

**Tri-Party Agreement Milestone Review – Office of River Protection
November 16, 2004
Meeting Minutes**

Approval: *Michael A. Wilson* Date: 2/1/05
 for Michael A. Wilson (H0-57)
 Ecology IAMIT Representative

Approval: *Joel B. Heddon* Date: 2/1/05
 for Joel B. Heddon (A5-12)
 RL IAMIT Representative

Approval: *Jim E. Rasmussen* Date: 2/1/05
 Jim E. Rasmussen (H6-60)
 Chairman and ORP IAMIT Representative

Approval: *Nick Ceto* Date: 2/1/05
 Nick Ceto (B5-01)
 EPA IAMIT Representative

Minutes Prepared by:

Approval: *Eileen J. Murphy-Fitch* Date: 2/1/05
 Eileen J. Murphy-Fitch (A4-25)
 Fluor Hanford, Inc.

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EDMC

Aromi, E. S.	CH2M	H6-63	Lobér, R.	ORP	H6-60
Bartus, D.	EPA	H0-57*	Long, J.	ORP	H6-60
Brown, M.	Ecology	H0-57*	Louie, C. S.	ORP	H6-60*
Buxbaum, M.E.	FH	B3-53	Lyon, J.	Ecology	H0-57*
Caggiano, J. A.	Ecology	H0-57	Mauss, B.	ORP	H6-60*
Castleberry, J.	CH2M	R3-26	Miller, P.	CH2M	R1-51
Clark, C. E.	RL	A5-15*	Morrison, R. D.	FH	A4-25*
Clark, D.	ORP	H6-60	Murphy-Fitch, E. J.	FH	A4-25*
Cusack, L.	Ecology	H0-57*	Navarro, J.	ORP	H6-60
Dahl, S.	Ecology	H0-57*	Niles, K.	ODE*	
Eschenberg, J.	ORP	H6-60*	Ollinger, S.	ORP	H6-60
Gallagher, R.	FH	H5-20	Piippo, R. E.	FH	A4-25
B. Harper	CTUIR		Quintero, R.	ORP	H6-60*
Harris, S.	CTUIR		Rasmussen, J. E.	ORP	H6-60
Hebdon, J.	RL	A5-12*	Ramsay, M.	ORP	H6-60
Hedges, J.	Ecology	H0-57*	Russell, W.	ORP	H6-60*
Heggen, D.	Ecology	H0-57	Schepens, R.	ORP	H6-60
Henry, D.	ODE*		Singleton, D.	Ecology	H0-57
Hertzel, J. S.	FH	A4-25	Skinnarland, E. R.	Ecology	H0-57
Jackson, D. E.	RL	A4-52	Sobotta, P.	NPT	
Jackson, G. W.	FH	H5-20	Stevens, A.	ORP	H6-60
Jarayssi, M. N.	CH2M	H6-03	Tollefson, K.	CH2M	R3-26
Jentzen, B.	Ecology	H0-57*	Uziemblo, N. H.	Ecology	H0-57*
Jim, R.	YN		Voogd, J.	CH2M	S4-43
Keggen, D.	Ecology	H0-57*	Vinson, R.	PEC	H6-60
LaMont, P.	ORP	H6-50	Yasek, R.	ORP	H6-60
Lijek, S. J.	Ecology	H0-57	Administrative Record	EDMC	H6-08*
S. Lilligren	NPT		*w/Attachments		
Liou W.	ORP	H6-60			

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Office of River Protection
Tri-Party Agreement Milestone Review
November 16, 2004

Tri-Party Agreement Milestone Performance

Start: 9:05 a.m.

End: 9:31 a.m.

All FY 2004 milestones were completed. Work continued on the Demonstration Bulk Vitrification System (DBVS) with the issuance of the Radioactive Notice of Construction by the Washington State Department of Health (WDOH). Site pre-construction activities are scheduled to commence in November 2004. Other accomplishments include:

- Installation of six RCRA groundwater monitoring wells three months ahead of schedule (M-024-57D).
- Initiated construction on the ILAW Disposal Facility approximately six months early (M-090-08).
- Retrieved 90 percent of the 241-S-112 Single Shell Tank (SST) and 70 percent of Tank 241-C-203. Retrieval will resume in late November or early December for both tanks.
- Project W-314, Tank Farm Restoration and Safe Operations, is approximately 96 percent complete. Construction is expected to be completed by May 2004; testing, turnover, and readiness activities are expected to be completed by December 2005.
- Construction of the AN-101 Retrieval System is 90 percent complete (Project W-211).
- Initiated the 90 percent Title II design for the 241-AY-102 Retrieval System.
- Awarded critical procurements to support 241-C Tank Farm and Tank 241-S-102 work.
- Continued emphasis on worker protection and resolution of vapor concerns. Tank headspace sampling continued and field monitoring cameras were installed and/or tested in 241-U, 241-S and 241-SX Tank Farms.

Ecology stated that the broad scoping Closure Environmental Impact Statement (EIS) and the record of decision (ROD) do not alone make tank farm closure decisions – RCRA is also critical to these decisions. The RCRA Closure Plan should be included on the critical path.

Action: Include RCRA Closure Plan in the Critical Path Schedule
Actionee: Dianne Clark/Kathy Tollefson

M-043-00, Tank Farm Upgrades

Start: 9:31 a.m.

End: 9:41 a.m.

Field work schedules were impacted by the additional respiratory protection requirements (RPR), compensatory controls for radiological control performance, mercury monitoring in tank farms, high contamination levels and waste disposal requirements in Pit SY-B, other field priorities and availability of key resources. Field work associated with the Tank Farm Upgrades resumed.

ORP has asked the Tank Farm Contractor to review the workscope and provide them (ORP) with an estimate for what it will take to get the job done. Ecology requested a copy of that analysis.

M-043-00, Tank Farm Upgrades (Continued)

Action: Provide RL and Ecology with the recovery plan and schedule
Actionee: Jim Navarro, ORP

M-046-00, Double Shell Tank Space Evaluation

Start: 9:41 a.m.

End: 9:48 a.m.

There is one remaining milestone in this milestone series – Tri-Party Agreement Interim Milestone M-046-21, Complete Implementation of Double Shell Tank Space Optimization, is due December 31, 2005. Three of the four space optimization recommendations and tank space management efforts are complete. The final recommendation, increase the fill height of the DST, is on schedule. This will be performed UT in AP Tank Farms.

Action: Schedule meeting on DST Space Optimization for CHG, ORP and Ecology. Discuss at the next Project Manger's Meeting. Discussion should identify how many tanks are needed for the primary feed of the WTP

Actionee: Cathy Louie, ORP/Jeff Lyon, Ecology/Nancy Uziembio, Ecology/Kathy Tollefson, CHG

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

Start: 9:48 a.m.

End: 9:52 a.m.

Near term deliverables are forecast for early completion. Out-year milestones are also forecast on or ahead of schedule. The 241-AY-102 90 percent design package was completed.

Interim Stabilization (Consent Decree)

Start: 10:46 a.m.

End: 10:56 a.m.

Consent Decree Milestone D-001-00, *Complete Interim Stabilization of all 29 SSTs*, due September 30, 2004, was completed on March 18, 2004 with discontinuation of pumping in 241-U-108 and subsequent consultation with Ecology staff. Interim stabilization of 241-S-102 and 241-S-112 held in abeyance by the third amendment to the Consent Decree; these two tanks are undergoing accelerated retrieval. ORP's obligation to interim stabilize 241-S-102 and 241-S-112 will be satisfied upon completion of accelerated retrieval operations (by March 31, 2005). Currently, retrieval of Tank 241-S-112 is projected to finish by January 31, 2005; Tank 241-S-102 is targeted for March 31, 2005. The retrieval of 241-S-102 may be in jeopardy due to delays due to the additional respiratory protection requirements (RPR), work stoppage to address compensatory controls for radiological control performance, mercury monitoring in tank farms, and concerns on the formation of sodium phosphate gels during waste retrieval and transfer operations. Completion of retrieval operations is currently forecasted by June 1, 2005.

M-045-00, Complete Closure of all Single-Shell Tank Farms

Start: 9:52 a.m.

End: 10:21 a.m.

The SST Retrieval and Closure Program deliverables are in progress and anticipate that they will be completed on or ahead of schedule. Tri-Party Agreement Change Request M-045-04-01 was approved and incorporated into the baseline.

Workscope was impacted by the additional respiratory protection requirements, work stoppage to address compensatory controls for radiological control performance, mercury monitoring in tank farms, and concerns on the formation of sodium phosphate gels during waste retrieval and transfer operations. In addition, there is a tendency for sodium phosphate to solidify and may cause problems with retrieval. Impacts of the sodium phosphate on the waste process are being evaluated. Preliminary indications suggest control of sluice water temperature and dilution rate may be effective in mitigating the formation of the phosphate.

