Assessment (RCBRA) for ecological and human health. FH is responsible for the riparian and near-shore river ecological risk assessment at the 100 N Area, based on an Interim Action ROD requirement. The projects are coordinating the work. One identified coordination need is to identify an efficient way to address the human health risk assessment at the 100-N riparian and near-shore river zones.

FH is taking the lead to determine the source, driver, and actions needed to mitigate recent increases of hexavalent chromium in groundwater and river seeps in 100 D Area. FH is coordinating with BHI to review past waste site remediation and practices in the 100 D Area coupled with evaluation of potential sources of hexavalent chromium from waste sites yet to be remediated in 100 D Area. FH is evaluating potential drivers including the old fire suppression water lines and evaluating options for groundwater treatment systems. PNNL is providing details regarding groundwater flow paths, groundwater and river seep contaminant concentration levels, and groundwater treatment systems.

FH is managing closure of the 384 Powerhouse Bunker Tanks as a corrective action for a release from underground storage tanks. DOE and FH are currently discussing closure options with the Washington Department of Ecology. There is currently no identified impact of this workscope on 300 Area milestones or workscope.

There is currently no other potential impact of Central Plateau workscope that would delay the River Corridor milestones or workscope.

**U.S. Department of Energy  
Richland Operations Office  
Fast Flux Test Facility (FFTF) Deactivation**

**Tri-Party Agreement (TPA)  
M-81-00 Series Milestones and  
Related M-20-29B Milestone**

4/27/04 River Corridor TPA Milestones Review Meeting  
Washington State Department of Ecology  
U.S. Environmental Protection Agency

DOE-RL FFTF Division – AlFarabee  
Washington State Department of Ecology – Laura Cusack  
U.S. Environmental Protection Agency – Nicholas Ceto

**4/04 Status of FFTF Deactivation  
TPA M-81-00 Milestones and  
Related M-20-29B Milestone**

<b>Milestone</b>	<b>Milestone Description</b>	<b>Due Date</b>	<b>Status</b>
M-81-00A	Complete FFTF Facility Transition and Initiate the Surveillance and Maintenance Phase	2/28/11	On Schedule
M-81-00-T01	Complete Reactor Defueling	9/30/95	Completed 4/19/95
M-81-00A-T02	Complete Transfer of Unirradiated Fuel to Secure Onsite Storage	3/31/09	Completed 11/3/03
M-81-00A-T03	Complete Transfer of Irradiated Fuel to Secure Onsite Storage	3/31/09	On Schedule
M-81-00A-T04	Complete Transfer of Special Fuel to DOE's Idaho National Engineering Laboratory for Consolidated Storage	3/31/09	On Schedule
M-81-00A-T05	Complete Auxiliary Plant Systems Shutdown	2/28/11	On Schedule
M-81-01	Initiate Sodium Storage Facility Construction	2/28/97	Completed 10/9/95
M-81-02	Complete Sodium Storage Facility Startup	7/31/98	Completed 1/17/97

**4/04 Status of FFTF Deactivation  
TPA M-81-00 Milestones and  
Related M-20-29B Milestone  
(Continued)**

<b>Milestone</b>	<b>Milestone Description</b>	<b>Due Date</b>	<b>Status</b>
M-81-10-T01	Submit Final Sodium Disposition Report	9/30/05	On Schedule
M-81-11	Submit FFTF End Point Criteria Document	8/31/05	On Schedule
M-81-12	Initiate FFTF Sodium Drain	6/30/03	Completed 4/7/03
M-81-13	Complete Reactor and Heat Transport System Sodium Drain	6/30/05	On Schedule
M-81-14-T01	Complete Fuel Storage Facility Sodium Drain	4/30/07	On Schedule
M-81-14-T02	Initiate Interim Decay Storage Vessel Sodium Drain	6/30/08	On Schedule
M-81-14	Complete FFTF Sodium Drain	9/30/09	On Schedule
M-81-15	Submit FFTF Surveillance and Maintenance Plan	6/30/10	On Schedule
M-20-29B	Submit Sodium Storage Facility and Sodium Reaction Facility Closure Plan or Request for Procedural Closure to Ecology as Defined in Agreement Section 6.3.3	6/30/03	Completed 6/12/03

# Significant Accomplishments

(4/04)

- **M-81-00A-T03, Complete Transfer of Irradiated Fuel (Due: 3/31/09)**
  - Eight ISCs have been loaded and transferred to secure onsite storage
  - Funding was provided to TransNuclear, Inc. for fabrication of the first 10 of 22 ISCs needed to complete fuel offload
  - 42 of 57 fuel assemblies have been transferred from FSF to IDS to expedite offload activities when additional casks are available
  - Preps continue for special fuel (MFF-1) disassembly
    - Completed training of operators in the 309 Building IEM Cell training facility
    - Completed staging of disassembly equipment in the IEM Cell
  - Completed 400 Area preps for sending 22 ISCs from the 400 Area ISA to the 200 Area ISA
    - Waiting for final updates to the 200 Area Authorization Basis

# Significant Accomplishments

(4/04, Continued)

- **M-81-00A-T04, Complete Transfer of Special Fuel to INEEL (Due 3/31/09)**
  - Efforts continue on the T-3 SARP amendment
  - Proceeding with plans to store this fuel in ISCs at the 200 Area ISA prior to shipment to INEEL or possible direct shipment to the repository at Yucca mountain
- **M-81-00A-T05, Complete Auxiliary Plant Systems Shutdown (Due 2/28/11)**
  - Following drain of the secondary sodium systems, associated auxiliary systems (e.g., trace heat) were secured
  - Seven of the 19 PCB transformers at the plant have been removed
- **M-81-11, Submit FFTF End Point Criteria Document (Due 8/31/05)**
  - A draft table of contents was provided to Ecology on March 11, 2004 for review and comment

# Significant Accomplishments

(4/04, Continued)

- **M-81-13, Complete Reactor and Heat Transport System Sodium Drain (Due: 6/30/05)**
  - Completed fabrication of the pipe spools for the cross-connects needed for sodium flush of the in-containment NaK loops
    - Installation of the cross connects is in progress
  - Reheating of the primary sodium drain system is in progress
  - Fabrication of the second drill string for drain of the reactor vessel is complete
  - The reactor drain pump was completed by the vendor and was delivered in January and February 2004
  - Design review of the reactor vessel drain pump assembly is in progress

## **Significant Planned Actions (Next Six Months)**

- **Fuel Offload**

- Complete MFF-1 disassembly in the IEM Cell
- Complete transfer of the 22 ISCs stored in the 400 Area ISA to the 200 Area ISA
- Initiate fuel offload in June following receipt of 5 ISCs back from PFP
- Receive 5 ISCs in September and 5 additional casks in October from the new procurement activity.

- **Sodium Drain**

- Complete design review and initiate fabrication of the reactor drain pump assembly for reactor vessel installation
- Complete installation of the pipe spools for the NaK cross-connects and complete flush of the in-containment NaK loops
- Complete drain of the FSF NaK system and the primary sodium loops

# Significant Planned Actions (Next Six Months)

- **Auxiliary Systems Shutdown**
  - Secure trace heat following drain of the primary sodium and NaK systems
  - Remove an eighth PCB transformer by the end of April and another by the end of June 2004

# Schedule / Cost Performance Fiscal Year to Date Status (\$000s)

(Status through April 2004 month end)

Fast Flux Test Facility Closure Project	Budgeted Cost of Work Scheduled (BCWS)	Budgeted Cost of Work Performed (BCWP)	Actual Cost of Work Performed (ACWP)	Schedule Variance (SV)	Schedule Variance %	Cost Variance (CV)	Cost Variance %	FY Budget at Completion (BAC)
RL-0042: Fast Flux Test Facility	\$20,439	\$18,949	\$18,047	(\$1,490)	-7.3%	\$902	4.8%	\$43,842

## Schedule Variance Analysis (-\$1.5M):

The unfavorable schedule progress is due to less critical maintenance activities being deferred to allow resources to be applied to deactivation activities. Other significant contributors include elimination of the Radial Reflector Shipping Container procurement and reduction in fee in the budget.

## Cost Variance Analysis (\$0.9M):

The favorable cost variance is due to control of spending in the surveillance and maintenance area. An additional favorable variance contributor was above average equipment availability during fuel offload campaign 81.

## **Project Issues/Summary**

- Significant progress continues to be made in the key deactivation areas of fuel offload and sodium drain
- The project is currently on track to meet all milestones agreed to by the Tri-Party agencies in 5/03

*Tri-Party Agreement*  
*Milestone M-89-00*



324 Building

Closure of Mixed Waste Units

April 27, 2004  
Tri-Party Agreement  
Quarterly Milestone Review

Ecology Program Manager – FW Bond  
DOE-RL Program Manager – KD Bazzell  
FH Environmental Sponsor – DE Rasmussen



## *Active Milestone Overview*

<b>Milestone</b>	<b>Description</b>	<b>Date</b>	<b>Status</b>
M-89-00	Complete closure of non-permitted mixed waste units in the 324 Building REC B-Cell, REC D-Cell and the high-level vault	10/31/05	In Progress



# *Program Manager's Assessment*

*Since Last Quarterly review*

## **Environmental – Good**

- Activities related to completion of the M-89-00 milestone have been conducted in compliance with environmental regulations. No adverse impacts to the environment have occurred.

## **Safety – Good**

- Activities related to the M-89-00 milestone continued to be conducted safely.

## **Cost - Good**

- Facility activities are within budget and remained in minimum safe operations mode, with preventive and corrective maintenance activities continuing as required to maintain compliance with safety basis and regulatory requirements.

## **Schedule – Good**

- The 324 Facility continued to be maintained in minimum safe operation mode, in compliance with regulatory requirements and the Documented Safety Analysis (DSA), Basis for Interim Operation (BIO), and Technical Safety Requirements (TSR). Containers with size reduced equipment continued to be staged in A-Cell, awaiting future shipment during FY2004/FY2005.



# *Significant Accomplishments*

*Since Last Quarterly Review*

## **M-89-00**

- Continued to safely maintain 324 Facility in minimum safe operations mode and performed preventive/corrective maintenance and surveillance activities consistent with facility safety basis and regulatory requirements.
- Procurement of the 324 Building Radiochemical Engineering Cells Liquid Waste Handling System (LWHS) skid for future cell decontamination activities continued and is in the final stages of fabrication and assembly at the manufacturer.
- Provided TPA Change Control Form M-89-04-01 to Ecology for modification of the M-89-00 completion date to September 30, 2010 to coincide with the M-094-03 completion date for complete disposition of the 324 Building. Ecology provided minor comments, which are being addressed. This modification is consistent with the 12/18/02 Ecology approval letter for the Amendment to the *324 Building Radiochemical Engineering Cells, High-Level Vault, Low-Level Vault, and Associated Areas Closure Plan* (DOE/RL-96-73, Revision 1).
- Provided 324 Building Radiochemical Engineering Cells closure plan revision to Ecology and initiated workshop meetings with Ecology to facilitate Ecology review and comment activities. The closure plan revision reflects the removal actions summarized in Table 6-1A of the closure plan amendment addressed in the 12/18/02 Ecology approval letter for the Amendment to the *324 Building Radiochemical Engineering Cells, High-Level Vault, Low-Level Vault, and Associated Areas Closure Plan* (DOE/RL-96-73, Revision 1).



# *Significant Planned Actions*

*Next Six Months*

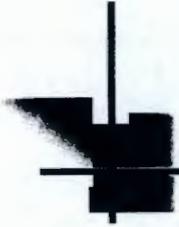
## **M-89-00**

- Continue minimum safe operations mode in the 324 Facility and perform preventive/corrective maintenance and surveillance activities consistent with facility safety basis and regulatory requirements.
- Complete factory acceptance testing and delivery of the 324 Building Liquid Waste Handling System equipment to the site.
- Incorporate Ecology comments for the M-89-04-01 Change Control Form and obtain Tri-Party approvals.
- Complete workshop sessions with Ecology for the revision of the 324 Building Radiochemical Engineering Cells closure plan.



## *Project Summary*

- The 324 Facility will continue to maintain minimum safe operations mode and conduct preventive/corrective maintenance and surveillance activities consistent with facility safety basis and regulatory requirements.
- Until the new River Corridor Contract is in place and transition activities are completed, no significant 324 Building Radiochemical Engineering Cells, High-Level Vault, Low-Level Vault, and Associated Areas mixed waste units closure activities are planned.



