

Tri-Party Agreement Milestone Review – Office of River Protection
 May 24, 2005
 Meeting Minutes

0065709

Approval: [Signature] Date: 6/28/05
 Michael A. Wilson (H0-57)
 Ecology IAMIT Representative

Approval: [Signature] Date: 6/30/05
 Matthew S. McCormick (A5-11)
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 James E. Rasmussen (H6-60)
 Chairman and ORP IAMIT Representative

Approval: [Signature] Date: 6/28/05
 Nick Ceto (B1-46)
 EPA IAMIT Representative

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Minutes Prepared by:
 Approval: [Signature] Date: 6/28/05
 Eileen J. Murphy-Fitch (A4-25)
 Fluor Hanford, Inc.

Aromi, E. S.	CH2M	H6-63	LaMont, P.	ORP	H6-60
Bartus, D.	EPA	H0-57	Lijek, S. J.	Ecology	H0-57
Bohnee, G.	NPT		S. Lilligren	NPT	
Boyd, A.	EPA	B1-46	Liou W.	ORP	H6-60
Brown, M.	Ecology	H0-57	Lober, R.	ORP	H6-60
Buxbaum, M.E.	FH	B3-53	Long, J.	ORP	H6-60
Caggiano, J. A.	Ecology	H0-57	Louie, C. S.	ORP	H6-60
Castleberry, J.	CH2M	R3-26	Lyon, J.	Ecology	H0-57
Cimon, S.	Oregon		Mauss, B.	ORP	H6-60
Clark, D.	ORP	H6-60	Miller, P.	CH2M	R1-51
Cusack, L.	Ecology	H0-57*	Morrison, R. D.	FH	A4-25*
Dahl, S.	Ecology	H0-57	Murphy-Fitch, E. J.	FH	A4-25
Erickson, L.	RL	A6-37	Navarro, J.	ORP	H6-60
Eschenberg, J.	ORP	H6-60	Niles, K.	ODE	
Fort, L.	Ecology	H0-57	Parnell, K.	ORP	H6-60
Fritz, L.	FH	H8-12	Parsons, G.	CHG	H6-19
Furlong, P. T.	ORP	H6-60	Piippo, R. E.	FH	A4-25
Gallagher, R.	FH	H5-20	Ollinger, S.	ORP	H6-60
Harris, S.	CTUIR		Quintero, R.	ORP	H6-60
Hanlon, B.	ORP	H6-60	Rasmussen, J. E.	ORP	H6-60
Hedges, J.	Ecology	H0-57	Ramsay, M.	ORP	H6-60
Heggen, D.	Ecology	H0-57	Russell, W.	ORP	H6-60
Henry, D.	ODE		Singleton, D.	Ecology	H0-57
Hertzell, J. S.	FH	A4-25	Skinnarland, E. R.	Ecology	H0-57
Huffman, L.	RL	A5-15	Stevens, A.	ORP	H6-60
Jackson, D. E.	RL	A4-52	Tollefson, K.	CH2M	R3-26
Jackson, G. W.	FH	H5-20	Uziemblo, N. H.	Ecology	H0-57
Jarayssi, M. N.	CH2M	H6-03	Voogd, J.	CH2M	S4-43
Jentzen, B.	Ecology	H0-57	Yasek, R.	ORP	H6-60
Jim, R.	YIN		Administrative Record	EDMC	H6-08*
Keggen, D.	Ecology	H0-57	*w/Attachments		

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Office of River Protection
Tri-Party Agreement Milestone Review
May 24, 2005

Actions from May 24, 2005:

- Action: Meet with EPA to discuss the draft 241-C-106 document with NRC, EPA & Ecology comments.
Actionee: Moses Jaraysi, CHG
- Action: Schedule meeting with Ecology to discuss optimization studies, feed, and proposed path forward
Actionee: Cathy Louie, RL/Jeff Lyons, Ecology/Suzanne Dahl, Ecology
- Action: Provide status of the gamma logs collected for A-101/ 102/106.
Actionee: Bob Lober, ORP/Joe Caggiano, Ecology
- Action: Schedule meeting to address the 7 SST's that do not meet the interim stabilization criteria as defined by the Interim Stabilization Consent Decree but are in the Hanlon. Discuss what the status of these tanks and proposed path forward.
Actionee: John Long, ORP/Les Fort, Ecology/Nancy Uziemblo, Ecology
- Action: The local EPA and Ecology offices should be briefed on any actions or proposed changes to existing Tri-Party Agreement workscope prior to it going back to DOE-HQ, EPA Region 10 Administrator, and the Director of Ecology for approval.
Actionee: J. Eschenberg, ORP/K. Fick, ORP

Tri-Party Agreement Milestone Performance

The status of FY 2005 performance was provided. There are 11 Tri-Party Agreement milestones, 1 Tri-Party Agreement target date and 1 Consent Decree milestone due in FY 2005. Tri-Party Agreement change packages have been developed for the M-045-05A, M-45-03C, M-045-05N-T01 and M-048 milestones. Cost and schedule concerns continue (\$84.0 Million unfavorable schedule variance and a \$110 Million over budget project to date). Resource constraints, increased respiratory protection requirements, vapor issue mitigation and enhanced work package development and approval continue to impact ORP critical path workscope. Recovery plans are underway.

M-045-00. SST Closure

Completion of the specified near-term SST waste retrieval and interim closure activities, may not be completed by the September 30, 2006, due date (Tri-Party Agreement Milestone M-045-00B). ORP is evaluating alternative strategies to meet the September 30, 2006 completion date. Significant accomplishments include the completion of the C-203 vacuum retrieval, approval of the SST Closure Sampling and Analysis Plan, and 95 percent complete for the saltcake dissolution technology demonstration.

Tri-Party Agreement Interim Milestone M-045-05A, Complete Initial Waste Retrieval from Tank 241-S-102, due June 30, 2005, is forecast for completion by November 2005. Tri-Party Agreement Interim Milestone M-045-15, Interim Completion of Tank 241-S-102 SST Waste Retrieval and Closure Demonstration Project, due March 31, 2006, is forecast for completion by December 2006. EPA approval is needed for the use of supernatant for sluicing S-102.

M-043-00. Tank Farm Upgrades

Double-shell tank (DST) systems needed to support operation on July 1, 2005, will be compliant with 40 CFR 264/WAC 173-303-640 standards by June 30, 2005 or operated under the conditions of an approved variance. Systems that do not have planed near term use are addressed through approved deferred use list and must be upgraded prior to use. Construction schedules are actively managed to meet the milestone date but are constrained on time and personnel resources. Double shifts and dedicated crews were assigned to the remaining workscope. Field conditions (contamination, wind, rain, etc.) continue to challenge completion of the remaining workscope.

M-046-00. Double Shell Tank Space Evaluation

DST space scope was tracked to implement four space optimization recommendations and tank space management efforts. Three of the four are complete and one remains (increase fill height). This milestone will be completed on or ahead of the December 31, 2005, due date.

M-047. Complete Work Necessary to Support Acquisition and Phase I Operations of Hanford Site High-Level Radioactive Waste Treatment, Storage and Disposal Facilities

Remaining M-047-00 workscope is forecast for early completion.

Interim Stabilization (Consent Decree)

Interim stabilization of all 29 SSTs was completed roughly 6-months ahead of schedule. Interim stabilization of 241-S-102 and 241-S-112 are held in abeyance in accordance with the third amendment to the consent decree. The interim stabilization completion dates for 241-S-102 and 241-S-112 were extended from March 31, 2005, to June 30, 2005. Approximately 3,034.3 Kgal of pumpable liquids have been removed from SSTs and transferred to DSTs since pumping began in June 1998 (excludes the 241-S-102 and 241-S-112 tanks).

M-045-50. 60 SST Corrective Actions

Near term deliverables will be completed on schedule. Gamma logging of A-Farm laterals beneath confirmed or suspected leaking tanks completed in April 2005 with planned field work to follow. Field work will be completed in FY 2005 and FY 2006; lab work to begin in FY 2005; and, writing of the document will begin in FY 2005. Gamma logs were collected from the laterals beneath tanks 241-A-103, 241-A-194, and 241-A-105. Initial indications show no contamination beneath tanks 241-A-103 and 241-A-104. Logs show significant zones of contamination (yet to be quantified) beneath 241-A-105.

Resource constraints, increased respiratory protection requirements, vapor issue mitigation and enhanced work package development and approval continue to impact ORP critical path workscope. Recovery plans are underway..

M-023. Tank Integrity and Monitoring

Tri-Party Agreement milestones are complete. Follow-on workscope continues.

M-048-00. DST Integrity Assessment Program

The wall/weld and liquid/air interface UT examination of tank 241-AN-103 was completed. Workscope is will be completed on schedule.

In Tank Characterization and Summary

Completed two segments of solid samples from 241-AY-102 to support the Tank Integrity Program.

M-090-00. Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/Disposal of ILAW and M-20 Part B Permits

Progress continues to be made on M-090 series milestones. IDF construction activities were temporarily suspended pending the issuance of an IDF Final status RCRA Permit. A mutually agreeable (Ecology and ORP) path forward for the permit is being implemented. Some construction activities were approved via temporary authorization. a third TA is planned following the public comment period and the IDF Permit is expected to be effective in August 2005.

NOD workshops for the IHLW permit were expected to begin in late January/early February in accordance with the proposed revised permit plan to support procurement and construction activities in 2006. Because resources may be otherwise obligated to the IDF permitting effort, the IHLW permit NOD workshops may e slowed or delayed. It is anticipated efforts on the IHLW permit will begin in May.

LDR Assessment Status

The June 30, 2005, assessment of the 242-S and 242-T Evaporators will not be completed by the June 30, 2005, completion date. The assessment is dependent upon entry for a roof inspection which has been moved to August 2005. Post 2006 LDR

inspections will no longer be discussed as part of ORP but will be discussed under Tri-Party Agreement M-026 milestone review.

M-062, Complete Pretreatment Processing and Vitrification of Tank Wastes

The WTP activities/workscope was stautused. Presentation materials were not available.

Office of River Protection

Tri-Party Agreement
Project Manager Meeting
May 24, 2005



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

2nd Quarter of FY 2005

Agenda

Office of River Protection
 Tri-Party Agreement Quarterly Milestone Review Meeting
 May 24, 2005
 Ecology Offices, 3100 Port of Benton
 9:00 a.m. – 12:00 p.m.

Page	Topic	Leads	Time
3 7	• TPA Milestone Statistics • FY 2004 ORP TPA Cost & Schedule Performance (CHG)	Diane Clark / Suzanne Dahl / Jeff Lyon	9:00
28	M-45-00, Complete Closure of All Single-Shell Tank Farms	Roger Quintero / Dick Heggen	9:10
40	M-43-00, Tank Farm Upgrades	Cathy Louie / Les Fort	9:20
41	M-46-00, Double-Shell Tank Space Evaluation	Cathy Louie / Jeff Lyon	9:30
44	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Cathy Louie / Jim Navarro / Les Fort	9:40
46	M-45, -50, -60 Single-Shell Tank Corrective Action	Rob Lober / Joe Caggiano	9:50
48	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/ Disposal of ILAW and M-20, Part B Permits	Phil LaMont / Bud Derrick	10:00
50	M-23-00, Tank Integrity and Monitoring	John Long / Jeff Lyon	10:10
52	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	10:20
54	M-48-00, DST Integrity Assessment Program	Andy Stevens / Vic Callahan / Brenda Jentzen	10:30
	BREAK		
55	In Tank Characterization and Summary	Wen-Shou Liou / Debra Singleton	10:40
56	M-26-01N, Calendar Year 2003 Land Disposal Restrictions Report, Table 3-4, Schedule for ORP Assessments for CYs 2004 through 2006	Woody Russell / Jeff Lyon	10:50
57	• BNI Cost & Schedule Performance and • M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes/Supplemental Technologies	Bruce Nicoll / Pete Furlong / Lina Pacheco / Bobby Williams / Billie Mauss / Suzanne Dahl	11:00

TPA Milestone Statistics

(Including target milestones)