Two Tri-Party Agreement milestones may not be completed as scheduled. Tri-Party Agreement Milestone M-045-05A, *Complete Initial Waste Retrieval from 241-S-102*, is forecast for completion approximately 15-days late. Tri-Party Agreement Milestone M-045-15, *Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project* is also in jeopardy and is projected for completion approximately 18 days after the due date.

Action: Provide copy of the Interagency Agreement signed by the which permits the NRC to provide technical review of certain ORP documents
Actionee: Roger Quintero, ORP

M-045, -050, -060 SST Corrective Actions

Start: 10:21 a.m.

End: 10:29 a.m.

Field work schedules were impacted by the additional respiratory protection requirements, compensatory controls for radiological control performance, mercury monitoring in tank farms, etc.

Revision 1 of the A, AX, C and U Work Plans have not be updated by RL and resubmitted to Ecology for approval. These work plans are primary documents as defined by the Tri-Party Agreement and as such, are subject to the Tri-Party Agreement Action Plan, specifically, Section 9.0, *Documentation and Records*. Tri-Party Agreement Section 9.0 defines the process for submittal, review and approval of primary documents. Regulator comments were returned to RL months ago. There are issues associated with the B/BX/BY Field Investigation Report that also needs to be resolved. Ecology provided comments on the revised B/BX/BY Field Investigation Report approximately 18 months ago and have not been provided either an update of the document or a schedule for when the update can be accomplished. If these documents and issues are not resolved by the next ORP Tri-Party Agreement Milestone Review (tentatively scheduled for February 15, 2005), then Ecology would like to see this included as an issue under this milestone series.

M-045, -050, -060 SST Corrective Actions (Continued)

- Action: Provide status of Revision 1 of the A, AX, C, and U Work Plans (Tri-Party Agreement Primary Documents)
Actionee: Rob Yasek, ORP/Joe Caggiano, Ecology
- Action: Prepare a schedule to update the B, BX and BY Field Investigation Report. Reach consensus on the definition of uranium.
Actionee: Rob Yasek, ORP/Joe Caggiano, Ecology
- Action: If issues associated with A, AX, C, U, B, BX and BY primary documents are not resolved, it should be included at the next Tri-Party Agreement Quarterly (tentatively scheduled for February 15, 2005)
Actionee: Rob Yasek, ORP/Joe Caggiano, Ecology/Kathy Tollefson, CHG

M-023, Tank Integrity and Monitoring

Start: 10:42 a.m.
End: 10:46 a.m.

The workscope is forecast for on-time completion. However, work has been temporarily suspended at the 244-Change Request Vault pending replanning of work packages to implement compensatory measures following overexposure during removal of a thermocouple from Pit 002. Efforts continued to reformat field work packages that comply with the Management Directives developed for radiological controls compensatory measures and mercury monitoring.

Interim Stabilization Consent Decree

Start: 10:46 a.m.
End: 10:56 a.m.

Consent Decree deliverable D-001-00, Complete Interim Stabilization of all 29 SST's, due September 30, 2004, was completed on March 18, 2004 with the discontinuation of pumping in U-018 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 held in abeyance by the 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. Ecology requested that ORP continue to provide the quarterly reports on 241-SY-102 and 241-S-112 until retrieval is complete (~June 1, 2005).

- Action: Review history on how the 29 tanks were chosen to determine why 7 tanks were not included (already interim stabilized?)
Actionee: Kathy Tollefson/CHG
- Action: Continue to provide quarterly reports for Tanks 241-SY-102 and 241-S-112 until retrieval is complete.
Actionee: Kathy Tollefson, CHG/ORP?

M-048-00, DST Integrity Assessment Program

Start: 10:56 a.m.

End: 11:07 a.m.

RL requested Ecology approval for the final four tanks for UT examinations. In order for Tri-Party Agreement Interim Milestone M-048-14, *Submit Written Integrity Report for the DST System*, due March 31, 2006, to be completed on schedule, a second UT crew is scheduled to begin work before the end of November 2004. The second UT crew will perform field set up activities associated with all M-048-13 and M-048-14 UT activities. The second UT crew will also perform the remaining annulus and primary tank videos and primary transfer line video activities associated with the M-048-14 milestone. The existing primary UT crew will perform all M-048-13 milestone UT activities in the first half of FY 2005 and will then perform the residual UT activities associated with M-048-14 in the remainder of FY 2005. The recover plan also consists of a two UT crawler scanning approach at each tank. The two crawler approach will allow for a tank UT scan activity to be performed using two crawlers simultaneously thus cutting the scan time of each tank in half.

In Tank Characterization and Summary

Start: 11:07 a.m.

End: 11:09 a.m.

Planning was complete for grab sampling at 241-S-112 to support the Supplemental Technology program and vapor samples from U Farm to support the Industrial Hygiene Program. Thirty-two BBI updates were completed in the fourth quarter of FY 2004. Three DQO's were prepared and are in review – SST Component Closure DQO, Evaluation of Tank Chemical Emission For Worker Safety, and for the Demonstration Bulk Vitrification System.

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

Start: 10:29 a.m.

End: 10:42 a.m.

All near-term M-090 deliverables are complete; outyear milestones (post 2006) are projected for early and/or on-time completion. Potential impacts to the schedule include the delay in issuance of an IDF final status RCRA Permit beyond March 1, 2005 and the late start of the IHLW Permit NOD workshops that should have started in September 2004 in accordance with the permitting plan. This approval was needed to support procurement and construction activities in 2006. The current permitting plan needs to be reviewed to address the late start of review/workshops. There is a 22-month permitting process requirement prior to starting construction. RL and Ecology will review the permitting plan and discuss that at the next monthly PMM.

Action: Review Permitting Plan – challenges/workarounds/etc.

Actionee: Suzanne Dahl, Ecology, and Phil LaMont, ORP

Action: Incorporate two additional RCRA wells for IDF into the M-024 groundwater monitoring workscope.

Action: Rob Yasek, ORP and Kathy Tollefson, CHG

LDR Assessment Status

Start: 11:08 a.m.

End: 11:13 a.m.

The assessment of 241-A-701, due December 31, 2004, will be completed on schedule. The assessment of the 242-S and 242-T Evaporators will be completed on schedule as well. Post 2006 assessments will be discussed in the M-026 Project Managers Meeting and identified in the update to the annual LDR Report.

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

Start: 11:13 a.m.

End: 12:03 p.m.

Waste Treatment Plant and Immobilization Plant (WTP) Project

The WTP consists of five major facilities - Pretreatment Facility, High-Level Waste Facility, Low-Activity Waste, Analytical Laboratory and Balance of Facilities. Engineering is approximately 72 percent complete; construction is 33 percent complete; and the overall Project is approximately 40 percent complete (based on dollars). ORP, Ecology and the Site Contractor have reviewed 50 design packages and 6 permit modifications in the last year.

Thirty-nine WTP tanks use pulse jet mixers. Five pretreatment vessels contain non-Newtonian fluids. The test program has optimized configurations for mixing. A near full-scale (one-half scale tank size) demonstration of normal and post-Design Basis Event (DBE: loss-of-power and the associated normal plant air supply to the fluidics equipment), non-Newtonian slurry vessel operations is ongoing. Testing (13 tests) are scheduled for completion in December 2005.

The HLW Summary Structural Reports (SSR), Revision B, is currently scheduled for October 30, 2004. ORP chartered a Peer Review Team and the DNFSB staff raised four main issues for resolution that may impact reaching closure – 1) redistribution of lateral loads due to seismic induced out-of-plane wall cracking; 2) load redistribution out of load channel B in the E-W direction; 3) seismic contribution to demand/capacity ratios and, 4) mess density used in BNI's finite element model has reached the limits of the GTStrudl modeling capability. All issues are anticipated to be closed by the end of November 2004.

Bulk Vitrification

ORP stated that they were ready to pour pads on non-regulated portions of the facility/complex. Ecology stated that until Ecology has issued a final permit, ORP should not be installing any pads. Ecology stated that if the pad will support a diesel generator, chiller, etc., they are a "key" component within the permit. These are structures that will support the treatment facility and therefore subject to the Dangerous Waste Regulations and should be addressed under the Permit. Ecology stated that ORP should not proceed with the concrete pours.

Action: Halt concrete pad installation in the unregulated sections of the Bulk Vitrification Demonstration facility until the RD&D Permit has been issued and Ecology has approval is secured. Ecology will send ORP an email delaying the concrete pour.

Actionee: Laura Cusack, Ecology/Suzanne Dahl, Ecology/Billie Mauss, ORP/Jim Rasmussen, ORP

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

Revision to the function and requirements (F&R) document was also discussed. Ecology will provide a redline/strikeout of the document so that their changes are very clear in an effort to minimize any misunderstanding on how the change should be incorporated into the document.