# Facilities for Cesium/Strontium, Sodium, Un-irradiated Uranium, and Special Case Waste

## Tri-Party Agreement M-92-00 Series Milestones

April 27, 2004  
Tri-Party Agreement  
Quarterly Milestone Review

Ecology Program Manager – FW Bond  
DOE-RL Program Manager – DT Evans  
FH Environmental Sponsor – DE Rasmussen

# Milestone M-92-00 Interim Milestones and Target Dates

Milestone	Description	Target Date	Status
M-92-00	Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for the storage, treatment/processing, and disposal of Hanford Site cesium and strontium capsules (Cs/Sr), bulk sodium (Na) and sodium-potassium alloy (NaK), and 300 Area Special Case Waste (SCW).	TBD	TBD
M-92-01	Complete commercial disposition and/or acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for sitewide consolidation and storage prior to commercial use or treatment and/or repackaging by DOE-TWRS.	12/31/09	ORP Quarterly
M-92-05	Inclusion of Hanford Site Cs/Sr "treatment and/or repackaging parameters" in DOE TWRS Phase II Request for Proposals (treatment and/or repackaging of all remaining Cs/Sr).	6/30/2007	ORP Quarterly
MX-92-06-T01	Complete commercial disposition and/or acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for the storage, treatment/processing, and disposal/disposition of all Hanford Site U.  Complete the disposal/disposition of ~5 metric tons of UO <sub>2</sub> source materials located in the 300 Area Fuels Supply Shutdown Facilities and source material located in 325 and 2718-E and complete the disposition of ~235 metric tons of uranium billets located in the 300 Area.	12/31/01	Complete
MX-92-06-T02	Complete the disposal/disposition of ~135 metric tons of un-irradiated contaminated fuel located in the 300 Area and 5 metric tons of misc U source material located in all 300 and 200 Area Fuel Supply Shutdown (FSS) Facilities, and complete the disposal/disposition of ~825 metric tons of un-irradiated fuel source materials located in the 300 Area FSS Facilities.	9/30/06	On Schedule
M-92-09	Establish milestones and/or target dates if needed for acquisition of new facilities, modifications of existing facilities, and/or modification of planned facilities necessary for storage, treatment/processing, and disposal of Hanford Site sodium.	7/30/2009	On Schedule
M-92-10	Submit Hanford Site Sodium Disposition Evaluation Report to Ecology.	9/30/2005	On Schedule

# Milestone M-92-00 Interim Milestones and Target Dates (cont'd)

Milestone	Description	Target Date	Status
MX-92-11-T01	Complete disposition options for all Hanford non-radioactive sodium.	9/30/04	On schedule
M-92-12	Complete acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for consolidated storage, prior to disposal of Hanford Site 300 Area SCW and materials.	9/30/06	On schedule
M-92-13	Submit 300 Area SCW PMP to Ecology pursuant to Agreement Action Plan, Section 11.5.	9/30/00	Complete
M-92-14	Complete removal and transfer, and initiate storage of Phase I 300 Area SCW and materials. Phase I inventory will consist of, at minimum, one-third the total curie content of all 300 Area SCW.	9/30/02	Complete
M-92-15	Complete removal and transfer, and initiate storage of Phase II 300 Area SCW and materials. Phase II inventory will consist of, at minimum, half the remaining curie content of 300 Area SCW.	9/30/04	Complete
M-92-16	Complete removal and transfer and initiate storage of Phase III 300 Area SCW and materials.	9/30/06	On schedule

# Program Manager's Assessment

since last quarterly review

- **Environmental - Good**
  - No negative environmental impacts or issues have arisen out of the storage and/or handling, packaging, or transportation of M-92 materials.
- **Safety - Good**
  - No negative safety impacts or issues have arisen out of the storage and/or handling, packaging, or transportation of the SCW inventory
- **Budget - Good**
  - Milestone M-92 activities are being completed within budget

# Program Manager's Assessment (cont'd)

since last quarterly review

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## ■ Schedule - Good

- **MX-92-06-T02**
  - No activities are planned for the next six months
- **M-92-09 and M-92-10**
  - No activities are planned for the next six months
- **MX-92-11-T01**
  - Cleaning of residual sodium from 337B Composite Reactor Component Test Activity (CRCTA) vessel was completed and the vessel is being rinsed. Two associated vapor traps have also been cleaned.
- **M-92-16**
  - On schedule. No further Special Case Waste (SCW) packaging/shipment activities planned at 327 Building until after new River Corridor Contract is in place. The 340 Facility SCW activities status is being reviewed by RL

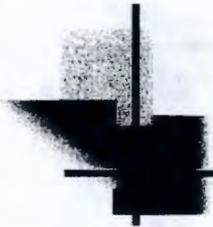


# Significant Planned Actions

next six months

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- **MX-92-06-T02**
  - If funded, revise existing Safety Analysis Report for Packaging (SARP) to allow on-site shipment of remaining 825 metric tons of fuel assemblies
- **MX-92-11-T01**
  - Finalize plans for disposition of the 337B sodium cold trap and miscellaneous other small sodium containing components.
- **M-92-16**
  - On schedule. No further Special Case Waste packaging/shipping activities planned at 327 Building until after the new River Corridor Contract is in place.



# Project Summary

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- **M-92-01:** Covered in ORP Quarterly Milestone Review
- **M-92-05:** Covered in ORP Quarterly Milestone Review
- **MX-92-06-T02:** On schedule
- **M-92-09:** On schedule
- **M-92-10:** On schedule
- **MX-92-11-T01:** On schedule
- **M-92-12:** On schedule. At this time there are no additional facilities identified as needed to store 300 Area Special Case Waste
- **M-92-16:** On schedule. No further Special Case Waste activities planned at 327 Building until after the new River Corridor Contract is in place. Special Case Waste (SCW) removal and shipping is complete for the 324 and 325 Buildings.

# Disposition of the 300 Area Surplus Facilities

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Tri-Party Agreement

M-094-00 Series Milestones

# Active Milestone Overview

Milestone	Description	Date
M-94-00	<p>Complete disposition of 300 Area Surplus Facilities</p> <p>Completion of facility disposition is defined as the completion of deactivation, decontamination, and decommissioning, and obtain EPA and/or Ecology approval of the appropriate project closeout documents</p>	9/30/2018
M-94-01	<p>Submit a schedule and Tri-Party Agreement milestones to complete disposition of the surplus facilities in the 300 area and identify the 300 area facilities and associated waste sites that will remain past the M-094-00 completion date (September 30, 2018). (Per change M-94-03-01)</p>	9/30/2004
M-94-02	<p>Submit an amendment to the existing 324 Building REC/HLV closure plan, DOE/RL-96-73, Rev 1, for Ecology review and approval. The amendment shall change the existing closure plan path from clean closure to a path where the high risk materials and wastes are removed from the facility followed by complete disposition. (Submitted 7/30/02, Ecology approval letter 12/18/02)</p>	7/30/2002
M-094-03	<p>Complete disposition of the following surplus facilities: 303M, 332, 333, 334, 334A, 3221, 3222, 3223, 3224, 3225, 324, 324B, 327</p>	9/30/2010
M-094-04	<p>(M-094-04 scope was combined with M-094-01 per change M-94-03-01)</p>	See M-094-01

# Project Summary

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- The M-094 series milestones address the disposition of the 300 Area Surplus Facilities and are part of the new River Corridor Contract work scope. Subject activities will proceed after the River Corridor contract is in place.
  - RL continued activities to pursue establishing the River Corridor Contract.
  - M-094-01: RL is continuing interactions with Ecology regarding status and strategy relative to near term milestone M-094-01.
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# **Hanford Spent Nuclear Fuel Project**

## ***Tri-Party Agreement M-34 Milestone Review***



**Larry Earley**  
**U.S. Department of Energy,**  
**Richland Operations Office**

**April 27, 2004**

*Hanford Spent Nuclear Fuel Project*

**TPA Milestone Status**  
**Remaining Milestones Due Fiscal Year 2004-2007**

<b>Number</b>	<b>Milestone Title</b>	<b>Due Date</b>	<b>Status/Comments</b>
M-34-08	Initiate full scale K-East Basin sludge removal	12/31/2002	MISSED. Sludge removal system installation complete. Testing and training for system operation in progress. FH ORR for K Basins commenced April 27, 2004.
M-34-28	Complete removal of 1,619 MTHM from the K-West Basin	12/31/2003	Completed 1/13/04.
M-34-25-T01	Complete transfer of K-East Basin SNF to K-West Basin	5/31/2004	In jeopardy of being missed by approximately six weeks.
M-34-18B	Complete removal of all K Basin SNF	7/31/2004	In jeopardy of being missed by approximately eight weeks.
M-34-10	Complete sludge removal from K Basins	8/31/2004	Scope and schedule for completing interim milestone subject to change based on revised sludge remedy involving treatment and packaging for WIPP disposal. *
M-34-23	Start K-East water removal	9/30/2004	Planned to be met by removal of water from K-East discharge chute or North Load-out Pit (NLOP).
M-34-09-T01	Complete K Basins rack & canister removal	1/31/2005	* (see note below)
M-34-24	Complete K-East Basin water removal	9/30/2005	* (see note below)
M-34-21-T01	Initiate full-scale K-West Basin water removal	10/31/2005	* (see note below)
M-34-22	Complete K-West Basin water removal	8/31/2006	* (see note below)
M-34-00A	Complete removal of K Basin fuel/sludge/debris/water	7/31/2007	* (see note below)

\* **NOTE: Milestone subject to possible change based on accelerated K-Basin sludge disposal and basin deactivation approach.**



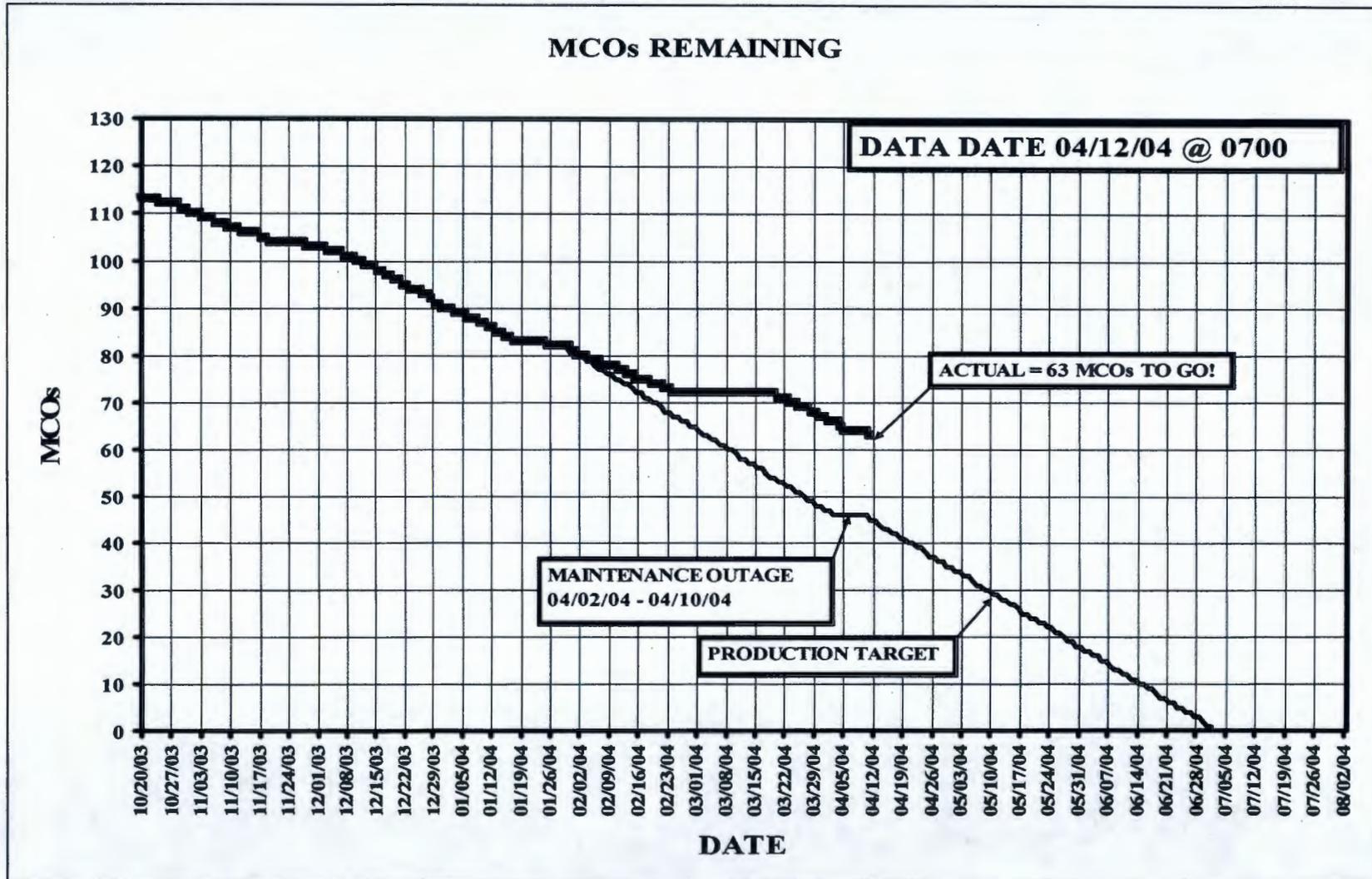
## ***Significant Accomplishments and Status***