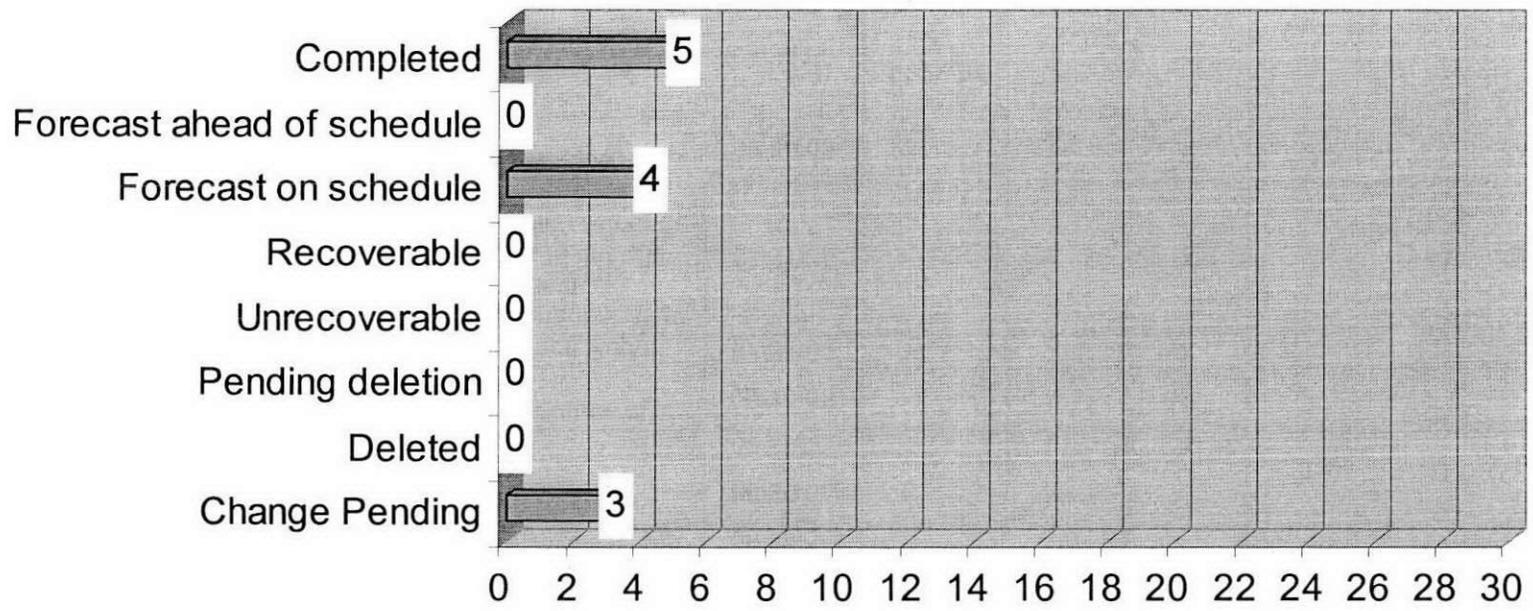
Milestone	Due Date	Total Active as of 03/31/05	Milestone Number	Due Date	Milestone Number	Due Date
M-20-00, Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	02/28/04 (M-20-00)	0				
M-23-25, Tank Integrity and Monitoring	03/31/05 (M-23-25)	0				
M-23-27, Complete 244-CR Liquid Level Assessment	12/30/04	0				
M-42-00, Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-43-00, Complete Tank Farm Upgrades	06/30/05 (M-43-00)	1	M-43-00	06/30/05		
M-45-00, Complete Closure of all SST Farms	09/30/24 (M-45-00)	36	M-45-00	09/30/24	M-45-05-T12	09/30/14
			M-45-00B	09/30/06	M-45-05-T13	09/30/15
			M-45-00C	09/30/06	M-45-05-T14	09/30/16
			M-45-00D	01/31/08	M-45-05-T15	09/30/17
			M-45-02	TBD	M-45-06	09/30/24
			M-45-02M	03/01/06	M-45-06-T03	03/31/12
			M-45-02N	03/01/08	M-45-06-T04	03/31/14
			M-45-02O	03/01/10	M-45-13	03/31/06
			M-45-03C	06/30/05	M-45-13-T01	03/31/07
			M-45-05	09/30/18	M-45-15	03/31/06
			M-45-05A	06/30/05	M-45-15-T01	03/31/07
			M-45-05N-T01	06/30/05	M-45-55	01/31/07
			M-45-05-T05	09/30/07	M-45-55-T03	07/31/05
			M-45-05-T06	09/30/08	M-45-56	TBD
			M-45-05-T07	09/30/09	M-45-58	06/30/07
			M-45-05-T08	09/30/10	M-45-59	TBD
M-45-05-T09	09/30/11	M-45-60	09/30/07			
M-45-05-T10	09/30/12					
M-45-05-T11	09/30/13					
M-46-00, Double Shell Tank Space Evaluation	11/30/06 (M-46-01)	1	M-46-21	12/31/05		
M-47-00, Complete All Work for Phase 1 Operations	02/28/18 (M-47-00)	5	M-47-00	02/28/18	M-47-04	03/31/09
			M-47-02	03/31/09	M-47-06	06/30/10
			M-47-03A	03/31/09		
M-50-00, Complete Pretreatment Processing of Hanford Tank Waste	12/31/28 (M-50-00)	1	M-50-00	12/31/28		
M-51-00, Complete Vitrification of Hanford High Level Tank Waste	12/31/28 (M-51-00)	1	M-51-00	12/31/28		
M-61-00* (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/28 (M-61-00)	1	M-61-00	12/31/28		
M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	12/31/28 (M-62-00)	11	M-62-00	12/31/28	M-62-07B	12/31/07
			M-62-00A	02/28/18	M-62-08	06/30/06
			M-62-01K	07/31/05	M-62-09	02/28/09
			M-62-01L	01/31/06	M-62-10	01/31/11
			M-62-01M	07/31/06	M-62-11	06/30/07
M-62-03	12/31/06					
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	3	M-90-00	TBD		
			M-90-10	08/31/08		
			M-90-11	08/31/10		

TPA Milestone Statistics

(Including target milestones)

Milestone	Due Date	Total Active as of 03/31/05	Milestone Number	Due Date	Milestone Number	Due Date
M-48-00, DST Integrity Program, Submit Results of 4 DSTs not Previously Examined	09/30/07	4	M-48-00 M-48-13 M-48-14 M-48-15	09/30/07 09/30/05 03/31/06 09/30/07		
Interim Stabilization Consent Decree	09/30/04 (D-001-00)	1	D-001-00			
Total Active Milestones:		67				

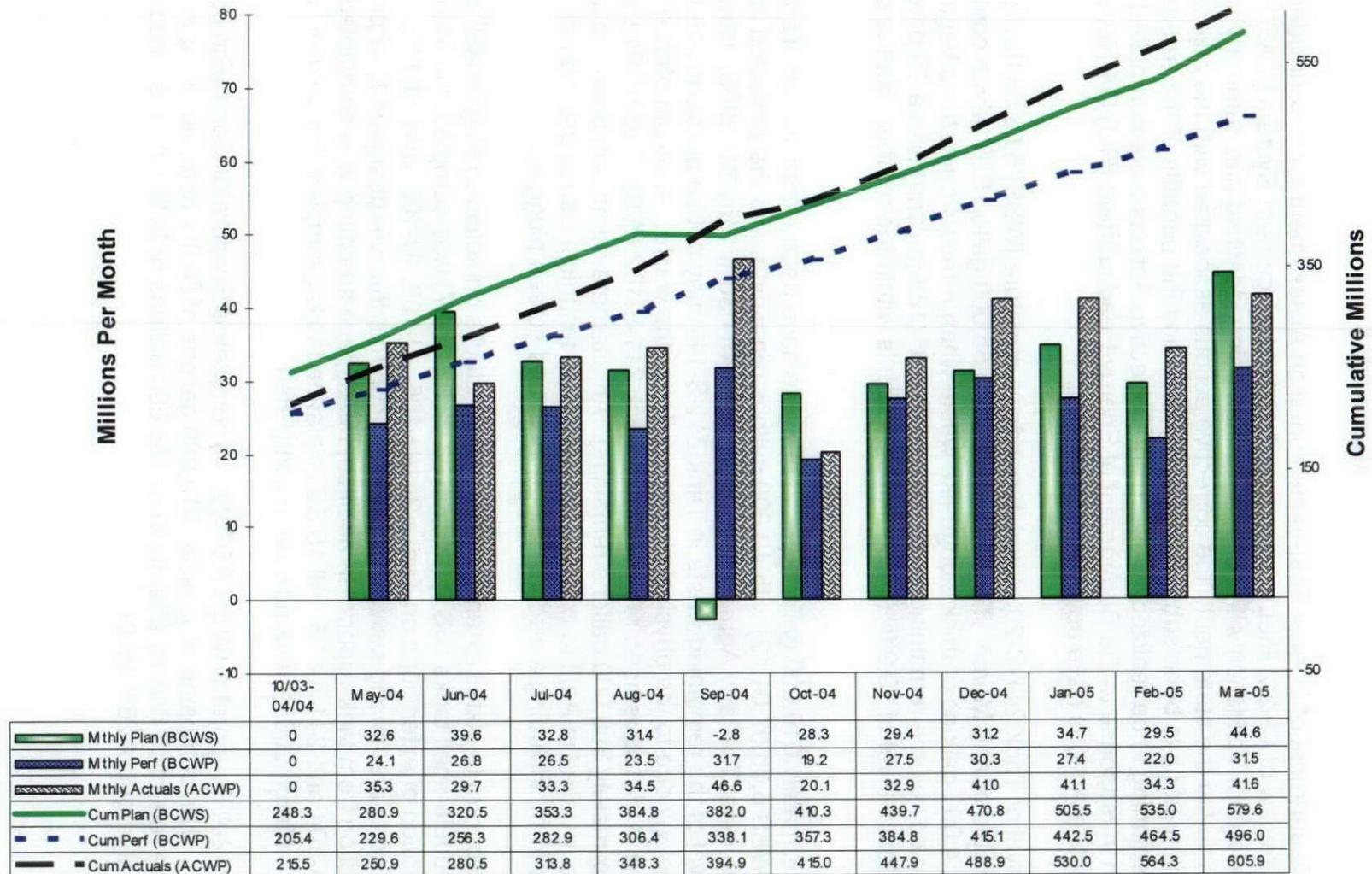
FY 2005 MILESTONE PERFORMANCE



Fiscal Year 2005 Tri-Party Agreement Milestone Status

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted	Change Pending
				Ahead of Schedule	On Schedule					
D-001-00-R22	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report.	10/31/04	10/27/04 X							
M-23-27	Complete 244-CR Liquid Level Assessments	12/30/04	12/29/04 X							
M-62-01J	Submit Semi-Annual Project Compliance Report	01/31/05	1/31/05 X							
M-90-08	Initiate ILAW Disposal Facility Construction	02/28/05	09/08/04 X							
M-45-05A	Complete Initial Waste Retrieval from Tank S-102	06/30/05								X
M-45-03C	Complete Full Scale Saltcake Waste Retrieval Technology Demonstration at S-112	06/30/05								X
M-43-00	Complete Tank Farm Upgrades	06/30/05			X					
M-45-05N-T01	Final Completion of Tank C-106 SST Retrieval and Closure	06/30/05								X
M-62-01K	Submit Semi-Annual Project Compliance Report	07/31/05			X					
M-45-55-T03	Submit to Ecology for Review and Comment as an Agreement Secondary Document a Field Investigation Report pursuant to the site-specific SST WMA Phase 1 RFI/CMS Work Plan Addenda for WMA-T and WMA TX-TY	07/31/05			X					
M-48-13	Submit Results of Four DSTs not Previously Examined	09/30/05			X					
M-47-05A	Complete Startup and Turnover Activities for Waste Retrieval and Mobilization Systems for Selected Initial Low-Activity Waste Feed Tank (Other than AZ-101 or AZ-102)	04/30/06	12/29/04 X							
TOTAL		13	4	0	9	0	0		0	

CH2M HILL Performance Cost/Schedule 10/2003- 03/2005



Executive Summary March 2005

The Department of Energy Post-Implementation Assessment team concluded its two-week review of CH2M HILL's Integrated Safety Management System (ISMS) Improvement Validation with no new findings being identified and summary conclusions that included the statement: "the corrective actions associated with the objective of this assessment have been substantially completed and the benefits of this implementation are beginning to be realized." Also, eight Corrective Actions were completed during the month in response to the Department of Energy Headquarters (HQ) OA Report. All 101 Corrective Actions have now been completed.

Retrieval of Tank 241-C-203 (work breakdown structure [WBS] 5.08.06.06.15) was completed during March. Tank 241-C-203 is a 55,000 gallon SST which contained about 4,000 gallons of thick sludge-like waste when retrieval operations began. The estimated volume remaining in the tank is 18.5 ft³ (138 gallons) with a 95 percent upper confidence level of 19.9 ft³ (149 gallons), which is within the retrieval criteria of less than 30 ft³.

Approximately 616,000 gallons (94%) of waste have been retrieved from Tank 241-S-112 (WBS 5.08.07.01.12) with 40,000 gallons remaining, and the projected completion date to meet Tri-Party Agreement Milestone M-45-03C is May 31, 2005. However, retrieval of the remaining waste in Tank 241-S-112 may not be possible with the existing technology due to the physical characteristics of the waste. Approximately 47,000 gallons (11%) have been retrieved from Tank 241-S-102 (WBS 5.08.07.01.02) with approximately 390,000 gallons remaining. An alternate pump has been procured and will be installed in April to address unanticipated technical issues associated with the waste form, including a viscous sludge layer and screen plugging.

The program to install extensions to exhaust stacks on selected single-shell tanks (SST) and double-shell tanks (DST) (WBS 5.08.02.01.03.07) was completed in March with the installation of extensions on Tanks 241-U-105, -U-106, -U-108, and -U-112. Stack extensions are among several engineering controls that are designed to improve worker protection from tank vapors. In addition, headspace sampling was completed on SSTs 241-A-104 and 241-A-105. All 15 SSTs planned to be sampled this quarter (January 2005 – March 2005) have now been completed.

The 242-A Evaporator (WBS 5.07.02.11) completed Evaporator Campaign 05-01 in March. The campaign processed 519,000 gallons of DST waste, resulting in a waste volume reduction (WVR) after flush of 156,000 gallons or 30% WVR, exceeding the original target of 26% WVR.

Executive Summary
March 2005
(Continued)

The State of Washington Department of Ecology (Ecology) sent the mitigated Decision of Non-Significance (DNS) for the Integrated Disposal Facility (IDF) (WBS 5.09.03.01) to the State Environmental Policy Act of 1971 (SEPA) register for public comment. The DNS will allow for construction of test pad and groundwater monitoring wells beginning in April 2005. In addition, the Notice of Construction (NOC) applications were transmitted to Ecology and the State of Washington Department of Health.

Project W-314, Tank Farm Restoration and Safe Operations (WBS 5.08.04.01), is 98% complete. In March, the AP-02A Pit Upgrade was completed. This completes 33 of 37 pit upgrades. The project is on track to complete all Tri-Party Agreement M-43-00 scope by June 30, 2005. Remaining scope will either be deferred or completed based on operational needs and funding availability. On Project W-211, Initial Tank Retrieval Systems (WBS 5.08.03.02), completion of the AN-101 Retrieval System remains at 90% with sufficient construction completion expected by September 2005 to support required waste transfers.

The TRU packaging system fabrication (WBS 5.09.02.02) is being ramped down to align with the current regulatory path forward and FY 2006 budget constraints. Ramp-down activities to disposition hardware, contracts, and project records are ongoing. Also, The B-200 and T-200 vacuum retrieval systems, which were planned for the retrieval of TRU waste, were repaired and accepted. On the Demonstration Bulk Vitrification System (DBVS) (WBS 5.09.02.03.06), the first full scale bottoms-up test of the new melter box configuration was completed. In addition, placement of concrete for DBVS equipment pads continues, with 900 cubic yards of the planned 2100 cubic yards placed as of April 5, 2005.