Action: Provide redline-strikeout of F&R. ORP will review redline-strike out and look at the comment resolution.

Actionee: Jeff Lyon, Ecology, Laura Cusack, Ecology, and Billie Mauss, ORP

ATTENDEES
Tri-Party Agreement Milestone Review
Office of River Protection
November 16, 2004
Jim Rasmussen, Chairperson

<u>NAME</u>	<u>ORGANIZATION</u>	<u>MAILSTOP</u>	<u>ATTACHMENTS</u>
JEFF HERTZEL	FH / TPA		
STEWART SIMON	OREGON		
Sandra Lilligren	NEE PERCE		
RO VINSON	ORP		
Jim Rasmussen	DOE / ORP		
Suzanne Dahl	Ecology		
Jeff Lynn	ECY		
JANE HEDGES	ECY		
Laura Gesack	ecy		✓
Jim Navarro	DOE		
Moses Jarayasi	CH2M HILL		
Kathy S Tolleson	CH2M HILL		
Diane Clark	ORP-DOE		
Brenda Griffin	Ecology		
Jeff Vogel	CHG		
LES Rort	Biology		
Roger Quintero	DOE-ORP		✓
Nancy Uziemoto	Ecology		
Andy Stevens	DOE-ORP		
Kris Colosi	CH2M Hill		
Phil LaMont	DOE-ORP		
JOE CAGGIANO	ECOLOG		

Office of River Protection

Tri-Party Agreement
Quarterly Milestone Review Meeting
November 16, 2004

The logo for the Office of River Protection features the text "Office of River Protection" in a bold, black, sans-serif font. The text is centered within a horizontal, wavy, brush-stroke-like graphic that has a textured, greyish appearance, suggesting water or a natural environment.

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

4th Quarter of FY 2004

Agenda

Office of River Protection
 Tri-Party Agreement Quarterly Milestone Review Meeting
 November 16, 2004
 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
27	M-43-00, Tank Farm Upgrades	Cathy Louie / Steve Lijek	9:10
29	M-46-00, Double-Shell Tank Space Evaluation	Cathy Louie / Jeff Lyon	9:20
32	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Cathy Louie / Jim Navarro / Steve Lijek	9:30
34	M-45-00, Complete Closure of All Single-Shell Tank Farms	Roger Quintero / Dick Heggen	9:40
61	M-45, -50, -60 Single-Shell Tank Corrective Action	Rob Yasek / Joe Caggiano	9:50
63	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
65	M-23-00, Tank Integrity and Monitoring	John Long / Jeff Lyon	10:10
67	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	10:20
69	M-48-00, DST Integrity Assessment Program	Andy Stevens / Vic Callahan / Brenda Jentzen	10:30
	BREAK		
71	In Tank Characterization and Summary	Wen-Shou Liou / Debra Singleton	10:40
72	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
73	• BNI Cost & Schedule Performance and • M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes/Supplemental Technologies	John Eschenberg / Billie Mauss / Suzanne Dahl	11:00

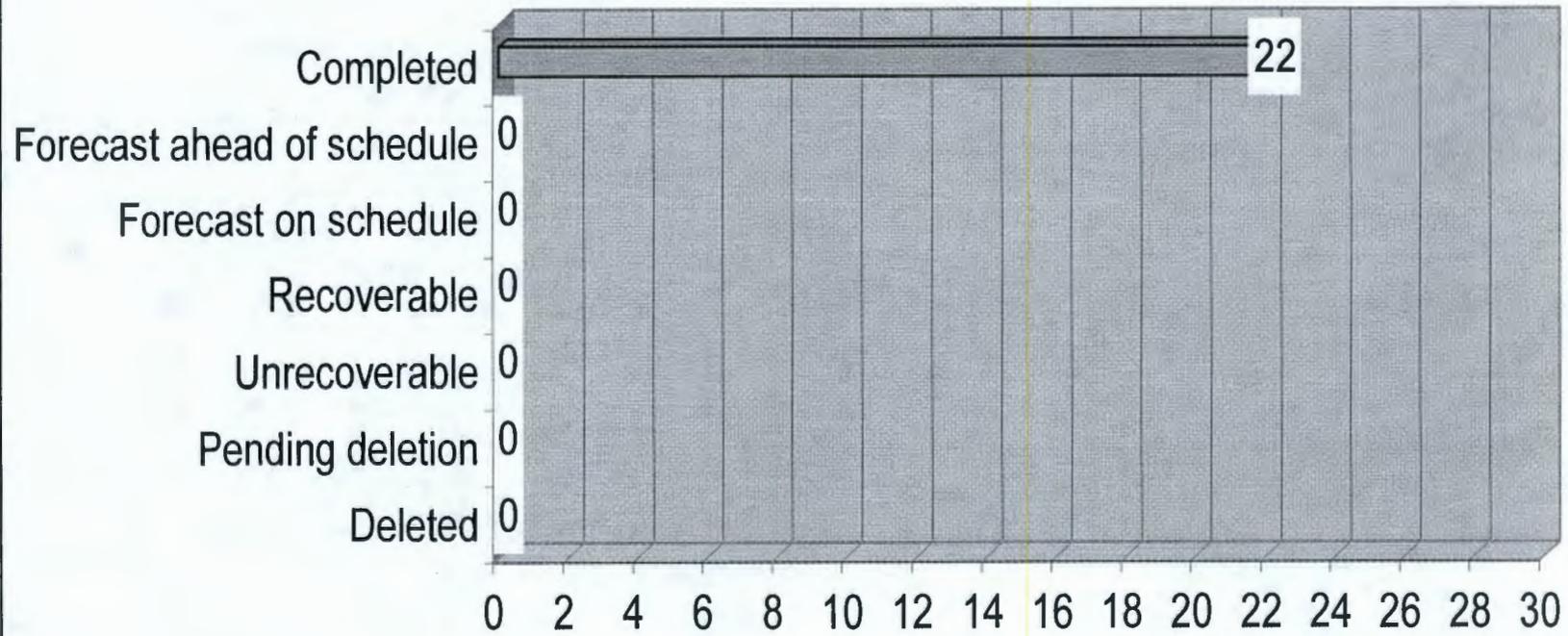
TPA Milestone Statistics

(Including target milestones)

Milestone	Due Date	Total Active as of 08/31/04	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	1	M-23-27	12/30/04		
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	9/30/2024 (M-45-00)	37	M-45-00C	06/30/05	M-45-05-T06	9/30/08
			M-45-02M	3/1/2006	M-45-05-T07	9/30/09
			M-45-05N-T01	06/30/05	M-45-05-T08	9/30/10
			M-45-55-T03	1/31/05	M-45-00D	01/31/08
			M-45-05A	3/31/05	M-45-05-T09	9/30/11
			M-45-03C	3/31/05	M-45-06-T03	3/31/12
			M-45-02N	3/01/08	M-45-05-T10	9/30/12
			M-45-13	12/31/05	M-45-05-T11	9/30/13
			M-45-02O	3/01/10	M-45-06-T04	3/31/14
			M-45-00B	9/30/06	M-45-05-T12	9/30/14
			M-45-55	01/31/07	M-45-05-T13	9/30/15
			M-45-13-T01	12/30/06	M-45-05-T14	9/30/16
			M-45-15	12/31/05	M-45-05-T15	9/30/17
			M-45-02P	3/31/12	M-45-05	9/30/18
			M-45-05-T05	09/30/07	M-45-06	9/30/24
			M-45-15-T01	12/30/06	M-45-00	9/30/24
			M-45-02P	3/01/12	M-45-58	6/30/07
M-45-60	9/30/07	M45-59	TBD			
M-45-56	TBD					
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	02/28/2018 (M-47-00)	6	M-47-05A	4/30/06	M-47-04	3/31/09
			M-47-02	3/31/09	M-47-03A	3/31/09
					M-47-06	6/30/10
					M-47-00	02/28/18
M-50-00, Complete Pretreatment Processing of Hanford Tank Waste	12/31/2028 (M-50-00)	1	M-50-00	12/31/28		
M-51-00, Complete Vitrification of Hanford High Level Tank Waste	12/31/2028 (M-51-00)	1	M-51-00	12/31/28		
M-61-00* (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/2028 (M-61-00)	1	M-61-00	12/31/28		
M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	12/31/2028 (M-62-00)	12	M-62-01J	1/31/05	M-62-01M	7/31/06
			M-62-01K	7/31/05	M-62-03	12/31/06
			M-62-08	1/30/05	M-62-09	2/28/09
			M-62-07B	12/31/07	M-62-10	1/31/11
			M-62-01L	1/31/06	M-62-11	1/30/06