### **• Fuel Movement**

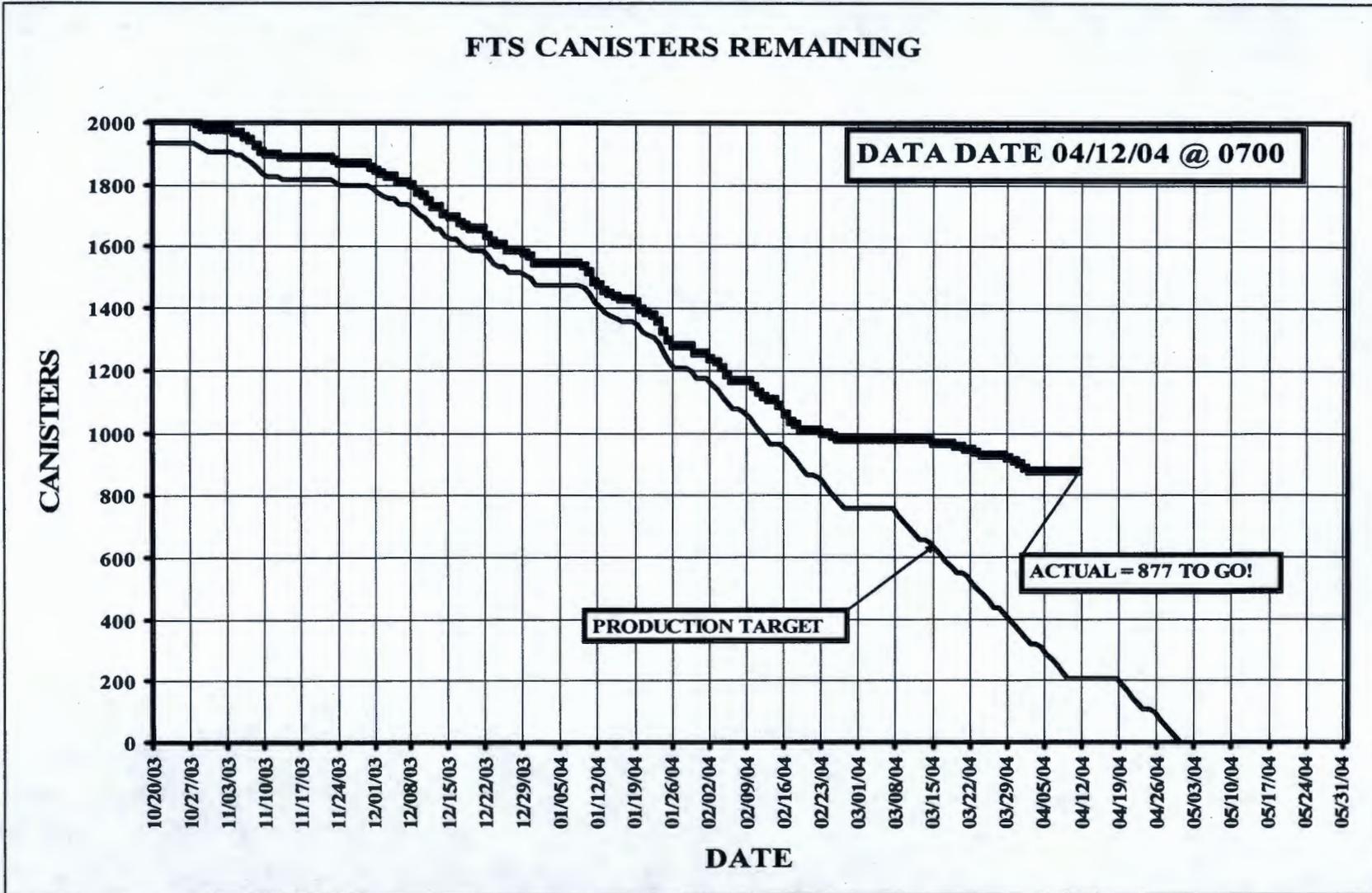
- Completed shipment of 297.73 MTHM (52 MCOs) from K-West Basin to Cold Vacuum Drying Facility (CVDF) between October 17 and April 14, 2004. Cumulative total of 320 MCOs and 1742.75 MTHM
- Completed 294 FTS shipments (79%) as of April 20, 2004
- Completed welding 172 MCOs as of April 20, 2004
- Radiological Improvements:
  - Implemented localized airborne radioactive area (ARA) controls centered around the Transfer Bay.
  - Responded to degraded fuel and increased airborne in K-West basin with new Ion Exchange resins, reducing basin water activity levels
- MCO processing improvements:
  - Completing the MCO helium purge on the trailer instead of in the south load out pit.
  - Reduced End of Key cleanouts by combining fuel keys
  - Provided new ergonomically-designed manual fuel handling tools
- FTS processing improvements:
  - Installed higher capacity pressure washers to improve FTS cask decontamination
- Equipment failures and degraded fuel caused significant delays:
  - Degraded fuel has increased basin water activity, increased airborne contamination levels, and has increased equipment problems. The resulting mask work has reduced productivity.
  - K-East FTS lift platform jackscrew thread damage repaired and new nuts installed
  - MCO basket loading mast misaligned and heat treated to align



# Significant Accomplishments and Status (continued)

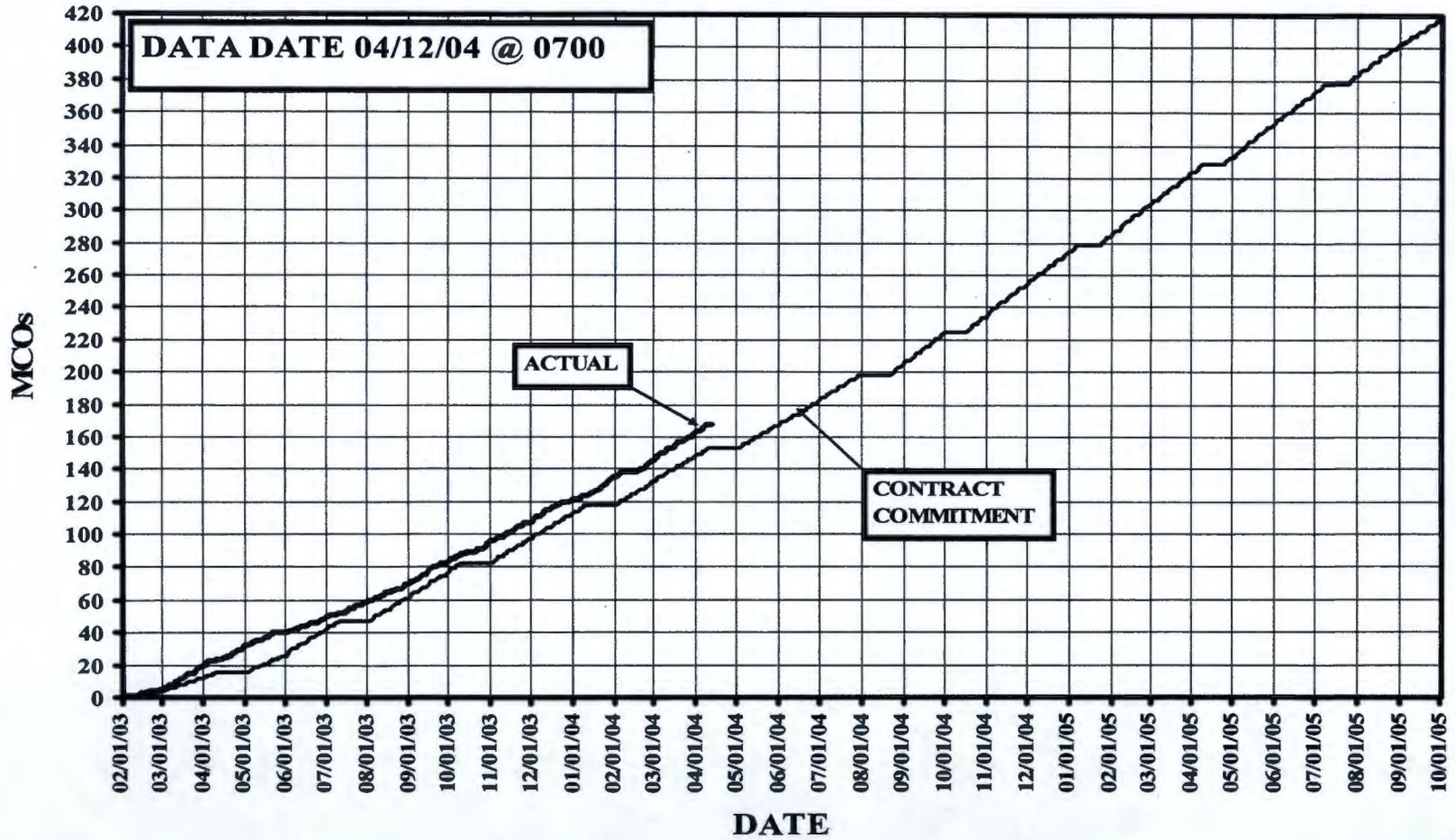


# Significant Accomplishments and Status (continued)



# Significant Accomplishments and Status (continued)

## MCO WELDING



## ***Significant Accomplishments and Status (continued)***

- **Sludge Retrieval and Disposition:**

- **DOE-RL and EPA have worked on developing a tentative agreement/milestone changes involving:**

- Accelerating sludge treatment for off site disposal.
- Accelerating removal of basins.

These changes cause a delay in sludge removal from the K Basins

- **DOE-RL has reviewed and commented on contractor baseline change request addressing sludge treatment and basin removal.**
- **DOE-RL is also providing input to DOE-HQ on revising the implementation plan provided earlier to the DNFSB to address sludge treatment.**
- **Installation and testing of the K-East sludge removal system is complete. FH plans to commenced the corporate ORR on April 27, 2004.**
- **Environmental documentation addressing sludge disposal pathway has been determined and discussed with the Environmental Protection Agency (EPA)**
  - Early retrieval of the K-East North Load-out Pit (NLOP) sludge (approximately 6.3 m<sup>3</sup>) has been proposed to conducted as a "time-critical removal action". DOE-RL and EPA reviews ongoing.
  - A CERCLA ROD amendment will grandfather in the actions of the "time critical removal action" and the remaining sludge
- **Technical studies are progressing to determine extent of separating metallic uranium from the sludge streams to yield an optimized volume of treated waste destined for disposal.**



## ***Significant Accomplishments and Status (continued)***

- **Sludge Retrieval and Disposition:**
  - **FH is using the BNFL experience in designing sludge treatment processes**
  - **Removed bulkhead separating K East Basin NLOP from the rest of the basin**
  - **Contract has been issued for the fabrication of the 105 K East Basin sludge storage tanks**
  - **Design has commenced on the "hose-in-a-hose" system that will transfer 105 K East Basin sludge to 105 K West Basin**



## ***Significant Accomplishments and Status (continued)***

- **Deactivation**

- **K Basin Accomplishments**

- Procured/installed equipment to size reduce and relocate debris; assisting Operations to Retrieve/Transfer Fuel from K East Basin
- Approved a formal MOA between FH and ERC (BHI) for grouting the K E Discharge Chute
- Issued a formal RFP for procurement of concrete/grout; held a vendor forum and answered questions from potential bidders
- Performed physical inspection and inventory of KE Discharge Chute (on both Basin and Reactor Sides of the Chute)



## ***Upcoming Activities***

### **General**

- Complete negotiations for a restructured set of TPA milestones addressing sludge treatment and basin removal

### **Fuel Movement**

- Complete removal of 105 K East Basin and 105 K West Basin fuel

### **Sludge Retrieval and Disposition**

- Continue treatment process design
- Install sludge consolidation system in 105 K East Basin
- Preparation and issuance of "CERCLA time critical removal action memorandum" or other document to allow K East Basin NLOP sludge removal and treatment
- Perform contractor and DOE ORR activities for 105 K East Basin and 325 Building sludge operations
- Remove and ship K-East NLOP sludge to 325 Building
- Revise K-Basins CERCLA documentation (ROD and Remedial Design Report) to reflect accelerated sludge disposal pathway

### **Deactivation**

- Remove 105 K East Basin debris to facilitate removal of fuel fragments on the floor of the basin
- Obtain EPA approval of the remedial design associated with grouting the K East Basin discharge chute



## ***SNF Project Issues/Concerns***

### **Programmatic Issues:**

- Establishing a time table for transport of sludge to WIPP for disposal in a form suitable to both DOE-RL and EPA is a challenge

### **Issue Resolution Status:**

- Being worked with resolution expected to be complete to support upcoming TPA tentative agreement and milestone change requests.