The status of the contract-period critical path activities is as follows: Final Completion of C-106 (M-45-05N-T01) (WBS 5.08.13.06.06) and other closure milestones are impacted by the delay of the EIS ROD; Complete S-102 Retrieval continues to be delayed due to waste physical characteristics (e.g. viscous sludge layer) and enhanced respiratory protection requirements; Complete S-112 Retrieval (M-48-14) is impacted by the retrieval technology's ability to remove the monolithic salt layer from the bottom of the tank and enhanced respiratory protection requirements. C-Farm has experienced modified sluicing system design delays. Projects E-525/W-314 (M-43) and DST System 1A Report to Ecology (M-48-14) are delayed due to implementation of enhanced respiratory protection requirements. Recovery plans have been developed and are being implemented for critical path activities. Tank 241 S 102 is being retrieved; C-Farm has dedicated teams working to recover schedule; Project W-314 upgrades have resumed; and Project E-525 transfer lines have been unplugged and flushed.

Executive Summary
March 2005
(Continued)

The earned value performance data reflects a current month unfavorable schedule variance (SV) of \$13M and a project-to-date (PTD) unfavorable SV of \$84M; a current month unfavorable cost variance (CV) of \$10M and an unfavorable PTD CV of \$110M. The PTD SV is due to continued delay in approval of the National Environmental Policy Act of 1969 (NEPA) documentation impacting the TRU Project, the DBVS extended contract negotiations, delays in SST retrievals due to vapor and tank waste technical issues, delays in Projects W-314 and E-525 due to vapor issues, Closure delays due to schedule extension for completion of the EIS and ROD, and Integrated Disposal Facility (IDF) permitting delays. The unfavorable PTD CV is due to higher than planned retrieval and closure design costs, longer retrieval periods due to waste physical characteristics, and unbudgeted costs for vapor mitigation activities. In addition, the DBVS incurred unplanned costs related to permitting, Engineering Scale Test 13, the Tank 241-S-109 Functions and Requirements (F&R) document, and retrieval of Tank 241-S-109 test waste.

Dollars in Thousands

WBS	TITLE	Budgeted Cost		Cumulative Program-To-Date				Budget at Completion (BAC) *	
		Work Scheduled	Work Performed	Actual Cost Work Performed	Variance				
					Schedule	SV %	Cost		CV %
5.07	BASE OPERATIONS - Excluding 5.07.02	178,141.5	177,487.7	191,348.0	(653.8)	-0.4%	(13,860.3)	-7.8%	442,256.1
5.07.02	Env/TPA Milestone Achievement	38,445.8	33,617.8	28,312.8	(4,828.0)	-12.6%	5,305.0	15.8%	82,549.5
	TOTAL BASE OPERATIONS	<u>216,587.3</u>	<u>211,105.5</u>	<u>219,660.8</u>	<u>(5,481.8)</u>	<u>-2.5%</u>	<u>(8,555.3)</u>	<u>-4.1%</u>	<u>524,805.6</u>
5.08	RETRIEVE AND CLOSE - Excluding foll. WBS	9,377.6	9,489.7	8,559.4	112.1	1.2%	930.3	9.8%	10,642.4
5.08.02	WTP Feed Delivery Program	16,003.4	15,901.1	22,336.1	(102.3)	-0.6%	(6,435.0)	-40.5%	30,347.0
		14,338.5	13,604.9	16,026.9					48,558.3
5.08.03.02	10 DST Retrieval Systems (W-211)				(733.6)	-5.1%	(2,422.0)	-17.8%	
		33,624.0	28,806.4	31,269.1					34,767.7
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)				(4,817.6)	-14.3%	(2,462.7)	-8.5%	
		13,290.6	9,425.1	14,597.5					15,489.5
5.08.04.02	Upgrade Transfer System (E-525)				(3,865.5)	-29.1%	(5,172.4)	-54.9%	
5.08.05	Retrieval / Closure Program	61,599.3	55,413.5	67,050.7	(6,185.8)	-10.0%	(11,637.2)	-21.0%	122,839.1
5.08.06/7	SST Retrieval East / West Area	45,177.3	29,514.6	73,923.6	(15,662.7)	-34.7%	(44,409.0)	-150.5%	163,162.3
5.08.13	SST Closure	8,211.2	5,035.7	8,632.3	(3,175.5)	-38.7%	(3,596.6)	-71.4%	37,945.0
	TOTAL RETRIEVE AND CLOSE	<u>201,621.9</u>	<u>167,191.0</u>	<u>242,395.6</u>	<u>(34,430.9)</u>	<u>-17.1%</u>	<u>(75,204.6)</u>	<u>-45.0%</u>	<u>463,751.3</u>
5.09	Elements	14,054.1	13,249.0	10,399.5	(805.1)	-5.7%	2,849.5	21.5%	32,648.8
5.09.02.02	TRU / LLW Packaging	26,357.3	10,518.3	15,883.1	(15,839.0)	-60.1%	(5,364.8)	-51.0%	40,832.6
5.09.02.03	LAW Treatment	26,597.8	19,547.8	35,897.2	(7,050.0)	-26.5%	(16,349.4)	-83.6%	48,078.7
5.09.03.01	Integrated Disposal Facility	15,849.8	9,840.7	7,411.9	(6,009.1)	-37.9%	2,428.8	24.7%	25,529.3
5.09.03.04	Initial IHLW Storage Facility (W-464)	3,670.4	3,611.2	2,146.5	(59.2)	-1.6%	1,464.7	40.6%	12,459.3
	TOTAL TREAT AND DISPOSE WASTE	<u>86,529.4</u>	<u>56,767.0</u>	<u>71,738.2</u>	<u>(29,762.4)</u>	<u>-34.4%</u>	<u>(14,971.2)</u>	<u>-26.4%</u>	<u>159,548.7</u>
5.10	ANALYTICAL/TECHNICAL SERVICES	30,218.7	29,447.9	30,475.6	(770.8)	-2.6%	(1,027.7)	-3.5%	66,526.1
RPP TOTAL		<u>534,957.3</u>	<u>464,511.4</u>	<u>564,270.2</u>	<u>(70,445.9)</u>	<u>-13.2%</u>	<u>(99,758.8)</u>	<u>-21.5%</u>	<u>1,214,631.7</u>

* BAC on this chart and in the Cumulative Performance tables is for the period FY 2004 - FY 2006.

Cumulative Performance 10/03-03/05 – Base Operations (Excl. 5.07.02)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.07	193,056.8	190,583.7	206,062.1	(2,473.1) -1.3%	(15,478.4) -8.1%	442,256.1

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is primarily due to the Contract fee associated with Performance Based Incentive (PBI) milestones not being earned as planned due to technical issues associated with waste forms in retrievals; regulatory documentation and approval delays in TRU, DBVS, Closure and IDF; and implementation of increased respiratory protection requirements.

Impact: Fee cash flow and earning capability has been adversely impacted.

Corrective Action: Corrective action-plans have been developed and are being implemented where applicable.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance is due to unplanned costs to support vapor issue mitigation efforts in the enhanced Industrial Safety Program, Environmental Health, and the Vapor Protection Initiative for Waste Feed Operations. Additionally, unplanned Readiness-to-Serve costs were incurred in Site Wide Services relative to Fabrication services and Crane and Rigging support.

Impact: Unplanned costs are impacting ability to complete all planned baseline scope.

Corrective Action: CH2M HILL has prepared an Integrated Priority List (IPL) that includes emergent and directed scope, impacts from technical and regulatory issues described above, and estimates-at-completion for the contract period work scope. CH2M HILL will work with ORP to implement the IPL.

Cumulative Performance 10/03-03/05 – Env/TPA Milestone Achievement						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.07.02	42,189.7	36,351.0	30,630.9	(5,838.7) -13.8%	5,720.1 15.7%	82,549.5

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is because of delays in the double-shell tank (DST) Integrity Project due to software problems which has impacted structural analysis activities, and delays in ultrasonic testing (UT) activities caused by vapor issues and the need to re-scan two DSTs. Also, some DST Space Management Project activities have not started in anticipation of deferral or deletion of work scope (based on IPL analysis).

Impact: The DST structural analysis and UT activities are expected to be complete in FY05. Some DST Space Management Project activities will be deferred or deleted.

Corrective Action: Remaining scope not based on IPL analysis will be discussed with ORP as part of the IPL implementation.

COST VARIANCE

Description and Cause: The program-to-date favorable cost variance is due to lower than planned level-of-effort support to cross site transfers and 242-A Evaporator operations as a result of delays in SST retrievals. In addition, underruns were experienced in certain level-of-effort DST project management activities.

Impact: No impact.

Corrective Action: None required.

Cumulative Performance 10/03-03/05 – Retrieve and Close (excl. 5.8.2, projects, 5.8.5, retrievals & Closure) (\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08	9,522.3	9,634.3	8,700.6	112.0 1.2%	933.7 9.7%	10,642.4

SCHEDULE VARIANCE

Description and Cause: The program-to-date favorable schedule variance is within threshold of ±10% or \$1M.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The program-to-date favorable cost variance is within threshold of ±10% or \$1M.

Impact: No impact.

Corrective Action: None required.

Cumulative Performance 10/03-03/05 – WTP Feed Delivery Program						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.02	16,840.5	16,721.9	24,223.9	(118.6) -0.7%	(7,502.0) -44.9%	30,347.0

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is within threshold of ±10% or \$1M.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance is due to unplanned labor and subcontract support to the Chemical Vapor Solutions project. Costs include engineering controls for field work; material and subcontractor costs for stack extension activities; technical basis documentation; and vapor expert review panelists.

Impact: Unplanned costs are impacting ability to complete all planned baseline scope.

Corrective Action: CH2M HILL has prepared an Integrated Priority List (IPL) that includes emergent and directed scope, impacts from issues described above, and estimates-at-completion for the contract period work scope. CH2M HILL will work with ORP to implement the IPL.

Cumulative Performance 10/03-03/05 – 10 DST Retrieval Systems (W-211)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.03.02	15,628.2	14,387.4	16,383.0	(1,240.8) -7.9%	(1,995.6) -13.9%	48,558.3

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is because of delays in AN-101 Retrieval System Start-up/Turnover (SU&T) and AY-101 Retrieval System design due to resource priority issues. In addition, delays were experienced on the AY-102 Retrieval System due to higher than expected radiation levels encountered during trench excavation and the delay to AY-101 Retrieval System.

Impact: There is no adverse impact to the overall project and waste transfer baseline completion schedules.

Corrective Action: AN-101 Retrieval System SU&T/Readiness will be completed to allow manual operation of the transfer pump by January 2006, which will allow emptying Tank 241-AN-101 per the overall waste transfer schedule. Additional SU&T/Readiness tasks will be conducted between January and June 2006 to support full automatic operation of the transfer system by the summer of 2006 to support C-Farm retrieval. AY-102 Retrieval System work planning is being revised to allow safe continuation of excavation and pipe installation.

COST VARIANCE

Description and Cause: Most of the unfavorable cost variance is in AN-101 Retrieval System construction, and is caused by the following: unplanned costs were incurred to modify the AN-101 Retrieval System design to accommodate use of the system's transfer capabilities to support C-Farm retrieval; attempts were being made to work on low risk work packages, but lack of priority for key field support resources resulted in continued stand-by costs; and, the increased costs and inefficiencies associated with requiring tank farm construction crews to work on supplied air.

Impact: Much of the cost variance associated with AN-101 Retrieval System is not recoverable.

Corrective Action: Closure Operations has committed to provide a crew for installation of the AN-101 transfer pump and jumpers, and the AN-101 construction contractor has been scheduled to demobilize in June 2005, when the pump is scheduled to be installed. Work by the construction contractor for the AZ-102 Retrieval System construction has been suspended, and is planned to be reinstated in July 2005, when Plant Forces field support is expected to be more available.

Cumulative Performance 10/03-03/05 – Project W-314 (Tank Farm Restoration and Safe Operations)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.04.01	34,222.8	29,574.6	32,442.9	(4,648.2) -13.6%	(2,868.3) -9.7%	34,767.7

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is primarily in Field Construction and is attributable to additional work steps needed to address enhanced work package development/approval and inefficiencies resulting from enhanced respiratory protection requirements. These factors have resulted in issues associated with availability of limited field resources for competing priorities.

Impact: Schedule variance continues to improve slightly due to progress in AP Pit upgrades. The compressed outage for the Waste Transfer System (WTS) Tie-in will require construction craft to work double shifts in May & June. Schedule float to the M-43-00 milestone is minimal, but the milestone is achievable.

Corrective Action: Corrective actions being taken include use of Waste Feed Operations (WFO) "Crew Concept" to provide resources and expedite completion of the AP farm pit upgrade work; early identification and resolution of work planning issues; evaluation and adjustment of support resources; and evaluation and implementation of alternatives to reduce the impacts of enhanced respiratory protection requirements.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance is primarily in Field Construction and is caused by lost time driven by resource availability, additional shifts/overtime required to recover schedule, maintenance of higher than budgeted (baseline) project management support and engineering levels due to schedule extensions, enhanced work package preparation and approval costs, and field work inefficiencies resulting from respiratory protection requirements.

Impact: The project will be completed with an unfavorable variance at completion.

Corrective Action: Project W-314 is evaluating remaining work scope to identify any potential efficiency that may be realized while performing schedule recovery actions.

Cumulative Performance 10/03-03/05 – Project E-525 (Upgrade Transfer Systems)

	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.04.02	13,683.1	9,932.3	16,295.1	(3,750.8) -27.4%	(6,362.8) -64.1%	15,489.5

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is primarily in Field Construction and is attributable to additional work steps needed to address enhanced work package development/approval, inefficiencies resulting from enhanced respiratory protection requirements, plugged transfer lines, and higher than expected radiation levels encountered during excavation. These factors have resulted in issues associated with availability of limited field resources for competing priorities.