Milestone	Due Date	Total Active as of 08/31/04	Milestone Number	Due Date	Milestone Number	Due Date
					M-62-00A M-62-00	2/28/18 12/31/28
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	4	M-90-08 M-90-10	2/28/05 8/31/08	M-90-11 M-90-00	8/31/10 TBD
M-48-00, DST Integrity Program, Submit Results of 4 DSTs not Previously Examined	9/30/07	4	M-48-13	9/30/05	M-48-14 M-48-15 M-48-00	3/31/06 9/30/07 9/30/07
Interim Stabilization Consent Decree	9/30/04 (D-001-00)	1	D-001-00 D-001-00-R22	10/31/04		
Total Active Milestones:		71				

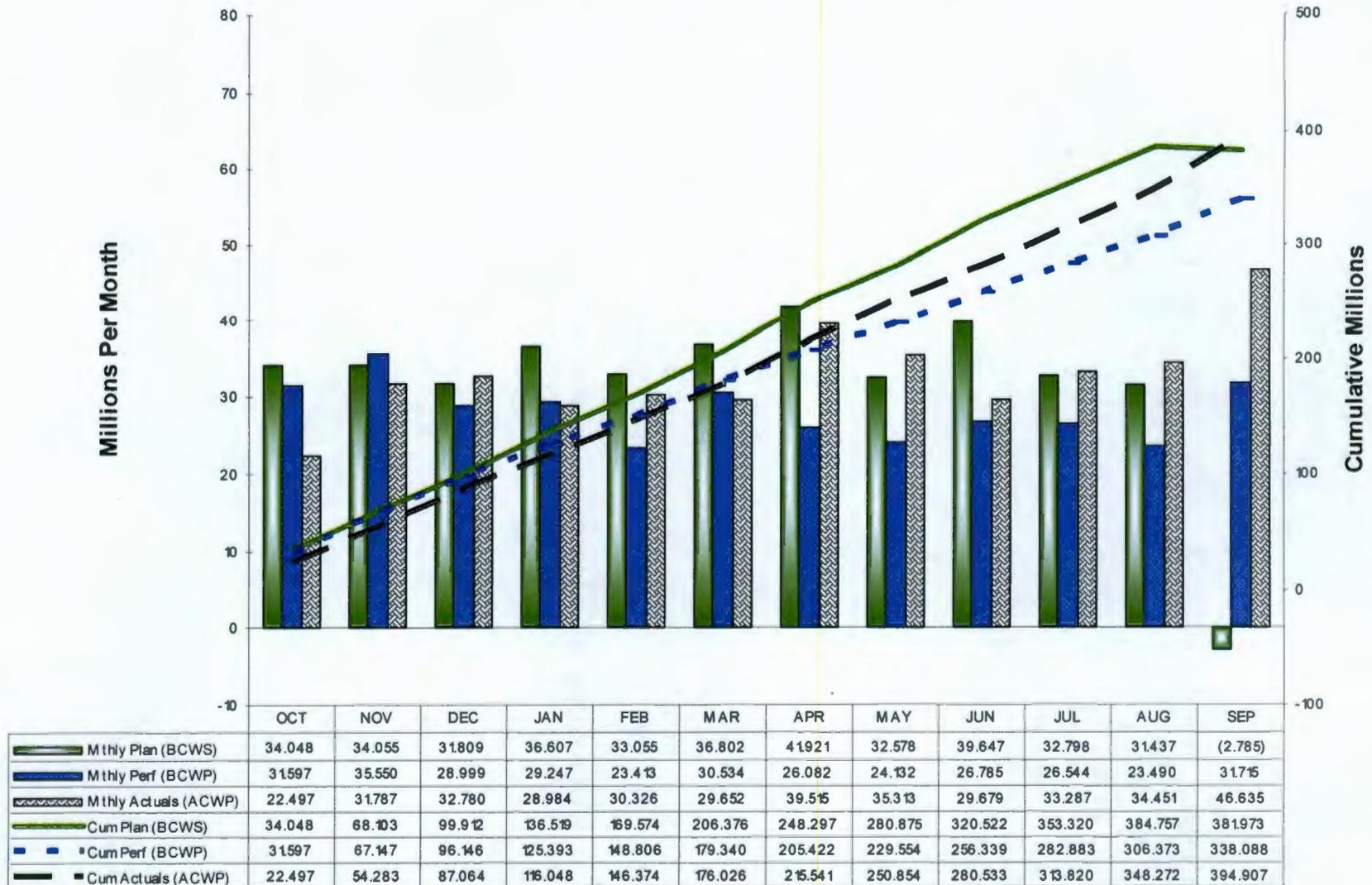
FY 2004 MILESTONE PERFORMANCE



Fiscal Year 2004 Tri-Party Agreement Milestone Status

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
D-001-00-R18	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.	10/31/03	10/29/03						
M-062-07A	Initial erection of LAW Vitrification Facility elevation - 21' structural steel columns, beams, and Q-Deck at elevation +3.	10/31/03	7/24/03						
M-045-05L-T01	Complete full-scale C-106 waste retrieval.	11/1/03	12/31/03						
D-001-14-T01	Complete pumping of C-103.	12/30/03	8/21/03						
D-001-00-R19	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.	1/31/04	1/31/04						
M-062-01H	Submit semi-annual Project Compliance Report.	1/31/04	1/31/04						
M-045-05M-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.	2/27/04	06/02/04						
M-023-25F	Complete installation of LOWs and begin weekly Liquid Observation Monitoring for 4 additional SSTs.	3/31/04	3/17/04						
M-045-05B	Complete S-102 Initial Retrieval Project Design.	3/31/04	5/30/03						
M-045-05C	Complete S-102 Retrieval Construction.	3/31/04	2/27/04						
D-001-00-R20	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.	4/30/04	04/29/04						
M-045-05H	Interim completion of Tank C-106 SST waste retrieval and closure demonstration project.	6/30/04	6/30/04						
M-047-05	Start construction of waste retrieval and mobilization systems for selected initial LAW feed tank.	5/31/04	10/7/03						
M-045-03G	Complete C-104 sludge/hard heel, confined sluicing and robotic technologies, waste retrieval cold demonstration.	6/30/04	8/13/03						
M-047-03	Start construction of waste retrieval and mobilization.	7/30/04	12/16/02						
D-001-00-R21	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.	7/31/04	7/31/04						
M-062-01I	Submit semi-annual Project Compliance Report.	7/31/04	7/31/04						
D-001-00	DOE shall complete interim stabilization of all 29 SSTs.	9/30/04	3/18/04						
M-045-03E	Complete S-112 Saltcake Waste Retrieval Technology Demonstration Construction.	3/31/04	6/30/03						
M-045-06B	Submit a certified S-112 component closure activity plan	9/30/04	9/30/04						
M-045-06C	Submit a certified S-102 component closure activity plan	9/30/04	9/30/04						
M-048-12	Submit results of 4 DSTs not previously examined.	9/30/04	9/30/04						
TOTAL		23	22	0	0	0	0	0	0

CH2M HILL Performance Cost/Schedule



Executive Summary September 2004

During September, work continued on the Demonstration Bulk Vitrification System (DBVS) with the issuance of the Radioactive Notice of Construction by the Washington State Department of Health. Site pre-construction is scheduled to commence in November 2004. Other accomplishments include completion of construction of 6 RCRA groundwater monitoring wells in accordance with the Hanford Federal Facility Agreement and Consent Order (HFFACO) Milestone M-24-57-D; three months ahead of schedule. In addition, HFFACO milestone M-90-08, Initiate ILAW Disposal Facility Construction was completed, approximately 6 months ahead of the milestone completion date. A more detailed list of accomplishments is included in this report beginning on page 5.

Retrieval of single-shell tank (SST) 241-S-112 is at 90% and Tank 241-C-203 is at 70%, and are both scheduled to resume retrieval in November 2004. Retrieval of Tank 241-S-102 is scheduled to start in November 2004.

As of September, Project W-314, Tank Farm Restoration and Safe Operations, is 96% complete. Construction is expected to be complete by May 2005, and testing, turnover, and readiness activities are expected to be complete by December 2005. Project W-211, 10 DST Retrieval Systems, construction of the AN-101 Retrieval System is 90% complete and is scheduled for completion in January 2006. The 90% Title II design review was initiated for the AY-102 Retrieval System.

The tank farm winterization program is progressing with the completion of a number of activities including the issuance of the facilities snow plan. In addition, critical procurements for 241-C Farm and Tank 241-S-102 retrieval operations including the Raw Water Distribution Device, utility skids, and slurry pumps were awarded in September. Enhanced personal protective equipment (PPE) such as silver shielding to protect against mercury exposure and breathing air equipment were received in September.