## ***SNF Project Issues/Concerns (continued)***

### **Fuel Removal Issues:**

- The remaining SNF shows increased deterioration which will continue to cause increased cycle time to load an MCO due to such factors as:
  - Increase the number of fuel canisters needed to be washed to obtain a sufficient number of fuel elements for MCO loading,
  - More processing time for scrap,
  - More frequent breakdowns of the K West PCM due to increase sludge and fuel fragments in the canisters being washed,
  - Increased filter plugging and back-flushing,
  - Increased fuel handling times due to fuel fragmentation, and
  - Decreased worker productivity due to added radiological protection measures.

### **Issue Resolution Status:**

- Installed new IXMs with a different ion exchange resin type to decrease basin water alpha contamination
- Revised operating procedures to reduce formulation of gas bubbles during IWTS startup
- Installed higher capacity pressure washers to reduce contamination on FTS casks
- Formed a Bottleneck Review Team to evaluate streamlining / enhancement opportunities



## ***Performance Measurement Terminology***

### **BCWS (Budgeted Cost of Work Scheduled)**

- ***BCWS represents the baseline budget for a scope of work over time. BCWS is normally combined with a term such as "Current Period" or "Fiscal Year to Date (FYTD)" to identify the time period the BCWS is associated with. BCWS is created by spreading the baseline cost estimate for a scope of work across its schedule activity duration based on the expected monthly level of activity. BCWS is the basis for the funding requested to perform a scope of work and is maintained through a documented change control process***

### **BCWP (Budgeted Cost of Work Performed)**

- ***BCWP represents the value of the work actually accomplished during a period based upon its budgeted value or BCWS. BCWP is a measure of the value of work based upon the physical work reported complete per the baseline schedule status update***

### **ACWP (Actual Cost of Work Performed)**

- ***ACWP represents the actual costs incurred to perform the work that was completed during a period and recorded as BCWP. For any particular period, ACWP includes accruals for costs not invoiced or booked associated with work that was performed during the period***

### **SCHEDULE VARIANCE (SV)**

- ***SV represents the difference between the work actually accomplished and the work planned or scheduled during any particular time period. (SV= BCWP-BCWS) A positive SV reflects an ahead of schedule situation while a negative SV reflects that work is behind the scheduled plan***

### **COST VARIANCE (CV)**

- ***CV represents the difference between the budgeted value of the work actually accomplished and the actual costs incurred to perform the work. (CV=BCWP-ACWP) A positive CV reflects the work being accomplished for less than its budgeted value and a negative CV reflects the work costing more to complete than planned***

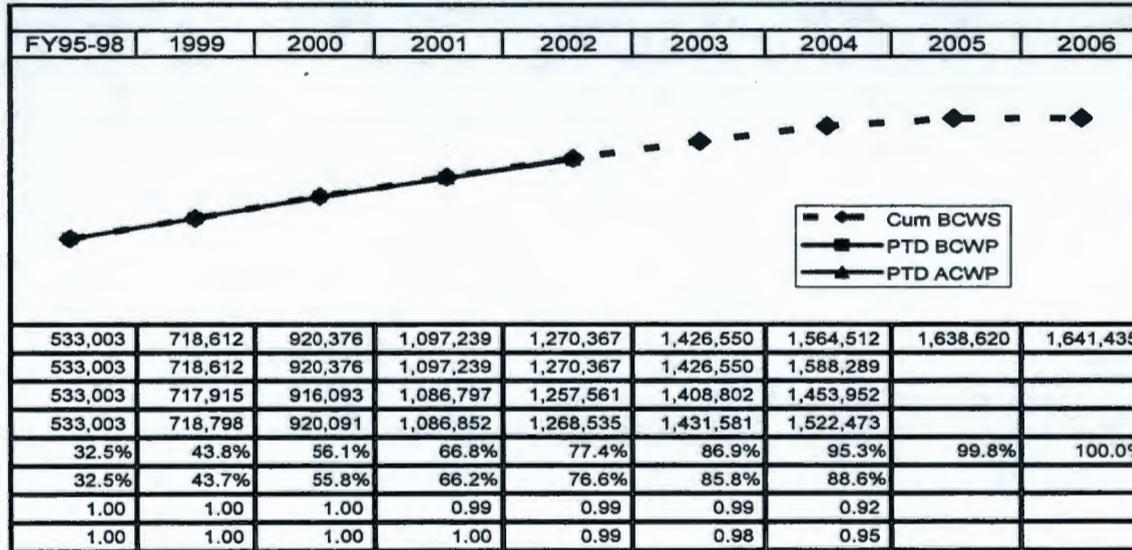
### **BAC (Budget at Completion)**

- ***BAC represents the total baseline budget for a scope of work associated with either a fiscal year or life cycle. BAC is the summary of all monthly BCWS values for a scope of work within the fiscal year or life cycle. On a fiscal year end report the FYTD BCWS will equal the FY BAC***



Hanford Spent Nuclear Fuel Project

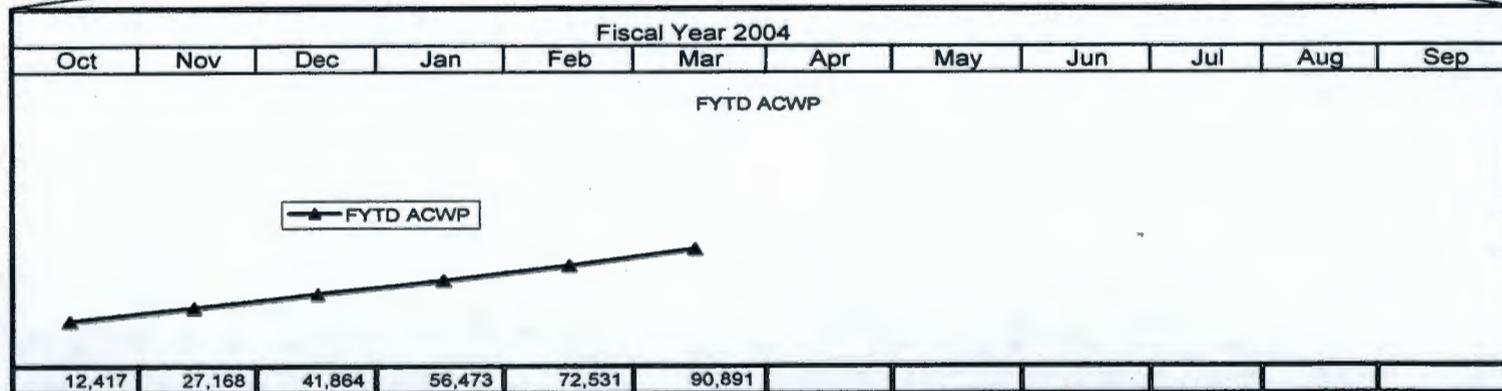
**SNF Project – Total Project Baseline**



Life Cycle	
*BAC=	1,641,435
EAC=	1,641,435
BCWS=	1,588,289
BCWP=	1,453,952
ACWP=	1,522,473
SV=	(134,337)
CV=	(68,521)

\* Current BAC reflects a 10-month acceleration to the TPA completion date.

Cum BCWS  
PTD BCWS  
PTD BCWP  
PTD ACWP  
% Sch  
% Cmpl  
SPI  
CPI



FYTD ACWP



### SNF Stabilization and Disposition Project Performance through Second Quarter FY 2004

		(\$ in thousands) By PBS	<u>FYTD ACWP</u>
PBS RL-0012	Fuel and Operations		\$ 58,395
PBS RL-0012	Sludge Retrieval and Disposition		\$ 19,215
PBS RL-0012	D&D Deactivation		\$ 4,314
PBS RL-0012	Closure Services		\$ 8,967
<b>TOTAL</b>			<u>\$ 90,891</u>



# PFP Closure Project



## Milestone

## TPA-M-83

April 2004  
Tri-Party Agreement Milestone  
Status Report

Ecology Project Manager - R. Bond  
DOE-RL Project Director – S. Charboneau  
FH Project Manager – M. B. Lackey  
FH Environmental – A. M. Hopkins

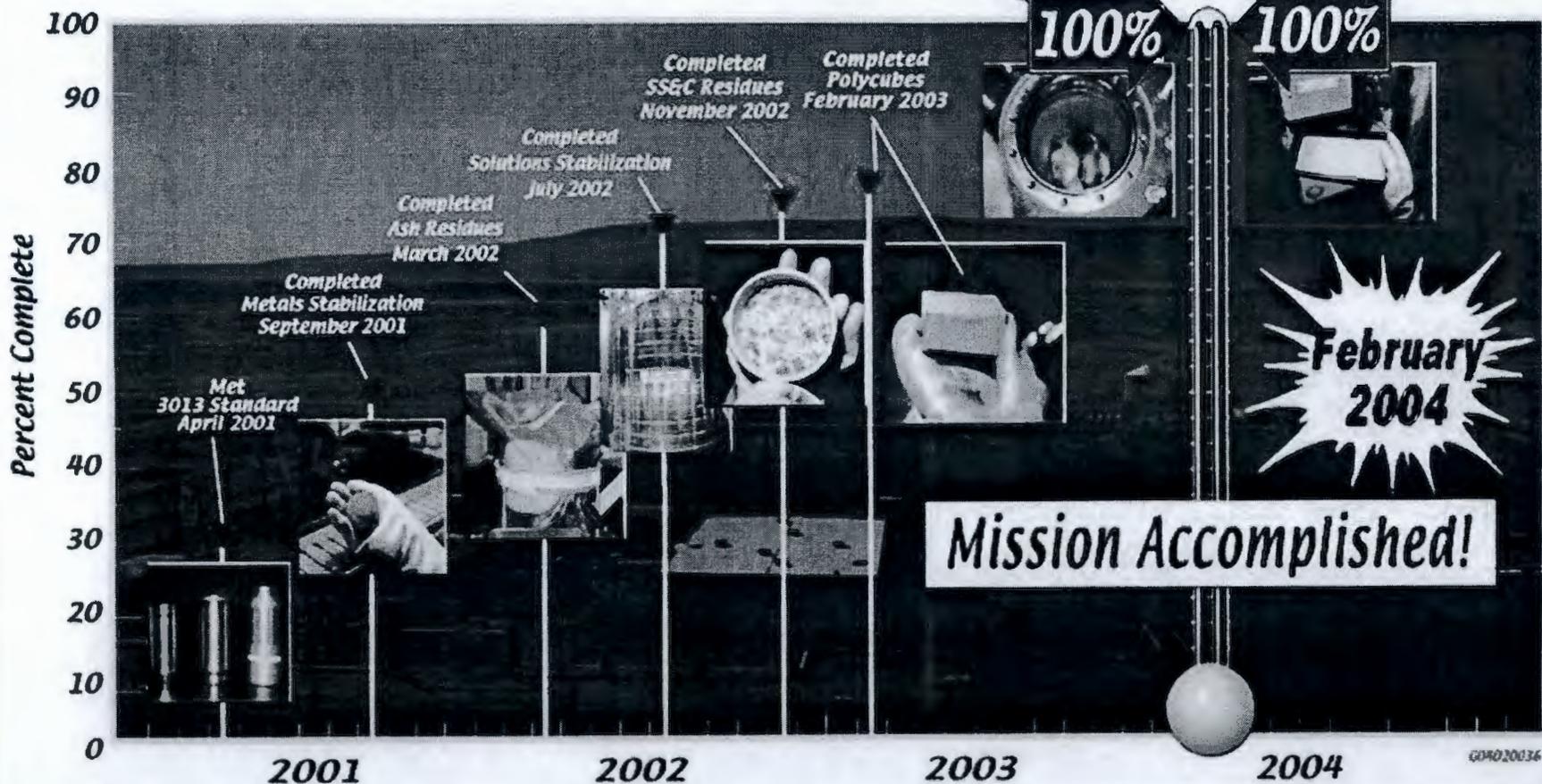
# M-83 Status for Interim Milestones Through 2006 (as of 3/31/04)

<b>TPA No.</b>	<b>TPA Commitment Date</b>	<b>Milestone Title</b>	<b>Status</b>
M-083-13	4/30/04	COMPLETE REPACKAGING OF PFP MIXED WASTE RESIDUES & SHIP TO CWC	Complete 3/11/04
M-083-31	6/30/05	DISCONTINUE WASTE DISCHARGES FROM THE 241-Z TANKS TO TANK FARMS	On Schedule
M-083-14	9/30/06	COMPLETE 100% OF THE LEGACY PU HOLDUP REMOVAL	On Schedule
M-083-40	9/30/06	COMPLETE TRANSITION AND DISMANTLEMENT OF 232-Z BLDG INCINERATOR	On Schedule

# PFP Plutonium Stabilization:

1,998 POCs Residues Packed - Done!