Impact: Project E-525 activities are on or near critical path to the Tri-Party Agreement Milestone M-43-00. Corrective actions implemented to date have resulted in increased performance and an associated improvement in schedule variance to M-43-00. Continued improvement in the schedule variance is expected as increased priority and resources are applied to the project.

Corrective Action: Recovery actions have been implemented, including hiring of additional construction resources and HPTs, purchasing of additional equipment to meet vapor requirements, and working closely with other organizations to ensure compatibility of schedules.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance is primarily in Field Construction and is attributable to additional work effort required to address enhanced work package development/approval, inefficiencies resulting from enhanced respiratory protection requirements, lost time caused by deferrals of the work, and additional shifts/overtime required to recover schedule. Also, project management and engineering support is continuing longer than planned, due to schedule extension.

Impact: A significant portion of the cost variance is not recoverable.

Corrective Action: Project E-525 is evaluating remaining work scope to identify any potential efficiency that may be realized while performing schedule recovery actions.

Cumulative Performance 10/03-03/05 – Retrieval / Closure Program						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u> (\$000)	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.05	66,181.0	59,466.2	72,378.3	(6,714.8) -10.1%	(12,912.1) -21.7%	122,839.1

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is primarily due to field work delays on Vadose RCRA Corrective Actions activities caused by air sampler delays due to electrical short potential, work stoppages due to respiratory equipment issues, and enhanced radiological controls. These factors have resulted in issues associated with availability of limited field resources for competing priorities.

Impact: The schedule variance for Vadose RCRA Corrective Actions will not be recovered in the near term; however, there is no impact as the Tri-Party Agreement milestones, that this activity support, have been renegotiated to FY05 through FY07.

Corrective Action: A recovery plan for Vadose RCRA Corrective Actions has been implemented to resolve resource availability issues, with the resulting benefit that field work began in March.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance is due to unplanned cost incurred by Closure Project operations resulting from vapor protection requirements for in-farm work. In addition, 244-CR Vault incurred unplanned costs resulting from vapor issues, which increased the size of work crews, lengthened the period needed to perform the work, and necessitated rework of work packages.

Impact: Unplanned costs are impacting ability to complete all planned baseline scope.

Corrective Action: CH2M HILL has prepared an IPL that includes emergent and directed scope, impacts from issues described above, and estimates-at-completion for the contract period work scope. CH2M HILL will work with ORP to implement the IPL.

Cumulative Performance 10/03-03/05 – SST Retrieval East / West Area						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.06/07	53,102.8	32,098.1	79,985.3	(21,004.7) -39.6%	(47,887.2) -149.2%	163,162.3

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is due to delays in C-Farm Retrieval procurement, fabrication, and system installation activities caused by extended design efforts for incremental shielding needs for the Modified Sluicing tanks. In addition, retrieval operations incurred delays primarily because the waste form is denser than was planned for, requiring equipment replacement, extra retrieval evolutions, and additional resources.

Impact: Issues identified above caused an extension of existing construction and startup schedules.

Corrective Action: The C-Farm Retrieval execution schedule has been revised and design media has been time-phased, in an effort to procure equipment as soon as possible to support Tri-Party Agreement requirements.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance is primarily due to SST retrievals experiencing higher than planned material and fabrication costs; longer than planned retrieval durations; increased special equipment and engineering costs; weather delays resulting in work stoppages; and costs related to vapor issues. Additionally, unplanned costs have been incurred for the purchase, installation, and testing of a second pumping system for Tank 241-S-102.

Impact: Unplanned costs are impacting ability to complete all planned baseline scope.

Corrective Action: CH2M HILL has prepared an IPL that includes emergent and directed scope, impacts from issues described above, and estimates-at-completion for the contract period work scope. CH2M HILL will work with ORP to implement the IPL.

Cumulative Performance 10/03-03/05 – SST Closure						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.13	9,040.5	5,077.5	8,769.8	(3,963.0) -43.8%	(3,692.3) -72.7%	37,945.0

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is primarily due to the planned closure of Tank 241-C-106 and C-200 series tanks which are behind schedule due to the delay in the approval of the Closure Environmental Impact Statement (EIS) Record of Decision (ROD) and in tank retrievals.

Impact: Closure of SSTs is dependent on the issuance of the ROD.

Corrective Action: Post-retrieval characterization and documentation are planned for FY 2005-2006. Isolation and fill work for tank closure will be performed following issuance of the EIS-ROD.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance is due to performing more sampling and analytical work than planned and incurring higher costs than planned for closure design and work package planning.

Impact: Unplanned costs are impacting ability to complete all planned baseline scope.

Corrective Action: CH2M HILL has prepared an IPL that includes emergent and directed scope, impacts from issues described above, and estimates-at-completion for the contract period work scope. CH2M HILL will work with ORP to implement the IPL.

Cumulative Performance 10/03-03/05 – Treat & Dispose Waste (Excl. WBS 5.9.2.2/2.3/3.1/3.4)						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09	15,408.9	14,297.4	11,170.8	(1,111.5) -7.2%	3,126.6 21.9%	32,648.8

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is because of delay in W-QQQ Project Support in order to fund higher priority work.

Impact: No impact. Dependant on funding availability, the schedule will be recovered in FY06.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The program-to-date favorable cost variance is due to efficiencies realized in the Fluor Hanford, Inc. (FH) support of the Waste Treatment Plant interfaces. In addition, efficiencies were realized in Strategic Planning.

Impact: No impact.

Corrective Action: None required.

Cumulative Performance 10/03-03/05 – TRU / LLW Packaging						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09.02.02	26,662.8	11,073.3	16,891.3	(15,589.5) -58.5%	(5,818.0) -52.5%	40,832.6

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance results primarily from permitting related delays in converting a Research, Development, and Demonstration (RD&D) permit into an extensive Part B permit. In addition NEPA permitting and Part B certification issuance has been delayed by the DOE while it resolves related litigation issues. Lastly, some schedule delay has occurred from ORP's decision to issue the Preliminary Documented Safety Analysis (PDSA) as new scope, in addition to the planned Documented Safety Analysis (DSA) amendment.

Impact: Permitting issues and regulatory uncertainty have delayed packaging operation planning such that completion of the first 100,000 gallons of tank waste is no longer practical. In addition, ORP has directed a ramp-down of the TRU project to place the project in indeterminate standby by end of FY05 until resolution of NEPA and other permitting issues. Ramp-down activity includes preparation of overall TRU project BCR, estimated completion by August 2005. The schedule variance will continue to increase until implementation of the BCR.

Corrective Action: Per ORP direction, the TRU project will be ramped down pending resolution of regulatory issues.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance results from added costs to mitigate permitting delays, rework associated with NEPA document revision per DOE, and new scope to issue the PDSA. Also, the packaging vendor has incurred additional design costs resulting from inadequate design estimation.

Impact: Unfavorable costs variances are impacting ability to complete all planned baseline scope.

Corrective Action: CH2M HILL has prepared an IPL that includes emergent and directed scope, impacts from technical and regulatory issues described above, and estimates-at-completion for the contract period work scope. CH2M HILL will work with ORP to implement the IPL.

Cumulative Performance 10/03-03/05 – LAW Treatment						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09.02.03	28,734.4	20,912.4	39,926.8	(7,822.0) -27.2%	(19,014.4) -90.9%	48,078.7

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is due to the 6-month delay in issuing the RD&D permit for the Demonstration Bulk Vitrification System (DBVS), and delayed placement of the supplement treatment procurements to allow evaluation of bid estimates that exceeded baseline values. In addition, the pretreatment technology development project is impacted by the delay in Tank 241-S-112 retrieval.

Impact: Delays in supplemental treatment procurements could potentially impact the startup of the Bulk Vitrification Test and Demonstration Facility.

Corrective Action: The RD&D permit was issued on December 13, 2004. Plans are to accelerate design/construction and work with the State to minimize the impact of required reviews. However, the variance may be unrecoverable. The scope for the pretreatment technology development project is planned to complete in FY05.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance results from higher than anticipated negotiated contract costs with the principle contractor (AMEC) for design, fabrication and installation; additional requirements associated with the DBVS permits, (including, additional equipment and system requirements; and increased testing, sampling and analysis associated with waste form qualifications); new project scope (ES-13), and Tank 241-S-109 retrieval.

Impact: Unplanned costs are impacting ability to complete all planned baseline scope.

Corrective Action: CH2M HILL has prepared an IPL that includes emergent and directed scope, impacts from technical and regulatory issues described above, and estimates-at-completion for the contract period work scope. CH2M HILL will work with ORP to implement the IPL.

Cumulative Performance 10/03-03/05 – Integrated Disposal Facility (IDF)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09.03.01	19,190.9	10,638.0	7,718.8	(8,552.9) -44.6%	2,919.2 27.4	25,529.3

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is due to delay in issuance of Part B Permit for the Integrated Disposal Facility (IDF), which has resulted in suspension of construction activities.

Impact: The forecast for completion of the IDF will increase depending on the length of delay of issuance of the Part B Permit.

Corrective Action: CH2M HILL, ORP, and Ecology have concurred on a path forward. Documentation is being revised and permit conditions are being prepared consistent with the path forward, with the draft permit planned to be released to the public on April 15, 2005.

COST VARIANCE

Description and Cause: The program-to-date positive cost variance is due to the favorable fixed-price contract for the IDF. In addition, engineering and Performance Assessments experienced under-runs in FY04 due to efficiencies.

Impact: No impact.

Corrective Action: None required.

Cumulative Performance 10/03-03/05 – Initial IHLW Storage facility (W-464)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09.03.04	3,797.2	3,730.7	2,327.9	(66.5) -1.8%	1,402.8 37.6%	12,459.3

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is within threshold of ±10% or \$1M.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The program-to-date favorable cost variance is due to efficiencies realized on the detailed design activity, resulting from favorable contract performance.

Impact: No impact.

Corrective Action: None required.

Cumulative Performance 10/03-03/05 – Analytical Technical Services						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.10	32,333.0	31,508.7	32,000.8	(824.3) -2.5%	(492.1) -1.6%	66,526.1

SCHEDULE VARIANCE

Description and Cause: The program-to-date unfavorable schedule variance is within threshold of $\pm 10\%$ or \$1M.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The program-to-date unfavorable cost variance is within threshold of $\pm 10\%$ or \$1M.

Impact: No impact.

Corrective Action: None required.

Milestone M-45-00, Complete Closure of All Single-Shell Tank Farms

SST Retrieval and Closure Program

I. Deliverables

- **M-45-00, Complete Closure of all Single-Shell Tank Farms**

Due: 9/30/24

Status: On schedule

- **M-45-00B, Complete Specified "Near-Term" SST Waste Retrieval and Interim Closure Activities, to Result in the Retrieval of all Tank Wastes in WMA-C SSTs Pursuant to the Agreement Criteria in Milestone M-45-00**

Due: 9/30/06 (Or as otherwise indicated within the descriptive text of this milestone.)

Status: Current working schedule projects completion of some C-Farm retrievals extending beyond September 2006. ORP is working on strategies to accelerate schedule to complete all retrievals by the required due date.

- Completion of four limits of technology retrieval demonstrations:
 - Saltcake dissolution (S-112): In progress; forecast completion by August 2005.
 - Modified sluicing (C-106): Completed
 - Vacuum retrieval (C-200's): In progress; C-203 field retrieval operations completed on 3/24/05; forecast completion of remaining C-200's by February 2006.
 - Mobile retrieval (C-101, C-105, C-110, or C-111): C-101 retrieval planned for start in December 2006 with forecast completion in February 2007.
- Implementation of full-scale LDMM technologies for the first three 100-series tank retrievals following Tank S-112:
 - Tank S-102: High Resolution Resistivity (HRR) system installed; supporting retrieval operations
 - Tank C-103: HRR system installed; baseline data being collected
 - Tank C-108: HRR system to be installed during August 2005
- Submittal of TWRWPs:
 - Tanks C-201, C-202, C-203, and C-204 (provide supplemental information by 3/31/04): Completed (04-TPD-046, 4/8/04)
 - Two (2) 100-series tanks by 7/31/04: Completed on 7/29/04 (C-103 and C-109)
 - Four (4) 100-series tanks by 10/31/04: Completed on 10/8/04 (C-102, C-104, C-107, C-108, and C-112).
 - Five (5) 100-series tanks by 1/31/05: Completed on 1/24/05 (C-101, C-105, C-110, and C-111).

- Submittal of Waste Management Area (WMA) integration plans by 6/30/05:
 - WMA C: On schedule.
 - WMA T: On schedule.