Several DOE-HQ requests were addressed regarding potential impacts relative to the Waste Incidental to Reprocessing (WIR) lawsuit. Resolution of the WIR funding is needed to allow work to continue on Supplemental Treatment and tank closures.

Executive Summary
September 2004
(Cont'd)

CH2M HILL continues to aggressively pursue numerous activities to ensure worker protection and resolve vapor concerns. Tank headspace sampling continued, and field monitoring cameras were installed and/or tested in 241-U, 241-S and 241-SX Farms.

As of September, the status of the Tank Farm Project contract-period critical path activities is as follows: Interim closure of C-106 (-346 days) is delayed until the Closure Environmental Impact Statement (EIS) and Record of Decision (ROD) is received; Upgrade Transfer Systems – Project E-525 (-142 days) and Project W-314 (-4 days) are impacted by the unavailability of critical resources and implementation of management directives related to mercury mitigation actions, and improving conduct of radiological operations and safety performance; Complete installation of 24 Liquid Observation Wells (-9-days), will be resolved as a result of the renegotiation of HFFACO M-23 series milestones. Plans are being executed to recover negative float. However, C-106 recovery is dependent on completion of the EIS and ROD.

The project-to-date (PTD) earned value data reflects a current month favorable change in the schedule variance (SV) of \$34M to an unfavorable \$44M (SPI = 0.89) and an unfavorable change in the cost variance (CV) of \$15M to an unfavorable \$57M (CPI = 0.86). The change in the schedule variance is due to implementation of the HFFACO change request M-45-04-01, which re-sequenced SST retrievals. The PTD SV is unfavorable due to Supplemental Technology Demonstrations extended contract negotiations, delay in HQ approval of the contact-handled (CH-TRU) packaging Supplement Analysis #4, delays in SST retrievals, and Closure delays due to schedule extension for completion of the EIS and ROD. The unfavorable CV is due to unplanned cost for retrieval activities, for Supplemental Treatment, and to mitigate vapor issues. More detailed explanations of variances are included in this report beginning on page 11.

CH2M HILL Hanford Group, Inc.
Fiscal Year 2004 Performance Measurement
BY WORK BREAKDOWN STRUCTURE
 Dollars in Thousands

WBS	TITLE	Cumulative Fiscal Year To Date							
		Budgeted Cost			Variance				Budget at Completion (BAC)
		Work Scheduled	Work Performed	Actual Cost Work Performed	Schedule	SV %	Cost	CV %	
5.07	BASE OPERATIONS - Excluding 5.07.02	124,344.5	121,801.2	127,778.3	(2,543.3)	-2.0%	(5,977.1)	-4.9%	124,344.5
5.07.02	Env/TPA Milestone Achievement	<u>25,666.7</u>	<u>23,277.6</u>	<u>20,329.6</u>	<u>(2,389.1)</u>	-9.3%	<u>2,948.0</u>	12.7%	25,666.7
	TOTAL BASE OPERATIONS	<u>150,011.2</u>	<u>145,078.8</u>	<u>148,107.9</u>	<u>(4,932.4)</u>	-3.3%	<u>(3,029.1)</u>	-2.1%	<u>150,011.2</u>
5.08	RETRIEVE AND CLOSE - Excluding foll. WBS	8,925.5	8,867.1	6,250.1	(58.4)	-0.7%	2,617.0	29.5%	8,925.5
5.08.02	WTP Feed Delivery Program	12,654.5	12,551.2	14,983.3	(103.3)	-0.8%	(2,432.1)	-19.4%	12,654.5
5.08.03.02	10 DST Retrieval Systems (W-211)	13,241.6	11,283.3	12,286.6	(1,958.3)	-14.8%	(1,003.3)	-8.9%	13,241.6
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	28,256.9	24,859.5	25,771.2	(3,397.4)	-12.0%	(911.7)	-3.7%	28,256.9
5.08.04.02	Upgrade Transfer System (E-525)	11,720.6	7,284.7	9,628.3	(4,435.9)	-37.8%	(2,343.6)	-32.2%	11,720.6
5.08.05	Retrieval / Closure Program	46,848.6	42,487.4	46,309.9	(4,361.2)	-9.3%	(3,822.5)	-9.0%	46,848.6
5.08.06/7	SST Retrieval East / West Area	26,226.1	20,951.3	51,675.3	(5,274.8)	-20.1%	(30,724.0)	-146.6%	26,226.1
5.08.13	SST Closure	<u>6,293.1</u>	<u>4,901.7</u>	<u>8,068.5</u>	<u>(1,391.4)</u>	-22.1%	<u>(3,166.8)</u>	-64.6%	<u>6,293.1</u>
	TOTAL RETRIEVE AND CLOSE	<u>154,166.9</u>	<u>133,186.2</u>	<u>174,973.2</u>	<u>(20,980.7)</u>	-13.6%	<u>(41,787.0)</u>	-31.4%	<u>154,166.9</u>
5.09	Elements	8,761.6	8,761.6	7,746.6	0.0	0.0%	1,015.0	11.6%	8,761.6
5.09.02.02	TRU / LLW Packaging	20,659.8	8,571.9	14,193.5	(12,087.9)	-58.5%	(5,621.6)	-65.6%	20,659.8
5.09.02.03	LAW Treatment	18,051.5	12,823.3	22,934.0	(5,228.2)	-29.0%	(10,110.7)	-78.8%	18,051.5
5.09.03.01	Integrated Disposal Facility	5,515.9	4,976.0	4,619.3	(539.9)	-9.8%	356.7	7.2%	5,515.9
5.09.03.04	Initial IHLW Storage Facility (W-464)	<u>3,163.2</u>	<u>3,132.8</u>	<u>1,709.2</u>	<u>(30.4)</u>	0.0%	<u>1,423.6</u>	0.0%	<u>3,163.2</u>
	TOTAL TREAT AND DISPOSE WASTE	<u>56,152.0</u>	<u>38,265.6</u>	<u>51,202.6</u>	<u>(17,886.4)</u>	-31.9%	<u>(12,937.0)</u>	-33.8%	<u>56,152.0</u>
5.10	ANALYTICAL/TECHNICAL SERVICES	<u>21,642.8</u>	<u>21,557.6</u>	<u>20,623.3</u>	<u>(85.2)</u>	-0.4%	<u>934.3</u>	4.3%	<u>21,642.8</u>
RPP TOTAL		<u>381,972.9</u>	<u>338,088.2</u>	<u>394,907.0</u>	<u>(43,884.7)</u>	-11.5%	<u>(56,818.8)</u>	-16.8%	<u>381,972.9</u>

FY 2004 Cumulative Performance – Base Operations (Excl. 5.07.02)						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.07	124,344.5	121,801.2	127,778.3	(2,543.3) -2.0%	(5,977.1) -4.9%	124,344.5

SCHEDULE VARIANCE

Description and Cause: The fiscal year-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 increased respiratory protection requirements, resource allocation issues, transfer schedule changes, and implementation of Management Directive (MD)-038, Compensatory Controls for Radiological Performance.

Impact: Contract fee will not be earned until specific deliverables are completed.

Corrective Action: Schedule variance will decrease as PBI milestones are completed.

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable variance is due to unplanned costs to support the vapor issue mitigation efforts, the Chemical Vapor Solutions Team, and the Industrial Hygiene Program Improvement initiatives.

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

Corrective Action: Unfavorable cost variances will be managed at the overall company level.

FY 2004 Cumulative Performance – 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	25,666.7	23,277.6	20,329.6	(2,389.1) -9.3%	2,948.0 12.7%	25,666.7

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is primarily due to double-shell tank (DST) system structural analysis activities schedule slippage due to software problems, vapor issues, and deferral of AN-105 UT support to FY05. In addition, equipment modifications were delayed by the increased respiratory protection requirements, and nondestructive examination (NDE) ultrasonic testing was deferred until FY05 because of the unavailability of critical resources.

Impact: Work scope will be completed by the 4th quarter in FY05.

Corrective Action: The schedule variance will be recovered as this work is performed in FY05.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance is because of delays in starting level-of-effort activities related to the 242-A Evaporator. Evaporator campaigns were reduced from eight campaigns to one in FY04. In addition, efficiencies were realized in other DST project management activities.

Impact: No impact.

Corrective Action: The positive cost variance will be utilized elsewhere in the program.

FY 2004 Cumulative Performance – Retrieve and Close (excl. 5.8.2, projects, 5.8.5, retrievals & Closure)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08	8,925.5	8,867.1	6,250.1	(58.4) -0.7%	2,617.0 29.5%	8,925.5

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is within threshold.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance is due to early completion/stabilization of FY04 scheduled tanks, which resulted in reduced Shift Operations resources/costs.

Impact: The favorable cost variances will be used to offset unfavorable variances in other accounts.

Corrective Action: These planned Interim Stabilization resources are being utilized by the Retrieval Project.