2,239 3013 Cans - Done!



# Major Accomplishments

- **Stabilization of Nuclear Materials officially completed on February 12, 2004, two weeks ahead of PI schedule and at a contract-to-date cost savings of \$1.6M**
- **Last pipe overpack container of Plutonium Finishing Plant (PFP) mixed waste residues shipped to Central Waste Complex on March 11, 2004, completing Tri-Party Agreement milestone M-83-13**
- **PFP's stabilization and packaging effort awarded "Project of the Year" by Columbia River Basin Chapter of the Project Management Institute on March 9, 2004**
- **Successfully cleaned out legacy plutonium from glovebox HC-9B**
  - **Largest and one of most challenging (complex) gloveboxes in the Remote Mechanical C Line**
- **Packaging of the first 75 9975 containers completed to enable first shipment of Special Nuclear Material offsite**

# Major Accomplishments

- **Field work in the 232-Z building included removal of upper glovebox firebrick and the conveyor and conveyor chain from Section C of the glovebox**
  - Completed all firebrick removal from the incinerator section
  - Approximately 18 drums of equipment, exceeding 2,100 pounds, removed from the glovebox

# Planned Activities

- **241-Z and Glovebox HA20MB Closure Plans**
- **241-Z Tank 361 EE/CA**
- **Data Quality Objective (DQO) and the Sampling Analysis Plan (SAP) for 232-Z**
- **232-Z Action Memo**
- **232-Z Removal Action Work Plan**
- **DQO and SAP for Balance of Plant**
- **Balance of Plant EE/CA**

# Schedule / Cost Performance

## Fiscal Year to Date Status (\$000s)

<b>BASELINE PLAN</b>	<b>Budgeted Cost of Work Scheduled</b>	<b>Budgeted Cost of Work Performed</b>	<b>Actual Cost of Work Performed</b>	<b>Schedule Variance \$</b>	<b>Schedule Variance %</b>	<b>Cost Variance \$</b>	<b>Cost Variance %</b>	<b>Budget At Completion</b>
<b>RL-11 PFP Closure Project</b>	<b>\$69,132</b>	<b>\$55,176</b>	<b>\$53,887</b>	<b>(\$13,956)</b>	<b>-20.2%</b>	<b>\$1,289</b>	<b>2.3%</b>	<b>\$147,644</b>
<b>Closure Services</b>	<b>\$9,994</b>	<b>\$9,994</b>	<b>\$9,500</b>	<b>\$0</b>	<b>0.0%</b>	<b>\$493</b>	<b>4.9%</b>	<b>\$25,215</b>
<b>TOTAL</b>	<b>\$79,126</b>	<b>\$65,170</b>	<b>\$63,387</b>	<b>(\$13,956)</b>	<b>-17.6%</b>	<b>\$1,783</b>	<b>2.7%</b>	<b>\$172,859</b>

*Status through March 2004 month end*

# PHMC Schedule / Cost Performance

## Fiscal Year to Date Status

### **Schedule Variance Analysis (-\$13.9M):**

- Delayed shipment of SNM offsite and associated procurement of shipping containers
- Delay in staff ramp-up
- Difficulties associated with 232-Z deactivation activities
- Documented Safety Analysis Implementation behind schedule

### **Cost Variance Analysis (\$1.8M):**

- Efficiencies in completion of the Pu Stabilization activities
- Dosimetry and medical costs lower due to delay in staff ramp-up
- Partially offset by unbudgeted severance costs
- Partially offset by increased costs associated with Pu shipping operations, difficulties in 232-Z deactivation and delays in 241-Z Tank D-5 transfer

# Issues

## ■ Regulatory Issue:

- None

## ■ Non-Regulatory Issues:

- Decision on Consolidation of Nuclear Material

# **GROUNDWATER REMEDIATION PROJECT**



2<sup>nd</sup> Quarter FY 2004

## GROUNDWATER REMEDIATION PROJECT

### GROUNDWATER REMEDIATION PROJECT FY 2004 TPA MILESTONE SUMMARY (Major & Interim Milestones)

Status as of: March 31, 2004

PBS	Milestone	Title	Compliance Date	Forecast/ Actual Date	Completed		Forecast		
					Ahead Schedule	On Schedule	Ahead Schedule	On Schedule	Behind Schedule
	M-024-57A	Complete required well installations in accordance with RCRA and CERCLA groundwater requirements. Install a minimum of 15 wells by 12/31/03.	12/31/03	12/31/03		X			
	M-015-41C	Submit 200-TW-1 & TW-2 OU FS and PP including Past Practice Waste Sites in 200-PW-5 Fission Product-Rich Process Waste Group	3/31/04	3/30/04		X			
	M-015-39B	Submit 200-CS-1 Chemical Sewer Group RI Report	5/31/04	5/31/04				X	
	M-013-00N	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan for the 200-UR-1 Unplanned Releases	6/30/04	6/30/04				X	
	M-015-43B	Submit 200-PW-2 OU RI Report including Past Practice Waste Sites in the 200-PW-4 General Process Waste Group	6/30/04	6/30/04				X	
	M-024-57B	DOE Initiates Discussions Annually to Reaffirm Selected Wells	6/30/04	6/30/04				X	
	M-024-57C	Conclude Negotiations & Revise M-024-57	8/1/04	8/1/04				X	
	M-016-66	Initiate Intermediate Design and Authorization Safety Analysis for Remedial Actions (618-10/11)	9/30/04	9/30/04				Note 1	

Note 1 – Change Request Proposed

## ACCOMPLISHMENTS

### 200 Area Waste Site Remediation

The feasibility study and proposed plan for the 200-TW-1, 200-TW-2, and 200-PW-5 Operable Units (OU) were transmitted to the regulators on March 31, 2004 for their review in accordance with the TPA. The transmittal of these documents fulfills interim TPA Milestone M-015-41C. These documents are the decision documents for 79 waste sites, including 28 waste sites in the BC Cribs and Trenches area.

The U Plant Waste Sites Draft Proposed Plan was modified to reflect comments received from EPA Region 10. On February 9, 2004, a half day workshop was held with EPA and Ecology to brief them on the comment resolutions and the revised proposed plan. A copy of the revised proposed plan was provided prior to the work shop. Remaining issues include RCRA/CERCLA integration and evaluating a new alternative, e.g. excavation and capping option.

The 200-PW-1, 200-PW-3, and 200-PW-6 Operable Unit (OU) Grouping field investigation is in progress. Drilling continued at the 216-Z-9 Trench.

The Rev.0 Work Plan for 200-PW-1, 200-PW-3, and 200-PW-6 OU's (plutonium and organic-rich) is complete and will be submitted to EPA for review in accordance with the TPA. EPA stated that additional comments will be minimal, if any, and could be addressed through the approval letter.

The 200-CW-5, 200-CW-2, 200-CW-4, and 200-SC-1 Rev. 1 consolidated work plan for these OUs is being finalized for transmittal to DOE/RL and the regulators in April 2004. Comments were received on the OU Remedial Investigation (RI) Report from the regulators and comment resolution was finalized in December 2003.

Progress continues on development of the data quality objectives (DQO) to support completion of the 200 Area NPL site ecological risk assessment needs. A workshop was held on March 30, 2004 with the Parties, and participants from the HNRTC and the HAB River & Plateau Committee to discuss the draft DQO summary report.

A series of collaborative meetings was held with Ecology and DOE/RL participants concerning the development of the 200-SW-1 and 200-SW-2 RI/FS Work Plan. Issues discussed include 40 CFR 191 as an applicable or relevant and appropriate requirement for these OUs and the use of process knowledge. The DQO for this work plan is

underway. The work plan is due December 31, 2004 under Tri-Party Agreement milestone M-013-000.

### Groundwater Remediation

Draft B RI/FS work plan for the 200-UP-1 operable unit is being reviewed by Ecology. The title of this report is *Remedial Investigation /Feasibility Study Work Plan for the 200-UP-1 Groundwater Operable Unit*, DOE-RL-92-76.

EPA and DOE/RL comments were received on the *Remedial Investigation/Feasibility Study Work Plan for the 200-ZP-1 Groundwater Operable Unit*, DOE/RL-2003-55 and the comments are currently being incorporated.

The three 100 Area pump-and-treat systems (100-KR-4, 100-NR-2 and 100-HR-3) and the 200-ZP-1 OU are all operating above 90% availability for FY 04. For the 200-ZP-1 OU, replacements for current extraction wells 1 and 4 have been installed and will be connected to the treatment system in April 2004.

Three extraction wells are currently pumping within the 200-UP-1 OU. Due to technical difficulties during the first quarter of FY04, the 200-UP-1 pump-and-treat system is currently showing 84% availability through the end of the second quarter of FY04. The 200-UP-1 OU is pumping >50gpm throughout the remainder of the year to ensure that a 50 gpm average, as required by the interim action record of decision, is achieved at the end of CY 2004.

Vapor extraction at Trench T-04 in the 218-W-4C Burial Ground continued.

As of March 31, 2004 2 wells have been completed and accepted, drilling and completion of another 11 wells is underway for FY 2004.

A total of 99 wells were decommissioned as of March 2004.

The DQO Process was initiated in October for the evaluation of impacts at 100 N to aquatic and riparian ecoreceptors. DOE is proposing to issue the final report in October, 2005 rather than October 2004 as previously planned. The revised schedule will also allow better coordination with the River Corridor Risk Assessment so that appropriate sample media are collected for both assessments. A change notice has been drafted to document the change from the ROD schedule.

Initial laboratory work supporting the 100-NR-2 strontium-90 (Sr-90) treatment options (phytoremediation and apatite-sequestration) began during the second quarter of FY 2004. Core samples were collected during drilling of a new monitoring well near the center of the former N springs. The core samples will be used to help assess Sr-90 mobility and extraction efficiency based on site-specific media properties.

Work continued on remedial actions to address an additional area of chromium contaminated groundwater in the 100 D Area. During the second quarter of FY 2004, over 75% of the water lines in the 100 D area were cut and capped, thus eliminating this potential driver. Plans to extend the ISRM were deferred until the causes of the apparent reduction in barrier longevity are better understood. A targeted pump and treat system was selected for the near term to minimize the impact of contaminated groundwater on the river and to achieve mass reduction of hexavalent chromium. Design of the extraction and injection network and associated treatment system has begun. Startup of an initial 40 -50 gpm system is scheduled for July 2004. Bechtel is preparing a test plan for investigation suspected soil contamination source areas.

A focus group of outside experts was assembled to evaluate possible causes of the ISRM breakdown and to make recommendations for a mitigation plan. The group met at Hanford on March 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup>. Additional characterization of the barrier is anticipated as result of the focus group report expected in April 2004.

## ISSUES

### U Plant Soil Waste Sites

**Issue-** The characterization and remediation planning approach for pipelines in the U Plant area is not progressing at a pace that is satisfactory to the regulators due to primarily budgetary constraints.

**Status-** RL and ORP are jointly working on characterization and remediation criteria for central plateau pipelines. They last provided status information to the IAMIT in March of 2004. The scope division between RL and ORP is the subject of ongoing discussions between the two organizations, and is also the focus of the IAMIT Central Plateau closure strategy working group

### 200-PW-2 and 200-PW-4 Work Plan Approval

**Issue-** Outstanding comments on the 200-PW-2 and 200-PW-4 Operable Units Work Plan remain unresolved. These comments include the need for a borehole in a hexone waste site.

**Status-** A comment resolution meeting was held with Ecology on February 23, 2004. The remaining comments were discussed and Ecology was provided redline copies of the text revisions. Ecology also raised the issue of RCRA/CERCLA integration and offered to revise work plan text on that issue. Input from Ecology on the RCRA/CERCLA integration text or comments on the redline text of the comment incorporation has not been received by DOE/RL.