- **M-45-00C, Initiate Negotiation of SST Waste Retrieval and Closure Activities and Associated Schedules (for the Period February 2007 through August 2008)**
Due: 9/30/06
Status: On schedule

- **M-45-00D, Initiate Negotiation of the SST Waste Retrieval and Closure Activities (for the Period September 2008 to September 2013)**
Due: 1/31/08
Status: On schedule

- **M-45-00E, Initiate Negotiation of SST Waste Retrieval and Closure Activities for the Remainder of the SST Program**
Due: 10/31/12
Status: On schedule

- **M-45-05, Retrieve Waste from all Remaining Single-Shell Tanks**
Due: 9/30/18
Status: On schedule

- **M-45-05-T05, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**
Due: 9/30/07
Status: On schedule

- **M-45-05-T06, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**
Due: 9/30/08
Status: On schedule

- **M-45-05-T07, Initiate Tank Retrieval from Seven Additional Single-Shell Tanks**
Due: 9/30/09
Status: On schedule

- **M-45-05-T08, Initiate Tank Retrieval from Eight Additional Single-Shell Tanks**
Due: 9/30/10
Status: On schedule

- **M-45-05-T09, Initiate Tank Retrieval from Ten Additional Single-Shell Tanks**
Due: 9/30/11
Status: On schedule

- **M-45-05-T10, Initiate Tank Retrieval from 12 Additional Single-Shell Tanks**
Due: 9/30/12
Status: On schedule
- **M-45-05-T11, Initiate Tank Retrieval from 14 Additional Single-Shell Tanks**
Due: 9/30/13
Status: On schedule
- **M-45-05-T12, Initiate Tank Retrieval from 17 Additional Single-Shell Tanks**
Due: 9/30/14
Status: On schedule
- **M-45-05-T13, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
Due: 9/30/15
Status: On schedule
- **M-45-05-T14, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
Due: 9/30/16
Status: On schedule
- **M-45-05-T15, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
Due: 9/30/17
Status: On schedule
- **M-45-06, Complete Closure of all Single-Shell Tank Farms in Accordance with Approved Closure/Post Closure Plan(s)**
Due: 9/30/24
Status: On schedule
- **M-45-06-T03, Initiate Closure Actions on a WMA Basis**
Due: 3/31/12 (See M-45-06)
Status: On schedule
- **M-45-06-T04, Complete Closure Actions on one WMA**
Due: 3/31/14 (See M-45-06)
Status: On schedule

II. Significant Accomplishments

- Approval of HFFACO Change Number M-45-04-04, extending due date for M-45-00C to 9/30/06.
- Completed vacuum retrieval at C-203 on 3/24/05.
- Received Ecology approval of the SST closure sampling and analysis plan.
- Awarded contract for off-riser sampler for residual tank wastes; visited vendor facility to observe system testing.
- Comments on the draft grout development test report were submitted to the Savannah River Technology Center for disposition.

- Saltcake dissolution retrieval technology demonstration in Tank S-112 roughly 95% complete.

III. Significant Planned Activities in the Next Six Months

- Completion of saltcake dissolution retrieval technology demonstration (S-112).
- Completion of vacuum retrieval technology demonstration at tanks C-201 and C-202; initiate vacuum retrieval of C-204.
- Complete installation of HRR leak detection system at C-108; begin collection of baseline data.
- Complete integration plans for WMA's C and T
- Complete SST Performance Assessment and submit to Ecology, EPA, and NRC for review.
- Complete procurement and receipt of off-riser residual waste sampler.
- Complete preparation of the grout development test report.

IV. Issues

- Recovery schedule being developed to ensure TPA Milestone M-45-00B (complete C-Farm retrievals) is met.
- Acceleration of HRR injection test.

SST RETRIEVAL SEQUENCE DOCUMENT

I. Deliverables

- **M-45-02M, Submit Biennial Updates to SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition**
Due: 3/1/06 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: On schedule
- **M-45-02N, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**
Due: 3/1/08 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: On schedule
- **M-45-02O, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**
Due: 3/1/10 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: On schedule

- **M-45-02P, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**
Due: 3/1/12 (Biennially thereafter. Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: On schedule

II. Significant Accomplishments

- Issued RPP-21216, Rev. 0A, "Single-Shell Tank Retrieval Selection and Sequence," establishing a tank pool list in September 2004.

III. Significant Planned Activities in the Next Six Months

- Nothing to report.

IV. Issues

- Nothing to report.

TANK RETRIEVALS WITH INDIVIDUAL MILESTONES

Tank 241-C-106

I. Deliverables

- **M-45-05H, Interim Completion of Tank C-106 SST Waste Retrieval and Closure Demonstration Project**
Due: 6/30/04
Status: Completed
- **M-45-05L-T01, Complete Full-Scale C-106 Waste Retrieval**
Due: 11/1/03
Status: Completed
- **M-45-05M-T01, Submit C-106 Waste Retrieval Results, Analysis of Residual Waste(s), and (if appropriate) Request for Exception to the Criteria Pursuant to Agreement Appendix H**
Due: 2/27/04
Status: Completed
- **M-45-05N-T01, Final Completion of Tank C-106 SST Retrieval and Closure Demonstration Project**
Due: 6/30/05
Status: Forecasted completion by October 2006

II. Significant Accomplishments

- Completed comment resolution workshops with Ecology on C-106 Appendix H exception request, including presentations on limits of technology, risk assessment, and leak detection; transmitted final comment responses to Ecology
- Completed draft responses to NRC comments on the Appendix H "Basis for Exception to the HFFACO Retrieval Criteria for SST 241-C-106"; provided responses to Nuclear Regulatory Commission (NRC) via email (cc: Ecology); public meeting with NRC scheduled for June 1, 2005.
- Completed draft revisions to the C-106 retrieval completion documentation (Stage I, Stage II, and Appendix H Exception Request) per the agreement with Ecology during recent comment resolution workshops.

III. Significant Planned Activities in the Next Six Months

- Complete C-106 retrieval completion documentation, incorporating Ecology and NRC comments.
- Continue preparations for C-106 interim closure.
- Continue development of SST System Permit.

IV. Issues

- Due to supplied air requirements in tank farms and status of C-106 closure plan approval, C-106 isolation and tank fill field work has been delayed into FY 2006.
- C-106 Closure Plan approval is pending completion of the Tank Closure Environmental Impact Statement and associated Record of Decision (ROD); forecast completion for draft EIS is May 2006.

Tank 241-S-102

I. Deliverables

- **M-45-05C, Complete S-102 Initial Waste Retrieval Project Construction (to Include all Physical Systems Including Those Necessary for Leak Detection, Monitoring, and Mitigation)**
Due: 3/31/04
Status: Completed
- **M-45-06C, Submit a Certified S-102 Component Closure Activity Plan, as an Application for a Modification to the Hanford Site-Wide Hazardous Waste Facility Permit to Ecology**
Due: 9/30/04
Status: Completed
- **M-45-05A, Complete Initial Waste Retrieval from Tank S-102**
Due: 6/30/05
Status: Forecast completion by November 2005.

- **M-45-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**
Due: 3/31/06
Status: Forecast completion 12/1/06.
- **M-45-15-T01, Final Completion of Tank S-102 SST Retrieval and Closure Demonstration Project**
Due: 5/24/07
Status: On schedule

II. Significant Accomplishments

- Currently shutdown pending installation and acceptance testing of new "top-down" retrieval system; total of 47.3 Kgal retrieved to date; roughly 390 Kgal remaining to be retrieved.
- Procured "top-down" pumping system and completed installation; acceptance testing underway; resumption of retrieval operations is forecasted by 5/23/05.
- Received approval from Ecology to use DST supernatant for S-102 sluicing retrieval.

III. Significant Planned Activities in the Next Six Months

- Continue retrieval operations.

IV. Issues

- Completion of M-45-05A by the required due date is in jeopardy. DOE and Ecology are currently considering a HFFACO change request extending the due date.
- The tendency for sodium phosphate to solidify may cause problems with retrieval. Evaluated the waste process impacts of sodium phosphate. Preliminary indications suggest control of sluice water temperature and dilution rate may be effective in mitigating phosphate formation; sodium phosphate controls implemented.
- S-102 retrieval system shutdown shortly after startup due to pump screen plugging with debris in waste. S-102 retrieval issues impacting currently scheduled cross-site waste transfers and overall schedule for S-102 retrieval. New pumping system installed and will retrieve waste from the top down.
- Need approval from EPA to use supernatant for sluicing S-102.

Tank 241-S-112

I. Deliverables

- **M-45-06B, Submit a Certified S-112 Component Closure Activity Plan, as an Application for a Modification to the Hanford Site-Wide Hazardous Waste Facility Permit to Ecology**
Due: 9/30/04
Status: Completed

- **M-45-03C, Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Single-Shell Tank S-112**
Due: 6/30/05
Status: Forecast completion August 2005.
- **M-45-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**
Due: 3/31/06
Status: On Schedule
- **M-45-13-T01, Final Completion of Tank S-112 SST Retrieval and Closure Demonstration Project**
Due: 5/24/07
Status: On schedule

II. Significant Accomplishments

- Continued S-112 retrieval operations; total waste volume retrieved to date is 623 Kgal or roughly 95% of the waste volume; roughly 33 Kgal of waste remaining.
- Soaking and impingement of the sluice nozzle stream on the hard heel (to break it up) has allowed retrieval to continue at a slow rate.

III. Significant Planned Activities in the Next Six Months

- Complete full-scale saltcake waste retrieval technology demonstration at single-shell tank S-112 (M-45-03C).
- Initiate post-retrieval sampling and preparation of Retrieval Data Report or Appendix H to document completion of retrieval.

IV. Issues

- Completion of M-45-03C by the required due date is in jeopardy. DOE and Ecology are currently considering a HFFACO change request extending the due date.
- Completion of S-112 retrieval potentially impacted by resource allocation to S-102 to resolve pump screen plugging problem and install new top-down pumping system.
- Retrieval of the hard heel is progressing slowly. Consideration in being given to testing, evaluation, and deployment of alternate retrieval techniques.

**ACCELERATED C-FARM TANK RETRIEVALS (C-FARM ACCELERATED
RETRIEVAL SUMMARY SCHEDULE FORECASTS)**

I. Deliverables: C-Farm Tanks

Tank	Final Design Drawings complete	Construction Complete	Process Control Plan Complete	Start Retrieval	Complete Retrieval	TSAP Complete	Retrieval Data Report or Appendix H to Ecology	Component Closure Plan, Rev 0 to Ecology	Complete Interim Closure
C-101	8/5/05	7/7/06	9/13/05	10/3/06	11/27/06	11/6/06	7/9/07	2/22/07	4/25/08
C-102	8/4/06	1/10/07	1/18/07	10/31/07	2/22/08	12/3/07	9/26/08	5/14/08	7/6/09
C-103	Complete	7/21/05	6/10/05	8/26/05	11/22/05	11/1/05	6/15/06	8/3/06	1/7/08
C-104	5/15/06	7/26/06	9/5/06	7/23/07	10/30/07	10/26/07	6/10/08	1/28/08	3/20/09
C-105	10/26/05	3/24/06	2/21/06	7/17/08	9/30/08	9/26/08	5/11/09	12/16/08	2/8/10
C-106	Complete	Complete	Complete	Complete	Complete	Complete	Complete	Complete	6/1/07
C-107	11/14/05	5/26/06	3/13/06	4/13/07	7/23/07	7/6/07	3/6/08	11/28/07	1/19/09
C-108	6/30/05	10/31/05	8/3/05	5/22/06	7/13/06	6/20/06	2/16/07	1/22/07	3/14/08
C-109	8/11/05	9/19/06	1/11/06	11/28/06	1/15/07	12/22/06	8/21/07	4/9/07	5/30/08
C-110	10/26/05	1/29/07	2/21/06	4/7/08	7/16/08	6/25/08	2/24/09	10/8/08	11/24/09
C-111	12/14/05	10/24/06	4/10/06	2/23/08	4/4/08	3/17/08	11/10/08	6/26/08	8/11/09
C-112	11/21/05	1/19/07	2/14/06	2/15/07	4/16/07	4/2/07	11/28/07	8/21/07	10/8/08
C-201	Complete	Complete	9/7/05	10/11/05	12/2/05	Complete	6/13/06	8/5/06	10/8/07
C-202	Complete	Complete	Complete	7/20/05	9/7/05	Complete	3/21/06	8/5/06	10/29/07
C-203	Complete	Complete	Complete	Complete	Complete	Complete	12/9/05	8/5/06	11/19/07
C-204	Complete	Complete	11/30/05	1/12/06	3/1/06	Complete	9/13/06	8/5/06	12/12/07

NOTE: Completion dates are based on the C-Farm Integrated Management Execution Schedule (IMES) forecasts as of 5/12/05 and are subject to change as efforts continue to identify and implement schedule efficiencies.

II. Significant Accomplishments

- Completed retrieval of C-203 on 3/24/05; completed in-tank video and post-retrieval residual volume calculation (20.3 cubic feet, including uncertainty); completed the Tank Sampling and Analysis Plan (TSAP); completed the work package for residual waste sampling; issued draft C-203 Lessons Learned Report; completed C-203 Retrieval Completion Report.
- Completed C-Farm ventilation system design; received C-Farm ventilation system from vendor; initiated cold operational acceptance testing.
- Successfully completed AY-101 mixer pump factory acceptance testing in support of C-Farm retrievals.
- Approved the Activity Description to support C-103 retrieval using supernatant from DST AN-106 as the sluicing medium.
- Continued C-103 modified sluicing retrieval system construction activities: C-103 sluicer and waste transfer pump installed; installed spray shield, bull pen, and lead blankets; installed coffer dam and leak detector.

- Obtained approval of C-103 safety basis amendment and performed lifting bail assessments; approved the Activity Description Sheet to support C-103 retrieval using AN-106 supernatant as the sluicing medium.
- Completed factory acceptance testing of C-102, C-108, and C-109 slurry pumps.
- Completed acceptance testing of Floway pump for C-102 supernatant recycle during retrieval operations.
- Installed camera and slurry distributor in C-102; completed mechanical tie-in from C-102 to AY-101; completed draft of C-102 test plan.
- Prepared design approach for connecting C-108 to AY-101; completed procurement of C-108 hose-in-hose transfer line.
- Prepared design approach for connecting C-109 to AN-106.
- Continued baseline development for C-104 and C-107 modified sluicing systems (e.g., equipment to be removed, tank riser utilization, receiver tank, etc.).
- Continued design of mobile retrieval systems for C-101, C-105, C-110, and C-111; reviewed final C-101 design package comment resolution underway; issued MRS installation instruction; completed C-101 ALARA Analysis; completed review of C-101 Preliminary Fire Hazards Analysis; completed review of C-101 Umbilical Management System Interface Drawings and Piping and Instrumentation Drawings; completed the C-101 Criticality Safety Evaluation Report; completed review of C-105 30% design package; resolved comments on 30% design report for C-110 and C-111; completed 90% design review of C-110 and C-111.
- Issued RPP-25832, "In-Tank Luminaire System (ITLS) Qualification Test Plan/Procedure;" performed ITLS testing at Cold Test Facility.
- Issued RPP-25833, "C-200 Vacuum Retrieval Development Test Plan/Procedure."
- Completed testing of C-Farm electrical skid at HiLine Facility in Richland.
- Completed AY-101 mixer pump factory acceptance testing in support of C-Farm retrievals.