FY 2004 Cumulative Performance – 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	12,654.5	12,551.2	14,983.3	(103.3) -0.8%	(2,432.1) -19.4%	12,654.5

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is within threshold.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable cost variance is due to extensive labor and subcontracts support to the Chemical Vapor Solutions Team. These costs were unplanned in FY04.

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

Corrective Action: Unfavorable cost variances will be managed at the overall company level.

FY 2004 Cumulative Performance – 10 DST Retrieval Systems (W-211)						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.03.02	13,241.6	11,283.3	12,286.6	(1,958.3) -14.8%	(1,003.3) -8.9%	13,241.6

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is due to construction delays related to implementation of the increased respiratory protection requirements and MD-038, and competing priorities for limited field resources to perform tank intrusive work.

Impact: Completion of construction of the AN-101 Retrieval System has slipped to February 2006, and the AZ-102 Retrieval System to October 2006.

Corrective Action: Corrective actions will be assessed when work packages are re-planned in accordance with MD-038 and construction is restarted.

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable cost variance is because of higher than planned construction costs for the AN-101 Retrieval System construction as a result of the increased respiratory protection requirements and implementation of enhanced radiological controls.

Impact: No impact.

Corrective Action: None required.

FY 2004 Cumulative Performance – Project W-314 (Tank Farm Restoration and Safe Operations)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u> (\$000)	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.04.01	28,256.9	24,859.5	25,771.2	(3,397.4) -12.0%	(911.7) -3.7%	28,256.9

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is due to field work delays caused by safety concerns and unexpected as-found field conditions.

Impact: The schedule float for Project W-314 has slipped with the potential to impact Tri-Party Agreement Milestone M-43-00, Complete Tank Farm Upgrades, and W-314 PBI milestones.

Corrective Action: Recovery actions have been identified and are currently being incorporated in the Integrated Mission Execution Schedule (IMES).

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable cost variance is within threshold.

Impact: No impact.

Corrective Action: None required.

FY 2004 Cumulative Performance – Project E-525 (Upgrade Transfer Systems)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u> (\$000)	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.04.02	11,720.6	7,284.7	9,628.3	(4,435.9) -37.8%	(2,343.6) -32.2%	11,720.6

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is because of interferences with Project W-314 activities in SY-Farm and cross-site transfers, unexpected as-found field conditions, unavailability of field resources due to competing priorities, and increased respiratory protection requirements.

Impact: Construction window for all E-525 work is slipping and indications are that M-43-00 will be impacted.

Corrective Action: Project E-525 is working on a recovery plan to be implemented prior to December 30, 2004 to accelerate work (including work deferred from FY04) to meet FY05 schedule commitments.

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable cost variance is because of schedule recovery actions which are costing more than planned due to unexpectedly high contamination levels, a plugged transfer line, and adverse weather impacts.

Impact: No impact.

Corrective Action: The project is evaluating options to reduce costs in other areas.

FY 2004 Cumulative Performance – Retrieval / Closure Program						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.05	46,848.6	42,487.4	46,309.9	(4,361.2) -9.3%	(3,822.5) -9.0%	46,848.6

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is primarily due to field work delays on Vadose RCRA Corrective Actions caused by safety concerns in farms, inclement weather, and lack of access to tank farms as a result of vapor issues. In addition, documentation activities were delayed because of a lack of available manpower due to competing priorities.

Impact: The schedule variance for drilling will not be recovered. However, there is no impact as the HFFACO milestones that this activity supports has been renegotiated to FY05 through FY07. The variance for documentation will be recovered in FY05.

Corrective Action: Recovery of the variance is contingent on access to the tank farms and availability of support personnel. A request for additional resources for the documentation activity is in progress.

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable variance is due to unplanned cost to support vapor monitoring for the Closure Project and SST Essential Services.

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

Corrective Action: Unfavorable cost variances will be managed at the overall company level.

FY 2004 Cumulative Performance – 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	26,226.1	20,951.3	51,675.3	(5,274.8) -20.1%	(30,724.0) -146.6%	26,226.1

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is due to delays in awarding task-based design/engineering contracts in support of Tank 241-C-103 design. In addition, minimal work was performed on Tank 241-C-105 as the decision was made to change the retrieval technology for this tank. Increased respiratory protection requirements have also restricted work in the tank farms.

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

Corrective Action: Efforts continue to obtain necessary breathing air supplies, and to aggressively manage critical path activities to minimize the life-cycle schedule variance.

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable cost variance is primarily due to SST retrievals experiencing higher than planned material and fabrication costs, increased special equipment and engineering costs, weather delays resulting in work stoppages, and costs related to vapor issues.

Impact: Unfavorable cost variances are being offset to the extent possible through under runs in other accounts. Unplanned costs may impact ability to complete all planned baseline scope.

Corrective Action: Activities will be replanned.

FY 2004 Cumulative Performance – SST Closure						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.13	6,293.1	4,901.7	8,068.5	(1,391.4) -22.1%	(3,166.8) -64.6%	6,293.1

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is primarily because of Tank 241-C-106 closure activities, which are impacted by the delay in the SST retrieval schedule and the Closure Environmental Impact Statement (EIS) Record of Decision.

Impact: There is no anticipated impact to waste processing.

Corrective Action: Tank 241-C-106 isolation and fill (tank prep, site prep and fill) will be moved to FY 2005 and 2006.

COST VARIANCE

Description and Cause: The fiscal year-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: Unfavorable cost variances will be managed at the overall company level.

FY 2004 Cumulative Performance – 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	8,761.6	8,761.6	7,746.6	0 0.0%	1,015.0 11.6%	8,761.6

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date schedule variance is within threshold.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-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.

FY 2004 Cumulative Performance – TRU / LLW Packaging						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09.02.02	20,659.8	8,571.9	14,193.5	(12,087.9) -58.5%	(5,621.6) -65.6%	20,659.8

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is due to delays in approval of the Record of Decision for the TWRS Supplement Analysis (SA-4) for dealing with processing and packaging of contact-handled transuranic mixed tank waste.

Impact: Permitting issues and regulatory uncertainty have delayed packaging operation planning such that support of 10 tank closures has been reduced to 8.

Corrective Action: An action plan was initiated with one significant item remaining to delete the Part B Revision 1. Recovery to the baseline October 2004 startup date is not practical, though significant acceleration could be achieved by eliminating Revision 1. The recovery plan will be revised and a Baseline Change Request issued, if necessary.

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable cost variance results from added costs to mitigate permitting delays and additional rework associated with NEPA document revision per DOE. Also, the packaging vendor has accumulated additional design costs resulting from inadequate design estimation. Some of the packaging vendor’s design performance has also been understated against the baseline.

Impact: Recovery planning is in progress. Final impacts will be detailed upon evaluation and planning.

Corrective Action: An action plan was initiated with one significant item remaining to delete the Part B Revision 1.

FY 2004 Cumulative Performance – LAW Treatment						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09.02.03	18,051.5	12,823.3	22,934.0	(5,228.2) -29.0%	(10,110.7) -78.8%	18,051.5

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is due to delays in placement of the supplemental treatment procurements to allow evaluation of bid estimates that exceeded baseline values.

Impact: Delays in supplemental treatment procurements could potentially impact the startup of the Bulk Vitrification Test and Demonstration Facility, with potential impact to HFFACO Milestone M-062-08.

Corrective Action: The revised bid for supplemental treatment procurements was received April 2, 2004, and the contract was awarded in June 2004. However, the variance may be unrecoverable. These activities will be replanned.

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable cost variance results from higher than planned costs associated with Demonstration Bulk Vitrification System RD&D permit and the S-109 function and requirement document.

Impact: Costs for these activities could be above budget at completion.

Corrective Action: These activities will be replanned.

FY 2004 Cumulative Performance – Integrated Disposal Facility						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09.03.01	5,515.9	4,976.0	4,619.3	(539.9) -9.8%	356.7 7.2%	5,515.9

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is within threshold.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance is within threshold.

Impact: No impact.

Corrective Action: None required.

FY 2004 Cumulative Performance – Initial IHLW Storage facility (W-464) (PED)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09.03.04	3,163.2	3,132.8	1,709.2	(30.4) 0.0%	1,423.6 0.0%	3,163.2

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance is within threshold.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-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.

Milestone M-43-00, Tank Farm Upgrades

I. Near-Term Deliverables:

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

Due: 06/30/05

Status: Field work is resuming. Developing schedule recovery plans for remaining field work (see Issues). Status of major system upgrades shown in table below.