Planning is underway to drill a borehole in the 216-S-7 Crib in response to Ecology's comment on the need to characterize a hexone waste site. At the November Unit Manager Meeting Ecology stated that the additional characterization data could be included in the Feasibility Study which follows the RI report so the associated FY04 and FY05 TPA milestones should not be negatively impacted.

### Draft B Revision of the 200-CW-1, 200-CW-3, and other 200 North Waste Sites Feasibility Study and Proposed Plan

**Issue-** EPA & Ecology transmitted a comment letter that identified a number of "global issues" but did not include detailed technical comments. The Parties continue to address the issues.

**Status-** The remedial actions were re-packaged as a result of the issue resolution activities. Fall ecological sampling was conducted to resolve concerns over the potential presence of new-to-science species at the waste sites. Additional ecological sampling is planned for this spring to help resolve the contaminants that were identified in the ecological risk assessment in the feasibility study as representing marginal ecological risks. The data from these sampling events will be available in August, 2004, and will be incorporated into Draft B of the FS and proposed plan. The proposed plan will be migrated to the new format developed as part of the U Plant Waste Site Project. A revision of the feasibility study and proposed plan will be prepared for delivery to the regulators in October 2004. Ecology indicated at the February UMM that this FS is not a high priority, given the other FSs currently in process.

## **200-IS-1 and 200-ST-1 Work Plan Approval**

**Issue-** Ecology has requested that the pits, lines, tanks, and boxes (200-IS-1) and septic tanks (200-ST-1) work plan be revised to include additional information on "likely response scenarios and potentially applicable technologies and operable units that may address site problems." This would require a revision to the Rev. 0 document.

**Status-** USDOE is preparing a Revision 1 work plan. One unresolved issue is the interface between RL and ORP; the latter has programmatic responsibility for some waste sites included in these operable units that are not addressed by the work plan. ORP and the IAMIT Central Plateau work group are looking at the latter issue.

## **200-TW-1, 200-TW-2, and 200-PW-5 RI Report Approval**

**Issue** – The regulators provided comments in a letter dated March 2, 2004, concerning the fate and transport modeling performed for the representative waste sites. The regulators provided conditional approval of the RI Report pending resolution of the modeling comments.

**Status** – A meeting with the regulators, USDOE, and USGS representatives was held on March 17, 2004 to discuss the comments and identify a path forward for revising the documents. The USGS provided clarification on the comment concerning Monte Carlo simulations by stating they are really interested in sensitivity analysis and not actual Monte Carlo simulations. RL will prepare some modifications to the modeling strategy and present them for discussion to USGS and the regulators. Once the strategy is agreed to, USDOE will rerun the modeling and present the information in the RI Report revision. This is expected to be done by July, 2004.

# TPA Milestone Summary Schedule

Status as of: March 31, 2004  
Updated April 26, 2004 02:25 PM

Operable Unit	Fiscal 2002 By Quarter				Fiscal 2003 By Quarter				Fiscal 2004 By Quarter				Fiscal 2005 By Quarter				Fiscal 2006 By Quarter				Fiscal 2007 By Quarter				Fiscal 2008 By Quarter				Fiscal 2009 By Quarter				Fiscal 2010 By Quarter			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
200 Area Remedial Action	Note 1 - "Ecology believes this is at risk"																																			
200 Area Work Plans	<p><b>M-13-00L 12/26/03(A)</b> Submit 3 200 NFL RI/FS (RFI/CMS) Work Plans</p> <p><b>M-13-26 12/26/03(A)</b> Submit Plutonium / Organic-Rich Process Waste Group (200-PW-1) Work Plan</p>				<p><b>M-13-00M 12/30/02(A)</b> Submit 1 200 NFL RI/FS (RFI/CMS) Work Plan for 200-IS-1 OU, Includes waste sites in 200-ST-1</p>				<p><b>M-13-00N</b> (Date revised from 12/31/03 per TPA CC M-13-01 approved by RL 10/23/03) Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan for 200-UR-1 OU</p>				<p><b>M-13-00O</b> (Note 1) Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan for 200-SW-2 OU, Includes waste sites in 200-SW-1</p>																							
200 Area Assessments					<p><b>M-15-38A 10/23/02(A)</b> Submit 200-CW-1FS/PP Proposed RCRA Permit Mod for Gable Mtn Pond/B Pond &amp; Ditch Cooling Waste Group ...</p>																															
200-CW-1					<p><b>M-15-40B 05/30/02(A)</b> Submit 200-CW-5 U Pond / Z Ditches Cooling Water Group RI Report including Past Practice Waste Sites in 200-CW-2, 200-CW-4 &amp; 200-SC-1</p>																															
200-LW-1									<p><b>M-15-40C</b> Submit 200-CW-5 FS/PP for U Pond / Z Ditches Cooling Water Group, Including Past Practice Waste Sites in 200-CW-2, 200-CW-4, &amp; 200-SC-1</p>																											
200-MW-1													<p><b>M-15-46A</b> Submit 200 Area Chemical Lab Waste OUs RI Report</p>																							
													<p><b>M-15-44A</b> Submit 200-MW-1 OU RI Report</p>																							
																	<p><b>M-15-46B</b> Submit 200 Area Chemical Lab Waste OUs FS</p>																			
																	<p><b>M-15-44B</b> Submit 200-MW-1 FS &amp; Proposed Plan</p>																			
200-CS-1					<p><b>M-15-39A 09/29/03(A)</b> Complete Chemical Sewer Group field Work Through Sample Collection &amp; Analysis</p>																															
									<p><b>M-15-39B</b> Submit 200-CS-1 Chemical Sewer Group RI Report</p>																											
													<p><b>M-15-39C</b> Submit 200-CS-1 FS/PP/Proposed RCRA Permit Mod for Chemical Sewer Group</p>																							
200-TW-1 / 200-TW-2	<p><b>M-15-41B 10/23/02(A)</b> Submit 200-TW-1 &amp; 200-TW-2 OU RI Report to Regulators, Including Past Practice Waste Sites in 200-PW-5</p>																																			
					<p><b>M-15-41C 03/30/04(A)</b> Submit 200-TW-1 &amp; 200-TW-2 OU FS/Proposed Plan to Regulators, Including 200-PW-5</p>																															
200-PW-2									<p><b>M-15-43B</b> Submit 200-PW-2 OU RI Report Including Past Practice Waste Sites in 200-PW-4</p>																											
													<p><b>M-15-43C</b> Submit 200-PW-2 OU FS/PP/Proposed RCRA Permit Mod Including Past Practice Waste Sites in 200-PW-4</p>																							
200 Area Common					<p><b>M-15-47 09/27/02(A)</b> Submit PP to Regulators to Conduct RA for Source Control at High-Risk Waste Sites Which Includes an Engineering Evaluation of an Engineered Surface Barrier</p>																															
																									<p><b>M-15-00</b> Complete RI/FS (or RFV/CMS) Process for All Operable Units</p>											
																									<p><b>M-13-00C</b> Complete All 200 Area Non-Tank Farm OU Pre-ROD Site Investigations Under Approved Work Plan Schedules</p>											
200 Area Closure Plans													<p><b>M-20-39</b> Submit 216-S-10 Pond/Ditch Closure/ Post Closure Plan to Ecology in Coord with / FS for 200-CS-1 (Wb coord under M-15-39C)</p>																							
200-CS-1													<p><b>M-20-33</b> Submit 216-A-10, 216-A-36B, 216-A-37-1 Crib &amp; 207-A South Retention Basin Closure/Post Closure Plan to Ecology in Coord w/FS for 200-PW-2 (Wb coord under M-15-43C)</p>																<p><b>M-20-54</b> Submit 314-CX-70, -71, -72 Tanks Closure/ Post Closure Plan to Ecot in Coord w/ 200-IS-1 FS Scheduled under M-13-00M</p>							
200-PW-2																													<p><b>M-20-00B</b> Submit Closure/Post Closure Plans for 216-A-10, 216-A-36B, 216-A-37-1, 207-A South Retention Basin 216-S-10 Pond, 216-S-10 Ditch, 341-CX-71, and 241-CX-72</p>							
200-IS-1																																				

 Major Milestone 
  Interim Milestone 
  Forecast 
  Complete 
  Unrecoverable 
  "At Risk" 
  (P) Pending Change Request 
  RCRA Permit Commitment

# TPA Milestone Summary Schedule

Status as of: March 31, 2004  
Updated April 13, 2004 11:45 AM

	Fiscal 2002 By Quarter				Fiscal 2003 By Quarter				Fiscal 2004 By Quarter				Fiscal 2005 By Quarter				Fiscal 2006 By Quarter				Fiscal 2007 By Quarter				Fiscal 2008 By Quarter				Fiscal 2009 By Quarter				Fiscal 2010 By Quarter							
	1st	2nd	3rd	4th																																				
618-10/618-11 Burial Grounds																																								
Groundwater																																								
Common																																								
100-HR-3																																								

**M-16-56**  
Initiate intermediate design and ASA for Remedial Actions

**M-16-57**  
Submit Intermediate Design, Report, Schedule, and Treatability inv Work Plan

**M-24-51 thru -55**  
**M-24-51 09/05/01 (A)**  
Install 11 Monitoring Wells at SST WMA B-BX-BY, U, S-SX, T-TX-TY

**M-24-52 09/29/01 (A)**  
**M-24-54 10/18/01 (A)**  
**M-24-53 55 11/08/01 (A)**

**M-24-00M 11/08/01 (A)**  
Install RCRA Groundwater Monitoring Wells at Rate from 0 to 50 in CY 2001 (if required)

**M-24-56 12/18/02 (A)**  
Install 2 Monitoring Wells at SST WMA TX-TY

**M-24-00N 12/18/02 (A)**  
Install RCRA Groundwater Monitoring Wells at Rate from 0 to 50 in CY 2002 (if required)

**M-24-57A 12/31/03 (A)**  
DOE Shall Install a minimum of 15 Wells by 12/31/03

**M-24-57B**  
DOE Initiates discussions Annually to Reaffirm Selected Wells

**M-24-57C**  
Conclude Negotiations & Revise M-24-57 by 08/01/04

**M-24-57D**  
DOE Shall Install a Cumulative of 30 Wells by 12/31/04

**M-24-57E**  
DOE Initiates discussions Annually to Reaffirm Selected Wells

**M-24-57F**  
Conclude Negotiations & Revise M-24-57 by 08/01/05

**M-24-57G**  
DOE Shall Install a Cumulative of 45 Wells by 12/31/05

**M-24-57H**  
DOE Initiates discussions Annually to Reaffirm Selected Wells

**M-24-57I**  
Conclude Negotiations & Revise M-24-57 by 08/01/06

**M-24-57J**  
DOE Shall Install a Cumulative of 60 Wells by 12/31/06

**M-24-00Q (TBD)**  
Complete Well Installations with RCRA/CERCLA Groundwater Requirements

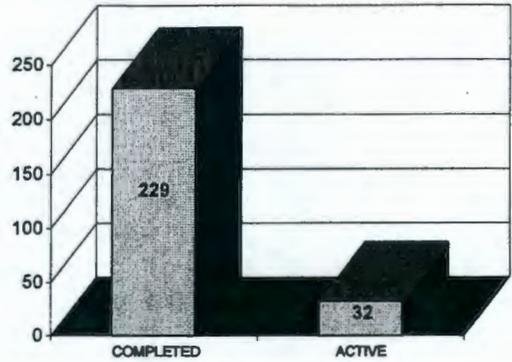
**M-16-27B 11/20/01 (A)**  
Complete 100-HR-3 Phase II, ISRM Barrier Emplacement

**M-16-27C 04/10/03 (A)**  
Complete 100-HR-3 Phase III, ISRM Barrier Emplacement

Major Milestone 
 Interim Milestone 
 Forecast 
 Complete 
 Unrecoverable 
 "At Risk" 
 (P) Pending Change Request 
 RCRA Permit Commitment