III. Significant Planned Activities in the Next Six Months

- Finalize all TWRWP documents, receive Ecology approval.
- Collect C-203 residual waste sample, prepare Retrieval Data Report.
- Finalize the Process Control Plan for C-103 retrieval
- Complete C-102, C-108, C-109, and C-112 modified sluicing retrieval system designs; initiate procurement.
- Complete installation of C-108 High Resolution Resistivity leak detection system.
- Complete C-103 modified sluicing retrieval system construction activities and start retrieval.
- Complete baseline development for C-104 and C-107 modified sluicing system retrievals.
- Complete mobile retrieval system designs for C-101, C-105, C-110, and C-111; initiate procurement.
- Complete retrieval of tanks C-201 and C-202; initiate retrieval of tank C-204; initiate post-retrieval sampling and preparation of Retrieval Data Report or Appendix H to document completion of retrieval.

IV. Issues

- Authorization to recycle supernatant. Retrieval designs are proceeding at risk assuming recycle of DST supernatant. Environmental Protection Agency approval required for supernatant recycle and a Risk Based Disposal Approval is required.
- All tank farm entries require use of supplied air respiratory protection until further notice due to vapor concerns.
- Target dates subject to change due to resource availability and inter-project logic ties with E-525 and W-314. C-Farm Project Team working on schedule efficiencies to meet TPA commitments.

OTHER 200 SERIES TANKS**241-B-200 Series Tanks****I. Deliverables**

- B-200 series tank work deferred into FY06 and beyond; will be replanned.

II. Significant Accomplishments

- Early completion of final retrieval system design.
- Completed fabrication, factory testing, and receipt of the B-200 series vacuum retrieval system.
- Completed repair of the vacuum retrieval system (damaged during shipping).

III. Significant Planned Activities in the Next Six Months

- Nothing to report.

IV. Issues

- No retrieval system installation and operations work scope approved for FY 2005 with impacts to out-year target dates. Activities deferred into FY 2006 and beyond.
- TRU/regulatory issues need to be resolved.

241-T-200 Series Tanks**I. Deliverables**

- T-200 series tank work deferred into FY06 and beyond; will be replanned.

II. Significant Accomplishments

- Early completion of retrieval system design.
- Completed fabrication, factory testing, and receipt of T-200 series vacuum retrieval system.
- Completed repair of the vacuum retrieval system (damaged during shipping).

III. Significant Planned Activities in the Next Six Months

- Nothing to report.

IV. Issues

- No retrieval system installation and operations work scope approved for FY05 with impacts to out-year target dates. All activities deferred into FY06 and beyond.
- TRU/regulatory issued need to be resolved.

Milestone M-43-00, Tank Farm Upgrades

I. Near-Term Deliverables:

- **M-43-00, Complete Tank Farm Upgrades**

Due: 06/30/05

Status: DST systems needed to support operation on July 1, 2005 will be compliant with 40 CFR 264 / WAC 173-303-640 standards by June 30, 2005, or operated under the conditions of an approved variance. Systems that do not have planned near term use are addressed through approved deferred use list (ref. Ecology letters January 14, 2003 and April 29, 2005) and must be upgraded prior to use.

Construction schedules are being actively managed to meet the milestone date but are quite constrained on time and personnel resources. Double shifts and dedicated crews have been assigned to the remaining work scope.

II. Significant Accomplishments:

- Received Ecology letter, "Response to the Request for Amendment of the Double-Shell Tank Deferred Use Components", April 29, 2005
- Pit upgrades in AP-05A are underway, ready for SPC application
- COBs 6 and 8 have been cut and are ready for removal
- Cross site tie-in construction forces mobilized, line excavated, chipping CDF

III. Significant Planned Actions in the Next Six Months:

Remaining DST transfer system upgrade scope:

Transfer System Scope	Status
Cross Site Transfer Line Tie-In	Construction forces mobilized, line excavated
Upgrade AP-05A and 08A Pits	O5A pit, upgrades in progress 08A pit, preparations ongoing
Remove Clean Out Boxes AW-4, 6, 8 and A-30	Modifications In progress on AW- 6 and 8 Preparations in ongoing for AW-4 and A-30

IV. Near-term Actions Needed by DOE or Ecology:

- Review AY/AZ condensate sample confirmatory results and background information (ORP/Ecology)
- Complete planned upgrades. (CH2M Hill / ORP)

V. Issues

- Field conditions (contamination, wind, rain, etc.) continue to challenge completion of the remaining scope.

Milestone M-46-00, Double-Shell Tank Space Evaluation

I. Deliverables:

- **M-46-21, Complete Implementation of Double Shell Tank Space Optimization** Study recommendations (Tank Space Options report, Document No. RPP-7702, April 12, 2001)
Due: 12/31/05

DST space scope is being tracked to implement four space optimization recommendations and tank space management efforts as identified below.

(1) Increase the DST fill height

Status: On schedule to have AP-108 ready for increased fill height.

Remaining planned scope:

- Elevate in tank vapor probes in AP-108
- Update authorization basis
- Update procedures and set points

(2) Reserve emergency space to reflect compliance with DOE Order 435.1 for the DST system

Status: Complete. DST Emergency Pumping Guide (HNF-3484) updated May 2003. WTP Emergency space shared with Tank Farms – Interface Control Document 19, August 2003.

(3) Implement tank-by-tank evaluations to allow greater concentration of wastes beyond current 1.41 SpG limit

Status: Complete. Evaporator campaigns 2003-03, 2003-04, 2004-01 and 2005-01 were completed above 1.41 SpG. Additional upgrades are continuing to support handling higher SpG slurries in future evaporator campaigns.

(4) Use space currently identified as “restricted” space in tanks that contain staged feed for WTP

Status: Complete. ORP rescinded restrictions on restricted tank space, letter 04-TPD-024, March 17, 2004. CH2M Hill incorporated changes to TF Waste Compatibility Program, HNF-SD-WM-OCD-015, on July 28, 2004 for approving transfers to Feed Control List (restricted WTP feed tanks).

II. Significant Accomplishments:

- Nothing to report

III. Significant Planned Actions in the Next Six Months:

- Raise in tank equipment within AP-108 and AP-103.

IV. Near-term Actions Needed by DOE or Ecology:

- None

V. Issues:

- Nothing to report

M-46-21 Project Managers Monthly Report: Evaporator Campaign Plans and Actuals

	Jul-04	Aug-04	Mar-04	Mar-05	Dec-05**	TBD	TBD	TBD	TBD
Campaign	2003-03	2003-04	2004-01	2005-01	2005-02	2006	2006	2006	2006
Staging Tk	AP-108	SY-101	AP-105	AP-107	AP-107	AP-105	AP-107	AP-104	AP-101
Campaign Boil-off Upper Planned Limit-kGallons	497	120.9	185	328	151*	367*	696*	418*	265*
Campaign Boil-off Actual kGallons	464.6	136.1	164	156					
Target WVR% (Post-Flush)	40%	20%	19%	26%	TBD		TBD	TBD	TBD
Actual WVR% (Post-Flush)	39.00%	22.50%	17%	30.1%					
Specific Gravity	1.46	1.42	1.43	1.42					

*Indicates Campaign Upper Planned Limit boil off gallons, are based upon model estimates pending laboratory boil off tests and process control plan

**The schedule date and number of Evaporator campaigns is subject to change based upon timing and volume of SST retrievals.

Milestone M-47-00, Complete Work Necessary to Support Acquisition and Phase I Operations of Hanford Site High-Level Radioactive Waste Treatment, Storage, and Disposal Facilities

I. Near-Term Deliverables:

- **M-47-02, Complete startup and turnover activities for required transfer system upgrades to allow transfer of first high-level waste feed to the Pretreatment/Treatment Complex.**
Due: 03/31/09
Status: Ahead of schedule. No change in April 2005.
 - W-314 completed construction of new transfer lines from AZ to AP tank farms (SN-634, SN-636, and SN-637)
 - W-211 completed AP to WTP transfer system construction.
 - W-211 completed AP-02A and AP-O2D pit modifications construction. (See M-47-01)
 - Awaiting Operational Acceptance testing and turnover of transfer lines and jumpers.

- **M-47-04, Complete startup and turnover activities for required transfer system upgrades to allow transfer of first low-activity waste feed to the pretreatment/treatment complex. Installation of the pump will not be required until necessary to support WTP waste feed activities.**
Due: 03/31/09
Status: Ahead of schedule. No change in April 2005.
 - AP-101 transfer pump was turned over to Operations December 29, 2004.
 - Transfer pump jumper installed May 2004.
 - Transfer piping is addressed in M-47-02.
 - Awaiting Operational Acceptance Testing of transfer lines and jumpers.

- **M-47-05A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial low-activity waste feed tank (other than AZ-101 or AZ-102).**
Due: 04/30/06
Status: Complete. AP-101 transfer pump was turned over to Operations December 29, 2004. Official notification of milestone completion was sent to Ecology February 2, 2005 (letter 05-TPD-013).

Out year (Post 2006) Milestones:

- **M-47-03A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial high-level waste feed tank.**
Due: 03/31/09
Status: Ahead of schedule. No change in April 2005.
 - AZ-101 Retrieval system upgrades are near completion (w/exception of transfer pump installation)

– Completed AY-102 Title II design.

- **M-47-06, Complete negotiation of additional agreement requirements (milestones, target dates, and associated language) governing work necessary to support completion of treatment complex Phase I operations by 2018.**

Due: 06/30/10

Status: Negotiations are not yet underway

II. Significant Accomplishments:

- Nothing to report

III. Significant Planned Actions in the Next Six Months:

- Nothing to report

IV. Near-term Actions Needed by DOE or Ecology:

- None

V. Issues:

- Nothing to report

Milestone M-45,-50,-60 Single-Shell Tank Corrective Action

I. Near-Term Deliverables:

- **M-45-55-T03, Submit to Ecology for review and comment as an Agreement secondary document a Field Investigation Report pursuant to the site-specific SST WMA Phase I RFI/CMS Work Plan addenda for WMA T, TX, and TY.**

Due: 07/30/05

Status: All sections have been delivered and undergone initial editing, undergoing internal review. On schedule.

- **M-45-55-T04, Submit to Ecology for review and comment a draft of the A-AX, C, and U Field Investigation Report.**

Due: 04/30/06

Status: Gamma logging of A-farm laterals beneath confirmed or suspected leaking tanks completed on 4, 21, 2005, with other planned field work to follow. Field work to be completed in FY05 and FY06, lab work to begin in FY05, writing of document to begin in FY05.

- **M-45-55, Submit to Ecology for review and approval as an Agreement primary document a Phase 1 RFI report integrating results of data gathering activities and evaluations for WMAs S-SX, T, TX-TY, A-AX, B-BX-BY, C, and U; and related activities, including groundwater monitoring and impacts assessment using Hanford Site groundwater models, with conclusions and recommendations.**

Due: 01/31/07

Status: Work not started; forecast on schedule.

- **M-45-58, Submit to Ecology for review and approval as an Agreement primary document a RCRA Corrective Actions Corrective Measures Study for WMAs S-SX, T-TX-TY, B-BX-BY, A-AX, C, and U.**

Due: 06/30/07

Status: Work not started; forecast on schedule.

- **M-45-60, Submit to Ecology for review and approval as an Agreement primary document DOE's RCRA Corrective Actions Work Plan for SST WMAs.**

Due: 09/30/07

Status: Work not started; forecast on schedule.

II. Significant Accomplishments:

- Collected gamma logs of laterals beneath tanks 241-A-103, 241-A-104 and 241-A-105. Initial indications show no contamination beneath tanks A-103 and A-104. Logs show significant zones of contamination (yet to be quantified) beneath A-105.

- Initial draft of T, TX-TY field investigation report compiled, edited and distributed for internal project review.

III. Significant Planned Actions in the Next Six Months:

- Complete T, TX-TY FIR and submit to regulatory agencies.
- Coordinate with RL and participate on BP-5 OU RI/FS DQO, tentatively scheduled for week of June 13-17th. Requesting Tribal involvement in DQO.
- Conduct Surface Geophysical Exploration at 241-T farm, including areas north and east of the WMA. Work remains "On Track" per the Recovery Plan.
- Initiate Direct Push Technology investigation in 241-C , B, BX, and TY farms

IV. Issues:

- Continued use of respiratory protection equipment in all SST Farms. Current requirements are 2 hours/day on supplied air
- Competition for human resources with other high priority TPA-driven projects
- Project is operating to assumption that C/A-AX/U work plan revisions are acceptable to Ecology.