Project	Scope	Status
W-314 Phase 1	New AZ Valve Pit	Installation Complete
	Upgrade 10 Existing Pits (leak detection, drain seals, jumpers, nozzles and nozzle seals, valve actuators and indicators, crack repair, special protective coating, cover blocks)	Installation Complete
	Add 11 Waste Transfer Lines	Installation Complete, Awaiting transfer outage following M-45-03C & 05A for cross-site tie-in
	Add Master Pump Shut Down Capability	Installation Complete
W-314 Phase 2	Upgrade 27 Existing Pits	Installation Complete for 20 of 27 pits
	Replace Primary AN & AW HVAC	Installation Complete
	Replace Annulus SY HVAC	Installation Complete
	Backup HVAC Power in 3 tank farms	Installation Complete
	Add Pressure Monitoring in 28 tanks	Installation Complete
	Install 3 Waste Transfer Lines	Installation Complete
	Upgrade 2 Motor Control Centers	Installation Complete
	By-Pass 244-S DCRT	Installation Complete
E-525	By-Pass 241-A-A valve pit	In Progress Awaiting transfer outage following M-45-03C & 05A for tie-in
	Upgrade 4 transfer line - pit penetrations	In Progress Coordinating field schedule with M-45-03C & 05A
	Remove 16 Clean Out Boxes	Modifications Complete for 6 of 16 COBs
	Upgrade 204-AR Transfer Lines	Installation Complete
	Upgrade AY/AZ Condensate system	In Progress

II. Significant Accomplishments:

- Drafted recovery plans for IMES incorporation
- Continued field work for low risk work packages
- Continued preparation and review of medium and high risk work packages

III. Significant Planned Actions in the Next Six Months:

- W-314, Phase 1 Waste Transfer System: cross-site tie-in
- W-314, Phase 2 AP Farm: 6 pit upgrades
- W-314, Phase 2 SY Farm: 1 pit upgrade
- W-314, A-A Valve pit bypass: modifications and tie-in
- E-525, AY/AZ condensate and drain system
- E-525, SY farm transfer line modifications

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

- None

V. Issues:

- Field work schedules have been impacted by:
 - additional respiratory protection requirements
 - compensatory controls for radiological control performance (TFC-MD-038)
 - mercury monitoring in tank farms (TFC-MD-043)
 - high contamination levels and waste disposal requirements in Pit SY-B
 - other field priorities (M-45 retrievals)
 - availability of key resources (IH and RadCon technicians, Planners)

Action: Evaluation and planning efforts are attempting to recover the M-43-00 milestone in the Integrated Mission Execution Schedule (IMES). The recovery plans will be risked-based and address the specific issues noted above, including additional planning staff, dedicated field crews, revised shift schedules, additional personnel protective equipment availability and close coupling with S-102 and S-112 retrieval schedules.

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

I. Deliverables:

- **M-46-00J, Double-Shell Tank Space Evaluation**
Due: 09/30/03
Status: **Complete**. Document was transmitted from ORP to Ecology in Letter 03-TPD-093, R. J. Schepens (ORP) to M. A. Wilson (Ecology), "Completion of Hanford Federal Facility Consent Order (HFFACO) Interim Milestones M-045-02L and M-046-00J, dated September 25, 2003.
- **M-46-01J, Concurrence of Additional Tank Acquisition**
Due: Cancelled with M-45 change package
Status: Additional actions were requested by Ecology. Letter J. J. Lyon (Ecology) to R. J. Schepens (ORP), Re: RPP-21216, Single Shell Tank Retrieval selection and Sequence, Revision 0, dated September 7, 2004.
- **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. Preparing to perform UT in AP tank farms.

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

Status: Complete

(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 and 2004-01 were completed above 1.41 SpG. Additional upgrades are continuing to support handling of slurries resulting from high SpG 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:

- Evaporator campaigns as shown in the attached table
- Supplemental UT evaluation of AP-104 for increased fill height structural qualification

IV. Issues:

- None to report
-

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

	Jul-04	Aug-04	Mar-04	Mar-05**	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Campaign	2003-03	2003-04	2004-01	2005-01a	2005-01b	2005-02	2005-03	2005-04	2005-05	2006-01	2006-02
Staging Tk	AP-108	SY-101	AP-105	AP-107	AP-107	AP-105	AP-107	AP-104	AP-101	AY-102	AW-106
Campaign Boil-off Upper Planned Limit- kGallons	497	120.9	185	120*	207*	382*	485*	426*	333*	845*	277*
Campaign Boil-off Actual kGallons	464.6	136.1	164								
Target WVR% (Post-Flush)	40%	20%	19%	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Actual WVR% (Post-Flush)	39.00%	22.50%	17%								
Specific Gravity	1.46	1.42	1.43								

Data Sources:

Evaporator Schedule from: Historical records, IMES, and HTWOS model
 Campaign Upper Limits: Boil down tests prior to each run, model runs are used for preliminary information
 Actual WVR and SpG: Evaporator instruments, tank instruments and laboratory reports

*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.
 - 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

- **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.
 - AP-101 transfer pump was installed March 2004
 - Transfer pump jumper installed May 2004
 - Transfer piping is addressed in M-47-02
 - AP-101 construction was completed July 2004
 - Awaiting Operational Acceptance Testing

- **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: Ahead of schedule.
 - AP-101 Transfer pump was installed March 2004
 - Awaiting Operational Acceptance Testing of AP-101 Transfer pump

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.
 - AZ-101 Retrieval system upgrades are nearing completion (w/exception of transfer pump installation)

- Completed AY-102 90% design package for review
 - **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:**
- Completed AY-102 90% design package for review
- III. Significant Planned Actions in the Next Six Months:**
- W-211, AZ-101 Retrieval System, complete construction punch list and project turnover (delayed transfer pump installation to FY08)
 - AP-101, transfer pump turnover to operations
- IV. Near-term Actions Needed by DOE or Ecology:**
- None
- V. Issues:**
- Field work has been impacted by tank vapors and implementation of respiratory policy
Action: CH2M HILL is monitoring plans and schedules. Recovery plans are being developed where necessary.

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: On schedule
 - Completion of four limits of technology retrieval demonstrations:
 - Saltcake dissolution (S-112): In progress
 - Modified sluicing (C-106): Completed
 - Vacuum retrieval (C-200's): In progress
 - Mobile retrieval (C-101, C-110, or C-111): Retrieval planned FY 2006

 - 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; collecting baseline data for deployment test
 - Tank C-103: HRR system installation in progress
 - Tank C-109: HRR system installation in progress

 - 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 (C-103 and C-109)
 - Four (4) 100-series tanks by 10/31/04: Transmitted TWRWP for tanks C-102, C-104, C-107, C-108, and C-112 to Ecology on 10/8/04
 - Five (5) 100-series tanks by 1/31/05: On schedule

 - Submittal of Waste Management Area (WMA) integration plans by 6/30/05:
 - WMA C: In progress
 - WMA T: In progress

- **M-45-00C, Initiate Negotiation of SST Waste Retrieval and Closure Activities and Associated Schedules (for the Period September 2006 through September 2008)**
Due: 6/30/05
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 TPA Change Request M-45-04-01
- Baseline Change Request RPP-04-029 approved by ORP to incorporate TPA Change Request M-45-04-01 into the baseline.
- Completed "draft" of RPP-21217, "Hanford Tank Waste Operations Simulator Model Data Package for the Tri-Party Agreement M-45-04-01 Change Request Case," August 2004.

III. Significant Planned Activities in the Next Six Months

- Completion of saltcake dissolution retrieval technology demonstration (S-112).
- Completion of vacuum retrieval technology demonstration (C-203).
- Issue C-Farm 100-series tanks TWRWP's covering nine tanks.

IV. Issues

- Nothing to report.

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, "Single-Shell Tank Retrieval Selection and Sequence," establishing a tank pool list in June 2004.

III. Significant Planned Activities in the Next Six Months

- Ecology and ORP reach agreement on SSTs to be retrieved in FY05.

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 4/22/06

II. Significant Accomplishments

- Released Tank Fill Design.
- Procured construction contract for tank isolation.
- Submitted the residual waste analysis, risk assessment, closure plan, and Appendix H exception request to Ecology and EPA completing TPA target milestones M-45-05L-T01 and M-45-05M-T01; and TPA milestone M-45-05H. Prepared responses to Ecology comments for discussion at comment resolution workshop planned in December 2004.
- Met with Nuclear Regulatory Commission (NRC) to initiate their technical review of waste retrieval processes and documents.
- Developed numerical model for residual waste volume determination; discussed application of the model with Ecology.
- Received C-106 Closure Plan Completeness Determination from Ecology.
- Completed C-106 Activity Description for incorporation into the Startup Notification Report.

III. Significant Planned Activities in the Next Six Months

- Continue preparations for C-106 interim closure.
- Convene Appendix H exception request comment resolution workshop with Ecology.
- ORP approval of Activity Description.
- ORP approval of Safety Evaluation and Safety Basis Amendment.
- Resolution of Data Quality Objectives for tank sampling, analysis, and volume measurement.