**GROUNDWATER REMEDIATION PROJECT**

**Groundwater Remediation Project  
TPA Milestone Statistics  
(Major & Interim Milestones)**



Major Milestone	Compliance Due Date	Total Active*	Milestone Number	Compliance Due Date	Milestone Description
<b>M-13-00</b> Submit Work Plans for RFI/CMS or RIFS Studies	<b>12/31/2004</b> (M-13-00)	<b>2</b>	M-13-00N	08/30/04	Submit 1 200 NPL RIFS (RFI/CMS) Work Plan For The 200-UR-1
			M-13-00O	12/31/04	Submit 1 200 NPL RIFS (RFI/CMS) Work Plan For The 200-SW-1
<b>M-15-00</b> Site Investigations / Feasibility Studies	<b>12/31/2008</b> (M-15-00)	<b>12</b>	M-15-41C	03/31/04	Submit Draft 200-TW-1 OU & 200-TW-2 OU FS & Proposed Plan
			M-15-39B	05/31/04	Submit Draft A 200-CS-1 Chemical Sewer Group RI Report
			M-15-43B	06/30/04	Submit 200-PW-2 OU RI Report Including Past Practice Waste Sites
			M-15-40C	10/31/04	Submit Draft A 200-CW-5 Pond/Z Ditches Cooling Water Group FS
			M-15-46A	10/31/05	Submit 200 Area Chemical Laboratory Waste OUs RI Report
			M-15-39C	11/30/05	Submit Draft A 200-CS-1 Chemical Sewer Group FS and Proposed Plan
			M-15-43C	12/31/05	Submit 200-PW-2 OU FS and Proposed Plan/Permit Modification
			M-15-44A	12/31/05	Submit 200-MW-1 OU RI Report
			M-15-46B	09/30/08	Submit 200 Area Chemical Laboratory Waste OUs FS
			M-15-44B	12/31/08	Submit 200-MW-1 OU FS and Proposed Plan
<b>M-16-00</b> Remedial Design / Remedial Action	<b>9/30/2024</b> (M-16-00)	<b>3</b>	M-16-66	09/30/04	Initiate Intermediate Design & Authorization Safety Analysis
			M-16-67	03/31/07	Submit Design Report, Schedule, Work Plan for 618-10/11
			M-16-00	09/30/24	Complete Remedial Actions for All Non-Tank Farm Operable Units
<b>M-20-00</b> Submit Closure Plans for All RCRA TSD Units	<b>12/31/2008</b> (M-20-00) (Shared with FH)	<b>5</b>	M-20-39	11/30/05	Submit 216-S-10 Pond & Ditch Closure Plan to Ecology
			M-20-33	12/31/05	216-A-10/216-A-36B/216-A-37-1 Crib Closure/Post Closure Plans
			M-20-54	12/31/08	Submit 241-CX Tank System Closure/Postclosure Plan
			M-20-00B	12/31/08	Submit 216 & 241 Areas Closure/Post Closure Plans
<b>M-24-00**</b> RCRA Groundwater Monitoring	<b>Annually</b>	<b>10</b>	M-24-57A(C)	12/31/03	DOE Shall Install a Minimum of 15 Wells by 12/31/03
			M-24-57B	06/30/04	DOE Initiates Discussions Annually to Reaffirm Selected Wells
			M-24-57C	08/01/04	Conclude Negotiations & Revise M-024-57 by 08/01/04
			M-24-57D	12/31/04	DOE Shall Install a Cumulative of 30 Wells by 12/31/04
			M-24-57E	06/30/05	DOE Initiates Discussions Annually to Reaffirm Selected Wells
			M-24-57F	08/01/05	Conclude Negotiations & Revise M-024-57 by 08/01/05
			M-24-57G	12/31/05	DOE Shall Install a Cumulative of 45 Wells by 12/31/05
			M-24-57H	06/30/08	DOE Initiates Discussions Annually to Reaffirm Selected Wells
			M-24-57I	08/01/08	Conclude Negotiations & Revise M-024-57 by 08/01/08
			M-24-57J	12/31/08	DOE Shall Install a Cumulative of 60 Wells by 12/31/08
M-24-00O	TBD	Complete Well Installations in Accordance with RCRA/CERCLA GW Reqs			

1 --- MILESTONE COMPLETED IN FY04 (C)

**TOTAL ACTIVE MILESTONES 32**

\* Includes TPA changes requests approved thru March 31, 2004.  
\*\* M-24-00/57 Modified by Change Request M-24-02-02 Approved March 01, 2004

**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
Quarterly Presentation  
April 27, 2004**



**Mike Collins, RL Project Lead**

**Eric Van Mason, Ecology Lead**



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
April 27, 2004**

- Tri-Party Agreement requires that a Hanford Site Land Disposal Restrictions (LDR) Report be submitted annually
  - LDR Report is designated as a primary document in accordance with the Tri-Party Agreement
- The CY 2003 LDR Report (M-026-01N) will be submitted on schedule (April 30, 2004)
  - Tentative Agreement for modifying the Tri-Party Agreement M-091 Milestone Series was approved prior to the end of CY 2003 and the proposed milestones are included in Volume 2, Section 9.2 of the LDR Report and denoted with a "P"



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
April 27, 2004**

- Program Manager Meetings (PMMs) continue to be an effective tool for dialogue and as a venue to resolve outstanding actions outlined in the March 14, 2002, Resolution Agreement
  - One action from the March 14, 2002, Settlement Agreement remains open (Consolidation of Requirements Document)
  - Issues or concerns identified during the conduct of workscope or outyear activities are stated during the PMMs



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**Land Disposal Restrictions Report  
(Tri-Party Agreement Milestone M-26-01)  
April 27, 2004**

Actions Planned for Next Six Months

- Submit the CY 2003 LDR for regulator approval (April 30, 2004)
- Ecology approve CY 2003 LDR Report in accordance with the Tri-Party Agreement Action Plan, Chapter 9.0, *Documentation and Records*
- Continue the monthly PMMs focusing on requirements consolidation and PMM commitments/actions

**Tritium Treatment Technology Evaluation**  
**Tri-Party Agreement Milestone M-26-07A**  
**April 27, 2004**



**Doug Hildebrand**  
**RL Central Plateau**

# **Tritium Treatment Technology Evaluation**

## **(Tri-Party Agreement Milestone M-26-07A)**

**April 27, 2004**

- **Need identified to, on an annual basis, report and evaluate tritium treatment technology was incorporated into the Tri-Party Agreement in August 1994**
  - Report will evaluate and status the development of tritium treatment technology and its application for cleanup and management of tritiated waste water (e.g., 242-A Evaporator process condensate liquid effluent) and tritium contaminated groundwater.
- **Emerging tritium removal technologies were slow to mature, inadequacies identified during field demonstrations, and the lack of a commercial demand for development of tritium technologies required a change in the frequency for submitting the Report to biennially in 1996 and then to every five-years in 2003**
  - The change in reporting frequency coincides with the EPA/CERCLA five-year groundwater record of decision (ROD) review.
- **RL will submit a letter report to EPA/Ecology for the intervening years of the report**
- **2004 report was submitted ahead of schedule (March 31, 2004)**
  - No significant changes in the development of tritium removal technologies were identified.

Tri-Party Agreement M-91 Milestone Series  
Quarterly Presentation

G. L. Sinton  
U.S. Department of Energy,  
Richland Operations Office

April 27, 2004

## Tri-Party Agreement M-91 Milestone Series Quarterly Presentation

### Significant Accomplishments of Last Three Months:

- Submitted revised M-91-03 PMP on 3/30/04 in response to Ecology comments
- Responses to M-91 Change Package public comments were prepared
- Final M-91 change package approval transmittal in to RL concurrence.
- Retrieved 196 m<sup>3</sup> (941 drums) of RSW since the last quarterly report (1/22-3/30), bringing the total to 224 m<sup>3</sup>
- Submitted first quarterly burial ground sampling report (03/17/04)
- Continued operation of Trench 4 vapor extraction system
- Treated 371 m<sup>3</sup> of M-91-42 MLLW in the second quarter of FY04, bringing the total to 2017 m<sup>3</sup>

M-91 Status Summary 4/22/04

Milestone	Due Date(s)	Status Summary	Comments
<b>General Comments</b>			<p>1) In this current table "On-Schedule" means it is anticipated the proposed settlement change request milestone will be met. At present the baseline is being revised to realign the scope/schedule to match the settlement change request.</p> <p>2) M-91 requirements are extensive and continue well out into the future. This status table will generally only cover items due within about the next four years. A separate "Outyear table" identifies the other M-91 milestones, and the related M-16-93 milestone.</p>
<b>M-91-03:</b> Submit TRUM/MLLW PMP	12/31/03, 3/31/09, 3/31/13	On Schedule	<ul style="list-style-type: none"> <li>Revised PMP addressing the 2/5/04 Ecology comments was submitted to Ecology 3/30/04: Currently in review with additional briefings on-going.</li> </ul>
<b>M-91-05-T01:</b> Complete RH and or large TRUM retrieval Engineering Study/FDC	12/31/07	On Schedule (planning)	
<b>M-91-12:</b> CH-MLLW Thermal Treatment (600 m <sup>3</sup> cumulative)	12/31/05	Treatment capacity it not currently believed to be available to meet this milestone	<ul style="list-style-type: none"> <li>PMP was revised to show the existing milestone dates for thermal treatment in response to Ecology comments</li> <li>Plan to issue RFP for additional capacity Spring 2004</li> <li>After responses are received from the RFP the thermal treatment schedule will be re-evaluated based on all existing information. It is likely that a TPA Change request will be prepared proposing an alternative schedule.</li> <li>45 m<sup>3</sup> of CH-MLLW have been thermally treated as of the end of March that will count toward this milestone.</li> </ul>
<b>M-91-12A:</b> CH-MLLW Thermal	12/31/04	See M-91-12	<ul style="list-style-type: none"> <li>See M-91-12 comment</li> </ul>

Treatment (240 m <sup>3</sup> )			
<b>M-91-40:</b> Retrieval and designation of CH-RSW (regardless of size)	1200 m <sup>3</sup> retrieved by 12/31/04 and annual retrieval volumes through 2010 plus various other requirements	Behind Schedule (but expected to recover)	<ul style="list-style-type: none"> <li>• Retrieval rate increasing</li> <li>• Plan to add extra shift to increase rate further</li> <li>• Initiated retrieval in 218-4C 10/17/03 (required by 11/15/03)</li> <li>• First SAP quarterly report submitted to Ecology 3/17/04</li> <li>• Started DQO process for 218-E-12B SAP</li> <li>• Started vapor extraction in T-4 11/11/03 (required by 11/15/03): Carbon Tetrachloride level now below 10ppm.</li> <li>• 224 m<sup>3</sup> (1078 drums) of RSW retrieved as of 3/30/04 (1200 cubic meters required by 12/31/04)</li> </ul>
<b>M-91-42:</b> Treatment of non-large size CH-MLLW	Annual treatment requirements through 12/31/09	On Schedule (or ahead of schedule)	<ul style="list-style-type: none"> <li>• 2017 m<sup>3</sup> of the MLLW subject to this milestone (MLLW-2 through MLLW-10 excluding MLLW-7) has been dispositioned as for the end of March. (1630 m<sup>3</sup> required by 12/31/04)</li> <li>• Note: The M-91-42 progress quantity indicated above currently only includes waste dispositioned by FH. The actual progress numbers may be slightly higher due to waste subject to the milestone treated by other contractors. These numbers are from the M-91 tracking system and have not yet been validated.</li> <li>• Ahead of schedule due to successful 183-H project. Through the end of February 910 m<sup>3</sup> of 183-H waste had been disposed at ERDF that counts toward this milestone, as well as an additional 840 m<sup>3</sup> that do not count toward the milestone. 183H ERDF disposal through 3/30/04 is 1902 m<sup>3</sup></li> <li>• The quantities in this milestone are based on the 2002 LDR report. Therefore, the cumulative volumes toward meeting this milestone are based on a start date of 12/31/02 (LDR report inventory date).</li> <li>• Working on providing Ecology electronic access to M-91 waste tracking system (share-drive).</li> </ul>

<b>M-91-45:</b> RH and or Large Size Waste Annual Progress Report	9/30/04 and annually thereafter	On Schedule	<ul style="list-style-type: none"><li>• First report was submitted 9/30/03 (was an Administrative Order requirement)</li></ul>
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Fn: M-91 PMM Status table4-22-04R0