Milestone M-90-00, Complete Acquisition of New Facilities, Modifications of Existing facilities, and/or Modifications of Planned Facilities, as Necessary for Storage of Hanford Site Immobilized High Level Waste (IHLW), Immobilized Low Activity Waste (ILAW), and Disposal of ILAW, and M-20-00, Submit Part B Permit Applications

I. Near-Term Deliverables:

- **M-20-56, Submit Canister Storage Facility Part B Permit Application**
Due: 6/30/03
Status: **Complete**

- **M-20-57, Submit ILAW Disposal Facility Certified Part B Permit Application to Ecology**
Due: 6/30/03
Status: **Complete**

- **M-90-09-T01, Complete Detailed Design of ILAW Disposal Facility Critical Systems to 80%**
Due: 5/30/03
Status: **Complete**

- **M-90-08, Initiate ILAW Disposal Facility Construction**
Due: 2/28/05
Status: **Complete**

Out year (Post 2006) milestones:

- **M-90-10, Initiate Placement of ILAW Waste Canisters in ILAW Disposal Facility**
Due: 8/31/08
Status: On schedule

- **M-90-11, Complete Canister Storage Facility Construction**
Due: 8/31/10
Status: On schedule

II. Significant Accomplishments:

- Completed IDF excavation, utility tie-ins, and access roads - November 2004
- Submitted IDF NOC applications to Ecology and WDOH - March 2005
- Received second TA and initiated construction of IDF admix demonstration test pads and two additional groundwater monitoring wells - April 2005
- IDF Preliminary Documented Safety Analysis was approved by ORP- April 2005
- Initiated DOE review of IHLW Final Documented Safety Analysis - April 2005
- Kicked off 2005 IDF Performance Assessment review - May 2005
- Began 45 day public comment period for the IDF Permit – May 6, 2005

III. Significant Planned Actions in the Next Six Months:

- Begin IHLW Permit NOD Workshops - May 2005
- Initiate construction of IDF Cell 2 systems for LLW – June 2005
- Complete evaluation of admix test pads and issue report – June 2005
- Receive third TA and begin IDF Cell 1 admix liner construction - June 2005
- Complete installation of two additional groundwater monitoring wells and initiate groundwater monitoring to support development (one year effort) of the pre-operational baseline - June 2005
- IDF RCRA Part B Permit Effective - August 2005
- Initiate construction of remaining IDF MLLW Cell 1 systems (Not previously authorized on TA's) - August 2005

IV. Issues

- IDF Cell 1 construction activities have temporarily been suspended pending issuance of an IDF final status RCRA permit. However, a mutually agreeable (Ecology and DOE-ORP) path forward for the permit is being implemented. Some construction activities have been approved via temporary authorization. A third TA is planned following the public comment period and the IDF Permit is expected to be effective in August 2005.
- IHLW permit NOD workshops were expected to begin in late January/early February in accordance with the proposed revised permitting plan to support procurement and construction activities in 2006. Because resources may be otherwise obligated to the IDF permitting effort, the IHLW permit NOD workshops may be slowed or delayed. It is anticipated efforts on the IHLW permit will be begin in earnest in May.

Milestone M-23-00, Tank Integrity and Monitoring

I. Near-Term Deliverables:

- **M-23-23, Submit SST System Leak Detection and Monitoring F&R Document**
Due: 06/15/02
Status: Completed
- **M-23-25B, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Liquid Observation**
Due: 09/30/02
Status: Completed
- **M-23-25C, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Liquid Observation**
Due: 03/31/03
Status: Completed
- **M-23-25D, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Monitoring**
Due: 09/30/03
Status: Completed
- **M-23-26, Submit a Schedule, as a Primary Document, for Performing Liquid Level Assessments**
Due: 09/30/03
Status: Completed
- **M-23-25F, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Monitoring**
Due: 03/31/04
Status: Completed
- **M-23-25G, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Monitoring**
Due: 03/31/05
Status: Deleted per approved Change Request M-23-04-02.
- **M-23-27, Complete 244-CR Liquid Level Assessments**
Due: 12/30/04
Status: Completed

II. Significant Accomplishments:

- M-23-25F completed; LOWs installed in SX-112, T-101, TX-103, and TX-104.
- Completed installation of the TX-116 replacement LOW and initiated liquid level measurements.

- Reformatted field work packages in response to Management Directive MD-38 and MD-43 for radiological controls compensatory measures and mercury monitoring in tank farms.
- Completed liquid level assessments and video inspections for 244-CR 001 and 003 tanks/cells; submitted 244-CR Consent Decree completion letter to ORP documenting completion of TPA Milestone M-23-27.
- Cut-up equipment from tank 244-CR-011 and cell 11 and packaged for processing.
- Cut-up equipment from tank 244-CR-001 and cell 1 and packaged for processing.
- Issued RPP-CALC-24219, "244-CR Vault Tank and Cell Volume Calculations."
- Issued RPP-RPT-24257, "244-CR Vault Liquid Level Assessment and Video Inspection Completion Report."

III. Significant Planned Actions in the Next Six Months:

- Continue monitoring LOWs installed under M-23-25F.
- Cleanout Pit 3, remove equipment, and install riser extensions; planned to start in June 2005.
- Remove containment tent from Pit 3 and set aside for future use.
- Cut-up equipment from tank 244-CR-003 and Cell 3 and package for processing.
- Develop logic and schedule for removing the liquid from the 244-CR sumps and discuss with Ecology; meeting planned for 5/16/05.
- Revise/update monitoring and surveillance procedures; possible deferral based on outcome of 5/16/05 meeting with Ecology.
- Design, fabricate, and install an off-set articulated arm for sampling tanks 244-CR-001 and 244-CR-003.

IV. Issues:

- None.

Interim Stabilization Consent Decree

I. Near-Term Deliverables:

- **D-001-00V, Reduce Total Liquids to 2% of Total Volume from SSTs**
Due: 09/30/03
Status: Completed. Letter sent to Ecology 09/10/03.
- **D-001-00, Complete Interim Stabilization of all 29 SSTs**
Due: 09/30/04
Status: Completed on 03/18/04 with discontinuation of pumping in U-108 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 held in abeyance by third amendment to the Consent Decree; these two tanks are undergoing accelerated retrieval. ORP's obligation to interim stabilize S-102 and S-112 will be satisfied upon completion of accelerated retrieval operations.

II. Significant Accomplishments:

- Completed Consent Decree Milestone D-001-00, "DOE Shall Complete Interim Stabilization of all 29 Single-Shell Tanks," as amended, roughly 6-months ahead of schedule.
- Of the sixteen SSTs included in FY 2004 scope: Twelve tanks documented as being interim stabilized (A-101, AX-101, BY-105, C-103, S-101, S-107, SX-101, SX-102, SX-103, U-107, U-108, and U-111). Pumping has been completed in all tanks. Two tanks transitioned to accelerated retrieval in lieu of interim stabilization in accordance with the third amendment to the Consent Decree signed by a District Court Judge on 09/9/03 (S-102, S-112). Two tanks are in evaluation to document completion of pumping and satisfaction of interim stabilization criteria (BY-106 and S-111).
- Approximately 3,034.3 Kgal of pumpable liquids have been removed from SSTs and transferred to DSTs since pumping began in June 1998 (excluding S-102 and S-112).
- Issued the Second Quarter Fiscal Year 2005 Interim Stabilization Activity Report to Ecology.
- Ecology approval of HFFACO Change Package M-45-04-05 extending the retrieval completion dates for tanks S-102 and S-112 from March 31, 2005 to June 30, 2005.

III. Significant Planned Actions in the Next 6 Months:

- Complete and issue the Interim Stabilization Evaluation Forms for the two tanks in evaluation mode (BY-106 and S-111) documenting completion of pumping and satisfaction of interim stabilization criteria. Must wait until interstitial liquid levels equilibrate in tanks before the Interim Stabilization Evaluation Forms can be completed. Anticipate issuing last two IS evaluation forms by 5/31/05.
- Issue the Third Quarter Fiscal Year 2005 Interim Stabilization Activity Report to Ecology.

- Complete retrieval of tank S-112 thereby satisfying ORP's obligation to interim stabilize this tank under the Consent Decree and associated amendments. Completion of tank S-102 retrieval forecasted by 7/06.

IV. Issues:

None.

Milestone M-48-00, DST Integrity Assessment Program

I. Deliverables:

- **M-48-12, Submit Results of Four DSTs not Previously Examined**
Due: 9/30/04
Status: Complete
- **M-48-13, Submit Results of Four DSTs not Previously Examined**
Due: 9/30/05
Status: On schedule
- **M-48-14, Submit Written Integrity Report for the DST System**
Due: 3/31/06
Status: On schedule
- **M-48-15, Submit a Report to Ecology for the Re-examination of Six DSTs by Ultrasonic Testing**
Due: 9/30/07
Status: On schedule
- **M-48-00, Complete Tank Integrity Assessment Activities for Hanford Double Shell Tanks System**
Due: 9/30/07
Status: On schedule

II. Significant Accomplishments:

- Completed wall/weld and liquid/air interface UT examination of tank AN-103.

III. Significant Planned Actions in the Next Six Months:

- Complete lower knuckle UT examination at tank AN-103.
- Perform UT examination of tank AN-104.
- Begin UT examinations of tanks AN-105 and AN-101.
- Complete encasement pressure testing at pits AP05A, AP08A, AN06A and AN01A.
- Begin assessments of pump pit AP02D and AP Valve Pit.
- Perform primary transfer line video of SN-618 located in pit AP08A and transfer line SN-261 in pit AN01A.
- Perform primary video examination of tank AN-101.
- Perform annulus video examinations of tanks AP-101, AP-103 and AP-105.
- Perform primary tank video examinations of tanks AP-102, AP-103, AP-104, AP-105 and AP-106.
- Perform primary video examination of tank AN-105.

IV. Issues:

- None.

In Tank Characterization and Summary

As of May 11, 2005

I. Significant Accomplishment:

- Sampling Activities:

- Completed two segments of solid samples from Tank AY-102 to support Tank Integrity Program.

II. Planned Action within the next Six Months:

- Continuation of BBI updates. A total of 88 BBI updates are planned for the 3rd quarter; 3 new sample data, 9 waste transfers, 76 PCB liquid concentration value corrections.
- Complete Revision 1 of the Bulk Vitrification DQO by August 31, 2005.
- Complete Revision 5 of the Evaporator DQO by September 30, 2005.

III. Issues:

- None

Milestone M-26-01N, Calendar Year 2003 Land Disposal Restrictions Report, Table 3-4, Schedule for ORP Assessments for CYs 2004 through 2006

I. Near-Term Deliverables:

- **Complete assessment of 241-A-701**
Due: 12/31/04
Status: **Completed**

- **Complete assessment of 242-S and 242-T Evaporators**
Due: 6/30/05 (second quarter 2005)
Status: **Schedule in jeopardy - Assessment dependent upon entry for roof inspection now scheduled for August 2005.**

Out year (Post 2006) assessments:

- **None identified. Future assessments will be discussed in the M-26 Project Managers Meeting and identified in the update to the annual LDR Report.**
Due: 4/30/05
Status: On schedule

II. Significant Accomplishments:

- None

III. Significant Planned Actions in the Next Six Months:

- None

IV. Issues

- Schedule for completion of 242-S and 242-T evaporators is in jeopardy. Assessment was based on entry for roof inspection that has now been rescheduled for August 2005.

Hanford Waste Treatment and Immobilization Plant (WTP) Project

Project Overview

The Hanford Waste Treatment and Immobilization Plant (WTP) Project objective is the design, construction, and commissioning of a chemical processing plant to treat liquid radioactive waste stored in the large underground storage tanks at the Hanford Site. Operation of the WTP is planned under separate contract. The WTP complex consists of five major facilities: Pretreatment (PT) facility, the High Level Waste (HLW) vitrification facility, the Low Activity Waste (LAW) vitrification facility, the Analytical Laboratory (LAB), and the Balance of Facilities (BOF). Status of the individual facilities is provided during the monthly Program Manager's Meeting. A facility status with brief project overview is provided. This status reflects January 2005 financial data.

Project Summary

Through March 2005, engineering is 80% complete, construction is 39%, procurements are 76% awarded, and the overall the Project is 48% complete (based on dollars). An average of 1,350 craft and 700 non-manual staff were working on-site.

In November 2004, BNI delivered a proposed baseline schedule update incorporating impacts from the mixing and hydrogen control trend; re-ordering engineering, procurement, and construction activities; and an 18-month detailed look-ahead. DOE reviewed the package and has disapproved this proposed schedule pending detail backup which will be provided by April 15, 2005.

BNI delivered the 2005 Project Estimate at Completion (EAC) on April 22, 2005, including seismic assessment, updated risk assessment, potential trend impacts, and reforecast on to-go workscope. Evaluations by ORP and the US Army Corps of Engineers are underway. The USACE and ORP assessments will be used to support any proposed changes to the baseline.

Based on the revised seismic spectras for the WTP, BNI is updating facility models with current configurations; performing Soil-Structure Interaction analysis; developing revised forces for facility design; and the in-structure-response spectra at various elevations of the facilities to be used in the design of commodities, e.g., Piping, HVAC, Electrical and equipment. Dynamic analysis is expected to be completed by August 2005. BNI has developed a conservative bounding Interim Seismic Design Criteria to facilitate evaluation of SSCs to near-term structures and commodities for construction and procurement.

Total Project Commodity Summary							
Commodity	Engineering		Vendor		Construction		Total Project
	Scheduled	Released	Scheduled	Delivered	Scheduled	Installed	Budgeted
Concrete (yd ³)	194,690	186,480	-	-	147,830	134,820	252,010
Structural Steel (ton)	19,700	20,540	10,675	8,840	5,025	4,070	25,030
Piping (LF) ¹	736,580	575,930	281,580	249,210	137,170	115,230	985,870
Conduit (LF) ²	519,420	291,220	-	-	145,110	190,600	1,066,230
Cable Tray (LF)	51,230	32,250	-	-	3,240	3,400	107,720
Cable (LF)	619,330	318,160	-	-	167,000	119,590	4,867,100
HVAC Duct (lb.)	1,925,060	1,538,530	410,060	353,950	243,470	233,940	3,510,860

(1) Includes above and underground pipe

(2) Include building and underground conduit

Pretreatment (PT) Facility

The PT Facility will separate the radioactive tank waste into Highly Radioactive Waste and Low Activity Waste fractions and transfer each waste to its respective vitrification facility for immobilization. Facility construction began November 2002 and the current baseline date for completion is July 2008. This completion date can be expected to be adjusted to reflect the work required to accommodate the new seismic design spectra. Overall this facility is 42% complete and is behind schedule and over budget.

Engineering (civil/structural, HVAC, plant design and mechanical systems) continues to cost more than planned. The design of two-thirds of the fourth lift walls has been completed is making it possible for construction forces to fabricate the reinforcing and embeds for the fourth lift walls on the ground. This approach reduces the risk to workers who are no longer required to do all of the fabrication over seventy feet above the ground. Overall construction continues to make progress even though staffing has been reduced to stay within fiscal year funding. Two walls and two floor slabs were placed during the last month. Several vessels have been placed in the building during the month and all but three of the major vessels in the north side black cells have been placed in the building. Work on the piping modules has continued during the month but progress has been slowed considerably this month with the reduction in the number of pipe fitters now on the job. Erection of structural steel up to the 28' elevation has nearly been completed on the east end of the building and more than half of the steel beams over the hot cell are now in place. Construction will be focusing on the construction of concrete and steel structures over the next few months. The entire contractor organization is now involved with a reorganization that will consolidate management and construction of the Pretreatment and High Level Waste facilities. BNI is also developing plans and schedules that consider revision of the design to meet the new seismic criteria and the extended schedule that will result.

High Level Waste (HLW) Facility

HLW Construction placed seven 0' level walls and five 0' level slabs for a total of 2,003 cubic yards of concrete. Walls at grade are 21% complete and slabs at grade are 41% complete. The silver mordenite column housings have been installed at the -21' level.

The canister drop test is scheduled for the first week of July. A thin walled canister will be dropped 7 Meters onto a hard surface in accordance with National Geologic Repository requirements.

HLW Construction has slowed to reflect the need to reevaluate the structural calculations with respect to the Revised Ground Motion spectra issued by ORP. HLW Engineering is performing revised calculations for each wall on a case-by-case basis as calculations for the facility are being performed. Personnel required to perform the calculations are being pulled off the preparation of construction drawings which will extend the timeframe for issuing concrete and steel drawings. Fabricators of Safety Class Components are being requested to reevaluate their designs to ensure that the components can withstand the revised ground motion. Necessary modifications will be performed to support safe operation of the facility.

The cost of the HLW facility will increase above the current baseline of \$780M. Recent increases in cost reflect the revised ground motion spectra (cost and schedule) and the new fireproofing approach, and the extended construction schedule. Construction costs continue to increase due to higher installation cost for formwork, edge forms, and concrete, and increased cost for commodities. Recovery of these higher costs is not likely; steel will continue to increase due to higher costs for raw material. Trends are being processed to reflect the higher costs for installation of formwork, edge forms and concrete.

BNI has initiated a schedule change that reflects the anticipated funding levels for FY06 and available funding for FY05. This planning has resulted in the extension of the HLW Facility construction which compliments the additional time required for HLW Engineering to perform their structural reevaluation of the facility.

The number of Tracking Milestones that are projected to be missed indicates that recovery of the Baseline scheduled is not likely in the near-term.

Low-Activity Waste (LAW)

The LAW Facility takes the LAW fraction of the treated waste from the Pretreatment Facility and vitrifies this waste to immobilize it. Construction started on July 2002, and is scheduled for completion November 2007. Based on the December 2004 performance measurement baseline, the LAW facility is 46.9% complete with a 1.2% negative schedule variance and a 1% positive cost variance. Construction is 28.8% complete based on the December 2004-trended baseline. Engineering and procurement are currently behind schedule but are not currently impacting critical path activities. Structural steel framing is continuing from the +28' to +48' elevation and placement of concrete slabs at +28' and +48' elevations is ongoing. All fourteen process cell vessels have been delivered to the site and placed into the facility. In-situ fireproofing of structural steel started the week of January 10, 2005, and is ongoing at the +3' elevation. Maximum Available Control Technology (MACT) testing for demonstration of Destruction and Removable Efficiency (DRE) capability of the LAW

off-gas treatment components was conducted during March 2005 and the data is being analyzed. The key construction activities in the next few months will be installations of HVAC, cable trays, piping commodities at -21' and +3 ft elevations, structural steel installation between +28 and +48 elevations, fireproofing and protective coating at the +3 elevation, and FREP (forms, rebar, embeds and penetrations) at the +48 elevation. At the +28ft elevation the de-mineralized water tank is in place and the caustic blow-down tank is on site and the area is being prepared for tank installation. The current plan is to complete the concrete slabs, walls, and main structural framing for the main building shell so that the roofing and siding can be installed by the end of December 2005.

Analytical Laboratory (LAB)

The Radiochemical LAB will incorporate features and capabilities necessary to ensure efficient WTP operations including: (1) receipt/handling of Hanford Tank Farm samples for waste feed acceptance; (2) process control; (3) waste form qualification testing; (4) environmental and authorization basis compliance; and (5) limited technology testing. To mitigate technical risks and for cost advantages, the LAB will outsource low level and non-radioactive (environmental) samples. The project as a whole is approximately 23% earned with a negative cost variance of 2.5% and negative schedule variance of 2.2%. Design is 81.2% earned (83.3 scheduled). The majority of engineering disciplines show a slight slip against the October 2004 target schedule, process engineering, electrical, C&I and plant design have slipped 7 to 10 weeks against target. Construction is 7.8% earned (7.4% scheduled). WTP purchase order specifications and approved Dangerous Waste Permit conditions require application of ASME B31.3 to both the hastelloy and stainless steel core and carbon steel jacketed pipe. On March 10, 2005, the WTP discovered an incomplete longitudinal weld on the outer carbon steel pipe. Following the initial discovery, the contractor contacted the vendor and initiated an evaluation of extent of condition. Of the identified 332 welds (2 per clamshell) to be visually inspected by bore scope; A recently discovered disconnect between vendor shop drawings and BNI field drawings eliminated 8 BOF clam shells originally identified as suspect. Of the four remaining welds to be inspected, two are associated with one LAB spool embedded in concrete. BNI has taken appropriate action to identify the extent of condition and correct the deficiencies. For the 1 inaccessible spool, BNI is in the process of performing a technical fit for function evaluation. Construction forces continued fitting-up and welding of under-slab non-radioactive liquid drain piping and formwork, rebar, rebar supports, bulkheads, and anchor bolts installation for the basemats. The next basemat pour is scheduled for May 23, 2005, pour 13A for 632 cubic yards.

Balance of Facilities (BOF)

The BOF sub-project provides essential site services to all production and service facilities at the WTP. BOF includes multiple facilities of varying sizes that will provide such items as electrical power, roads, security, water, steam, glass former storage, chemical treatment, and air systems. The project is 50% earned with a positive cost variance of 5.0% and a less than 1% negative schedule variance. Design and construction are 86.1% and 57.5% earned respectively. The cost and schedule variance

is summarized by performance in engineering releases and construction installation of key commodities. The positive 5% cost variance is driven by high a high productivity factor experienced by the construction craft and subcontractors. The positive cost and schedule variance in construction are masking a three to four month slip in engineering as well as negative cost and schedule variances in procurement. The variance in design is driven by late award of subcontracts and procurements and lack of vender data. Subsequently, the variance in construction is also driven by acquisitions. The first of seven compressors was set on the housekeeping pad in the chiller compressor plant. Construction forces placed concrete for the electric ductbank and controlled density fill (low strength concrete) to backfill the radioactive transfer lines. Screening of aggregate from the crushed stock pile material has restarted and is expected to continue for the next couple of months. Construction forces continued cable, conduit, and terminations installation in the switch gear buildings; underground utilities, ductbank conduit installation in the important-to-safety switch gear building; interior electrical in fireproof coating buildings; and installation of instrumentation, instrument tubing, and pipe insulation, pump alignments, instrument racks setting, and wire pulling for the steam plant building.

Significant Planned Actions (next six months):

Facility	Milestone	Scheduled	Projected Aug 04
HLW	Complete slab at 0' level	4/05	4/05
	Start 0' Level Walls – First Rebar	10/04	10/04 A
LAW	Set all +3' elevation major process vessels	7/04	3/05 A
	Complete placement of slabs at el. +28'	05/05	5/05
PT	Completion Planning Group 1 Module Preassembly	3/05	3/05
	Completion of Concrete Walls to 56' Elevation	3/05	3/05
AL	Complete Structural Steel Design	01/05	1/05 A
	Complete Installation of In-slab Pipe	08/05	8/05
BOF	Complete Cooling Tower Facility Construction	11/04	12/04 A
	Complete NLD pump house Construction/Set on Foundation	11/04	11/04 A
	Complete Fire Water Pump Houses Construction/Set on Foundation	12/04	12/04 A
	Complete Fuel Oil pump house Construction/Set on Foundation	12/04	11/04 A
	Complete 8 Field Erected Tanks Construction	01/05	5/05
	Complete BOF Switchgear Facility (91) Construction	02/05	5/05
	Complete Steam Plant Construction	05/05	5/05

M-62-08/11

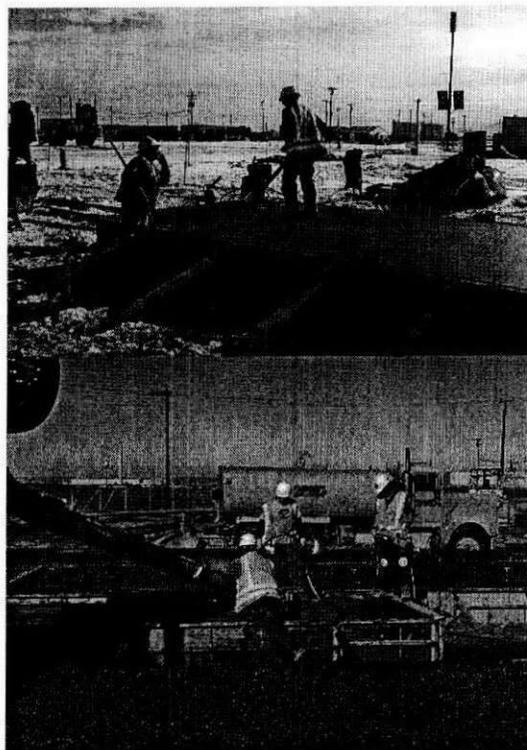
Demonstration Bulk Vitrification System (DBVS) Status

Construction:

- Seven non-RCRA pads have been poured in January and February
- Site Fencing is in place
- RCRA Pad System (first of seven system plans to be submitted to Ecology) have been reviewed by Ecology and comments/responses have occurred – approval pending
- Draft plans for System 2, the Waste Feed Receipt System, have been given to Ecology. They will be formally submitted following the IQRPE report
- On February 9th, a “start of construction” ceremony was held at the DBVS site. Speakers included Roy Schepens, Suzanne Dahl, and Ed Aromi. The event was covered by the local media and an AP reporter.

Tribal Interactions:

- In January, meetings were held with members and staff from the Confederated Tribes of the Umatillas and the Yakama Indian Nation to discuss any questions and concerns that they might have with the DBVS.
- Based on these meetings, a monthly meeting has been established for the 3rd Tuesday of the month in which staff from DOE, CH2M HILL, Ecology, and EPA can meet to status the tribes. The first meeting was held February 15th; with a staff member from the Yakamas attending. The Umatillas and the Nez Perce were invited; the Umatillas have currently declined due to budget restraints and the Nez Perce may participate at a later date.

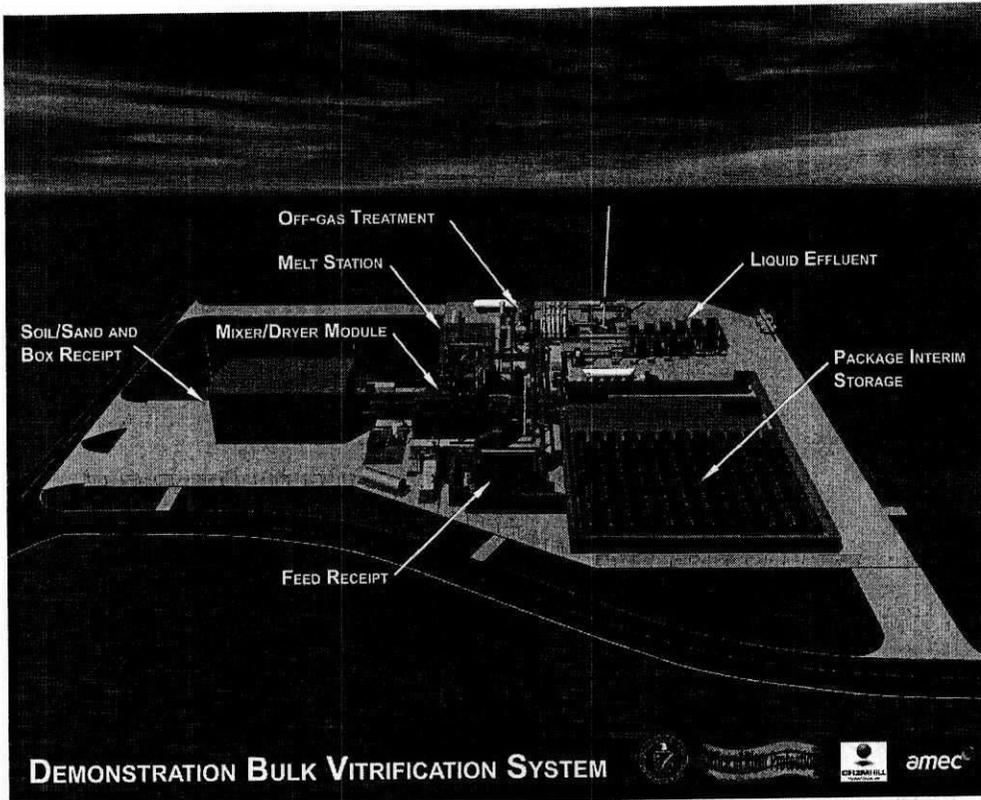


Testing:

- Analysis of Engineer Scale Test #13 (ES-13) continues. This test was ran with actual pretreated, tank waste that was spiked with cold cesium, rhenium, and technetium. To further understand the Tc distribution, more of the glass and refractory are being sampled.
- Full Scale Test (38A) is the first of two full scale tests planned for the Horn Rapids Test Site (HRTS) and is planned for March 2005. 38A will test the design of the full scale DBVS In-Container Vitrification box (simulated waste melted in a solid refractory, starting at the bottom and filling while melting). The test plan and sample analysis plan for test 38A is under review and will evaluate the following parameters: 1) test the new design using a solid refractory at full scale; 2) test starting the melting from bottom; 3) feeding while melting to produce a full container; and 4) determine the scaling effects on technetium migration into the refractory using rhenium as a surrogate.

Retrieval:

- Final S-109 Partial Retrieval Functions and Requirements document has been submitted to Ecology



DBVS February 2005