M-91 Out-year Milestone Status Summary 4/22/04

Milestone	Due Date(s)	Status Summary	Comments
<b>General Comments</b>			1) This table is intended to identify the M-91 milestones that are not covered in the more detailed near term M-91 Status Summary Table. These milestones are generally those with due dates four or more years in the future.
<b>M-91-00:</b> Major Milestone for acquisition of needed facilities/capabilities for mixed and suspect MLLW, and TRUM and suspect TRUM.	TBD	On Schedule (planning)	
<b>M-91-01:</b> Facility/Capability Interim Milestone (RH and/or large container TRUM)	6/30/12	On Schedule (planning)	
<b>M-91-15:</b> RH.MLLW and/or Large Size MLLW Treatment	6/30/08	On Schedule (Planning)	"COMPLETE ACQUISITION OF FACILITIES AND/OR CAPABILITIES AND INITIATE TREATMENT OF RH-MLLW AND CH MLLW IN BOXES AND LARGE CONTAINERS"
<b>M-91-41:</b> Retrieval and Designation of RH RSW (regardless of size)	See Comment column	On Schedule (Planning)	<ul style="list-style-type: none"> <li>• 1/1/11: Initiate retrieval of RH RSW</li> <li>• 12/31/14: Complete non-caisson RH RSW retrieval</li> <li>• 12/31/18: Complete 4B RH RSW retrieval</li> </ul>
<b>M-91-43:</b> Designation and treatment of RH and or Large Size MLLW	See Comment Column	On Schedule (Planning)	<ul style="list-style-type: none"> <li>• 12/31/08: Complete designation of RH MLLW and or Large Size MLLW in storage.</li> <li>• 6/30/08: Begin RH and or large size MLLW treatment at rate of 300 cubic meters per year</li> <li>• Treated 50.4 m<sup>3</sup> of MLLW-07 in March, bringing the total since 12/31/02 to 99.7 m<sup>3</sup></li> </ul>

<b>M-91-44:</b> Designation of Newly Generated and Stored RH and or Large Size Transuranic Waste	See Comment Column	On Schedule (Planning)	<ul style="list-style-type: none"> <li>Designate all RH and or large size transuranic waste in storage by 12/31/12</li> </ul>
<b>M-16-93:</b> Submit implementation workplan for acquisition of capabilities necessary to prepare TRU/M waste generated by CERCLA cleanup actions at Hanford for disposal at WIPP	9/30/2006	On Schedule (Planning)	<ul style="list-style-type: none"> <li>The date of this milestone seems somewhat early. It may be better to align it with the M-15-00 12/31/08 complete RI/FS for all operable units milestone.</li> </ul>

Fn: M-91 PMM Status Table Outyears4-22-04R0

# Tri-Party Agreement M-91 Milestone Series Quarterly Presentation

## Actions Planned for Next Six Months

- Continue with MLLW treatment, RSW retrieval, and waste processing
- Finish realignment of baseline with M-91 and M-16 agreement change packages
- Finalize M-91-03 PMP
- Issue thermal treatment RFP
- Submit second quarterly burial grounds sampling report to Ecology (May)
- Prepare 218-E-12B burial ground SAP

# Tri-Party Agreement M-91 Milestone Series Quarterly Presentation

## Issues

- Resolution of thermal treatment plans and M-91-12/12A milestones.

Cesium/Strontium Capsule Dry Storage Project  
TPA Quarterly Review



U.S. Department of Energy  
U.S. Environmental Protection Agency  
Washington State Department of Ecology

04/27/04

# Cesium/Strontium Capsule Dry Storage Project

## Milestone Summary

- **TPA Milestone M-92-00**  
Compete acquisition of new facilities, modification of existing facilities necessary for the storage, treatment/ processing and disposal of Hanford site cesium and strontium capsules, bulk sodium and 300 area special case waste.
- **TPA Milestone M-92-01 – 12/31/2009**  
Complete commercial disposition and/or acquisition of new facilities, modification of existing facilities and/or modification of planned facilities necessary for site wide consolidation, storage prior to commercial use, or treatment and/or repackaging by DOE TWRS (ORP).
- **TPA Milestone M-92-05 – 6/30/2007**  
DOE will assess the viability of directly disposing of Hanford Cs/Sr capsules at the National High-Level Waste Repository.

# Cs/Sr Capsule Dry Storage Project

## M-92-01 Accomplishments

- Pre-conceptual report due this week from Transnuclear on Capsule Dry Storage.
- WESF draft Part B submitted to Ecology for review.
- G Cell window changeout complete.

# Cesium/Strontium Capsule Dry Storage Project

## M-92-01 Accomplishments

- Procurement actions to acquire design/fabrication contractor:
  - Request for proposal issued 5/20/03
  - Bids from 5 vendors received 7/7/03
  - Consent Package submitted to DOE 8/12/03
  - Extended the proposal validity date to 11/7/03
  - Awarded contract in December 12, 2003  
(Transnuclear)

## Cesium/Strontium Capsule Dry Storage Project M-92-05 Status

- M-92-05

High-level waste repository will not have a permit in place until 2008. No decision can be made on viability of direct disposal until after 2008.

## Cesium/Strontium Capsule Dry Storage Project 6-Month Look Ahead

- DOE currently evaluating the priority of Dry Storage path forward.
  - Most likely option is to defer the Cs/ Sr Dry Storage Project and allocate the associated funding to higher priority work scope, such as the acceleration of suspect TRU retrieval and mixed low level treatment mandated by the proposed M-91 Change Package.

# Cesiums/Strontium Capsule Dry Storage Project FY-04 Performance Summary

## Cost and Schedule Variance Summary:

- No cost or schedule variance has been calculated due to the late authorization of the project.

# Special Case Waste 340 Building

- Completed the 340 complex portion of Tri Party Agreement Milestone M-92-16 (Complete removal and transfer and initiate storage of Phase III 300 Area Special Case Waste).
  - The tanks have been emptied to minimum heel similar as was done in B Plant and PUREX and subsequent evaporation has lowered the levels further to significantly below minimum heel levels. Ecology was given a tour and presentation showing how difficult it will be to remove these heels along with the unnecessary exposure there would be to the worker. DOE has agreed that the intent of this portion of the milestone has been met and has directed FH not to perform additional work. These tanks and heels will be dispositioned under M-94-01.
- Activities described in PMP HNF-5068, Revision 1A are deferred to the River Corridor Contractor as managed/directed under Tri Party Agreement Milestone M-94-04.
  - The PMP deliverables are the milestones M-92-14, -15, and -16. The intent of deferring to M-94-04 is to disposition the minimum heels in the vault tanks as part to the D& D program.
- Report of Closure submitted to WDOH for Permitted 340-A Building Tank solids removal activities pursuant to Washington Administrative Code 246-247-080(6).
  - The Report of Closure is required by WDOH to allow classifying the stack as a minor stack for emissions. This Report of Closure states that operations have permanently ceased in these tanks. EPA has agreed that current emissions warrant the minor stack classification. If direction is given in the future to remove the heels, the stack will be redesignated as a major stack. It is expected that the tanks with heels will be removed intact to be dispositioned in T-Plant during the D&D process.

## M-20 Milestone Status Permits and Closure Plans

Presented by:  
**Tony McKarns**  
U.S. Department of Energy

April 27, 2004

### Closure Plan Milestone Status

**M-20-33** **12/31/2005**

Submit 216-A-10 Crib, 216-A-36B Crib, 216-A-37-1 Crib, and 207-A South Retention Basin Closure/Postclosure Plans to Ecology in coordination with the Feasibility Study for the 200-PW-2 Uranium-Rich Process Waste Group Operable Unit (coordinate under M-15-43C)

**M-20-39** **11/30/2005**

Submit 216-S-10 Pond and Ditch Closure/Postclosure Plans to Ecology in coordination with the Feasibility Study for the 200-CS-1 Chemical Sewer Group Operable Unit (coordinate under M-15-39C)

**M-20-54** **12/31/2008**

Submit 241-CX-70 Storage Tank, 241-CX-71 Neutralization Tank, 241-CX-72 Storage Tank, 241-CX Storage Tank Closure/Postclosure Plan to Ecology in coordination with the 200-IS-1 Tanks/Lines/Pits/ Boxes Operable Unit Work Plan Feasibility Study scheduled under M-13-00M.

#### **Current Milestone Status:**

On schedule to meet milestones. The closure plans are to be integrated into the feasibility studies per the M-20 Milestones. DOE is actively working with the regulators on these integrations through the U Plant Waste Sites FFS and the 200-CW-1 FS.

### **Hanford Facility RCRA Permit Status**

- The Hanford Facility RCRA Permit expires on 9/27/04. The Permittees submitted their Permit reapplication documentation to Ecology and the EPA on 3/31/04. In conjunction with the reapplication the Permittees submitted Class 1 and Class 2 modifications to the RCRA Permit.
- Issuance of Modification E (Central Waste Complex and Waste Receiving and Processing Facility) is waiting a decision on offsite shipments and Ecology's acceptance of the SW EIS.
- Ecology proposed Modification F (222-S Laboratory Complex) is waiting issuance of Modification E and Ecology's acceptance of the SW EIS, before proceeding.
- Ecology awaiting resolution of onsite/offsite determination prior to issuing draft Permit for T Plant Complex.

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### **Accomplishments – last 3 months**

- DOE submitted documentation for Permit reapplication on 3/31/04.
- DOE submitted Class 1 modifications to Ecology for quarter ending 3/31/04.
- DOE submitted Class 2 modifications for the Waste Treatment and Immobilization Plant on 3/29/04.
- DOE submitted Class 2 modifications pertaining to groundwater for the General Information Portion, LERF/ETF, 300 Area Process Trenches, and the 183-H Solar Evaporation Basins on 3/31/04.
- DOE submitted Part A permit applications for 1706-KE Water Treatment System (Rev. 5), Hexone Storage and Treatment Facility (Rev. 5), and T Plant Complex (Rev. 10) on 3/30/04.
- DOE submitted the Draft Waste Encapsulation Storage Facility (WESF) Part B Permit Application, Revision 0, on 3/22/04.

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### **Accomplishments – last 3 months**

- Ecology and DOE signed change request closing major milestone M-20-00A on 4/13/04.
- Ecology approved procedural closure of 325 HWTUs Radioactive Liquid Waste Tank.

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### **Planned Actions – next 6 months**

- DOE and Ecology continue NOD workshops for the LLBG.
- DOE/PNNL submit Class 1 modifications to remove Radioactive Liquid Waste Tank from Permit Attachment 36.
- DOE/CHG provide NOD responses to Ecology for the DST permit application, and begin NOD workshops.
- DOE hold public meeting on Class 2 modification for WTP on 5/6/04.
- DOE hold public meeting on Class 2 modifications for the General Information Portion, LERF, 300 Area Process Trenches, and 183-H Solar Evaporation Basins Groundwater Monitoring on 5/12/04.

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### **Planned Actions – next 6 months (cont.)**

- Ecology respond to Class 1 modifications submitted for quarter ending 9/30/03, 12/31/03, and 3/31/04.
- Ecology review Permit reapplication.
- Ecology approve closure of the 1324-N Surface Impoundment and 1324-NA Percolation Pond.
- Ecology and DOE resolve comments on the closure plan for the 216-B-3 TSD unit, in conjunction with the CERCLA feasibility study for the 200-CW-1 and 200-CW-3 operable units.
- Ecology issue final status RCRA permit for the Integrated Disposal Facility (IDF).

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### **Planned Actions – next 6 months (cont.)**

- Ecology approve Part A permit applications for 1706-KE Water Treatment System (Rev. 5), Hexone Storage and Treatment Facility (Rev. 5), and T Plant Complex (Rev. 10).
- Ecology provide NODs for:
  - SST System Closure Plan, Revision 2
  - Immobilized High-Level Waste Storage Unit (IHLW) Part B permit application
- Ecology provide comments on draft WESF Part B permit application

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**Hanford Federal Facility Agreement and Consent Order  
IAMIT Milestone Review Form  
(For Milestones Without Issues or Significant Activity)**

**M-35-09D Summary**

**Date: 04/16/04**

**1. Significant Activities Last Three Months**

A meeting held on April 15, 2004 resolved the final issue for this milestone and will allow its completion.

**2. Budget Status (within budget or explain variance)**

N/A

**3. Issues**

N/A

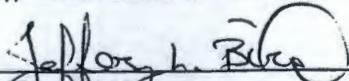
**4. Non-TPA Regulatory Issues with Potential Impact to TPA Milestone**

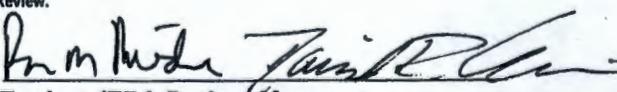
N/A

**5. Significant Activities Planned Next Three Months**

- Continue to assist Department of Ecology with the relocation of their office from 1315 W 4<sup>th</sup> Ave. in Kennewick to 3100 Port of Benton in Richland. Plans and schedules have been established and work is proceeding smoothly.

Note: Approved form to be submitted to IAMIT members 7 days prior to scheduled Milestone Review.

  
\_\_\_\_\_  
RL Project Manager

  
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Ecology/EPA Project Manager