IV. Issues

- Due to supplied air requirements in tank farms, C-106 isolation field work has been delayed into FY 2005.
- C-106 Closure Plan approval is pending completion of the Tank Closure Environmental Impact Statement and associated Record of Decision.

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: 3/31/05
Status: Forecasted for completion by 4/15/05
- **M-45-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**
Due: 12/31/05
Status: Forecasted for completion by 1/19/06
- **M-45-15-T01, Final Completion of Tank S-102 SST Retrieval and Closure Demonstration Project**
Due: 12/31/06
Status: On schedule

II. Significant Accomplishments

- Completed Operations Acceptance Tests for waste retrieval system and portable exhauster.
- Continued testing of HRR leak detection and monitoring system (baseline measurements).
- Awarded design contract for tank preparation and Phase 1 tank fill.
- Issued tank isolation design.
- Issued cascade line isolation design.
- Submitted certified S-102 Component Closure Activity Plan to Ecology.
- Issued the waste retrieval system test results report.
- Continued working on S-A manifold installation; removed jumpers and flushed pit; installed camera in SY-102 for drop leg removal/installation.
- Initiated procurement of S-102 recirculation raw water distribution device riser extensions and shield boxes.
- Incorporated comments and released the design for S-102 tank fill.

III. Significant Planned Activities in the Next Six Months

- Complete work package closeout required for startup of retrieval system.
- Initiate retrieval operations.

IV. Issues

- The tendency for sodium phosphate to solidify may cause problems with retrieval. Evaluating 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.
- All field work delayed pending incorporation of compensatory measures in work packages for performance of radiological controls and mercury monitoring in tank farms.
- Drop leg at SY-102 plugged; replacement underway.

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: 3/31/05
Status: On schedule

- **M-45-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**
Due: 12/31/05
Status: Forecasted for completion by 1/19/06
- **M-45-13-T01, Final Completion of Tank S-112 SST Retrieval and Closure Demonstration Project**
Due: 12/30/06
Status: On schedule

II. Significant Accomplishments

- Retrieval is at 90.2% complete (554 Kgal of 614 Kgal).
- Issued tank isolation design.
- Issued clamshell test summary report.
- Awarded contract for off-riser sampler.
- Initiated procurement of construction contraction for tank isolation.
- Submitted S-112 Component Closure Activity Plan to Ecology.
- Incorporated comments and released design for S-112 tank fill.

III. Significant Planned Activities in the Next Six Months

- Complete retrieval operations.
- Conduct post retrieval sampling in support of closure.
- Issue Retrieval Data Report and other information documenting completion of retrieval operations.
- Incorporate ORP comments into the Data Quality Objective and submit to Ecology.
- Initiate off-riser sampler procurement and system delivery.
- Complete full-scale saltcake waste retrieval technology demonstration at single-shell tank S-112 (M-45-03C).

IV. Issues

- Resumption of retrieval operations on hold pending completion of SY-102 drop leg and S-A valve pit manifold installation, and completion of cross-site transfer.
- All field work delayed pending incorporation of compensatory measures in work packages for performance of radiological controls and mercury monitoring in tank farms.

ACCELERATED C-FARM TANK RETRIEVALS

Tank 241-C-101

I. Deliverables

- **Submit TWRWP to Ecology**
Target Date: 12/31/04

- **Start Waste Retrieval System Installation**
Target Date: 3/1/05
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 3/9/06
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 10/15/06 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 10/15/06 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 4/13/07

II. Significant Accomplishments

- Continued review and approval of final design package.
- Approved procurement specification.
- Approved task order for additional Mobile Retrieval System equipment procurement.
- Continued procurement of long-lead retrieval system hardware.
- Draft of TWRWP completed.

III. Significant Planned Activities in the Next Six Months

- Complete final design.
- Obtain major system components and initiate retrieval system installation.
- Submit TWRWP to Ecology.
- Issue Closure DQO/SAP.

IV. Issues

- Authorization to recycle supernatant. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-102

I. Deliverables

- **Submit TWRWP to Ecology**
Completed: 10/08/04
- **Start Waste Retrieval System Installation**
Target Date: 11/29/04
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 9/6/05
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 10/25/06 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 7/12/06 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 10/8/07

II. Significant Accomplishments

- Continued procurement of retrieval system hardware.
- Reviewed final design package; modified design to utilize equipment already procured for C-105 retrieval; modified design media to reflect change in supernatant recirculation pump.
- Approved Statement of Work for ex-tank leak detection, monitoring, and mitigation.
- Inspected cover plate for AN-101.
- Submitted TWRWP to Ecology.
- Continued slurry pump and slurry distributor fabrication.
- Received partial shipment of hose-in-hose transfer line shield plate.
- Prepared Statement of Work for retrieval system construction.
- Performed Criticality Safety Evaluation Report determination.

III. Significant Planned Activities in the Next Six Months

- Release final design package.
- Complete retrieval system procurement.
- Initiate retrieval system installation.
- Issue Closure DQO/SAP.

IV. Issues

- Ecology approval to start retrieval system installation requested no later than 11/1/04.

- Authorization to recycle supernatant. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-103

I. Deliverables

- **Submit TWRWP to Ecology**
Completed: 07/29/04
- **Start Waste Retrieval System Installation**
Target Date: 1/27/04
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 6/28/05
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 12/20/05 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 5/27/05 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 12/5/06

II. Significant Accomplishments

- Installed hose-in-hose transfer line and shield pits from C-Farm to AN-Farm.
- Submitted TWRWP to Ecology for review; received Ecology comments.
- Installed leak detection/monitoring outside of tank farm.
- Calibrated raw water manifold.
- Developed risk-based decision analysis model to support recirculation of DST supernatant.
- Installed hose-in-hose transfer line from Pit 03B to the waste retrieval system valve box.
- Updated Safety Evaluation unit liter dose for sump pumps.
- Provided process and verification of engineering data to support risk-based decision analysis modeling.

- Completed inspection of slurry distributor pump, supernatant pump, control trailer, and portable value pit.
- Completed Enhanced Work Planning on AN-106 equipment installation.
- Completed Independent Review Team for pit washing and slurry pump installation work packages.
- Released instrument list for C-103 retrieval system.

III. Significant Planned Activities in the Next Six Months

- Complete retrieval system procurement.
- Continue retrieval system installation, readiness, and startup.
- Issue Closure DQO/SAP.

IV. Issues

- Approval to use supernatant recirculation. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-104

I. Deliverables

- **Submit TWRWP to Ecology**
Completed: 10/08/04
- **Start Waste Retrieval System Installation**
Target Date: 10/3/05
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 9/30/06
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 1/2/08 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 10/1/07 (Within 120 days after completion of retrieval actions)

- **Complete Interim Closure**

Target Date: 2/6/09

II. Significant Accomplishments

- Continued baseline development.
- Developed and released Process Flowsheet.
- Submitted TWRWP to Ecology.

III. Significant Planned Activities in the Next Six Months

- Complete retrieval system design.
- Initiate retrieval system procurement.
- Issue Closure DQO/SAP.

IV. Issues

- Approval to use supernatant recirculation. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-105

I. Deliverables

- **Submit TWRWP to Ecology**

Target Date: 12/31/04

- **Start Waste Retrieval System Installation**

Target Date: 8/1/05

- **Issue Closure DQO/[SAP]**

Target Date: 1/25/05 [4/20/05]

- **Start Waste Retrieval Operations**

Target Date: 9/30/06

- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**

Target Date: 6/18/07 (Within 120 days after completion of retrieval actions)

- **Submit Closure Plan (Rev. 0) to Ecology**

Target Date: 7/25/05 (Within 120 days after completion of retrieval actions)

- **Complete Interim Closure**

Target Date: 5/30/08

II. Significant Accomplishments

- Continued baseline development; developed baseline for Mobile Retrieval System deployment.
- Updated Safety Evaluation unit liter dose for sump pumps.
- Draft of TWRWP completed for Mobile Retrieval System.

III. Significant Planned Activities in the Next Six Months

- Retrieval technology has changed from Modified Sluicing to Mobile Retrieval System. Design work will start in early FY 2005.
- Initiate procurement of retrieval system.
- Complete tank investigation for construction.
- Submit TWRWP for the Mobile Retrieval System to Ecology.
- Issue Closure DQO/SAP.

IV. Issues

- Approval to use supernatant recirculation. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-107

I. Deliverables

- **Submit TWRWP to Ecology**
Completed: 10/08/04
- **Start Waste Retrieval System Installation**
Target Date: 7/1/05
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 7/4/06
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 2/28/07 (Within 120 days after completion of retrieval actions)

- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 11/7/06 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 2/4/08

II. Significant Accomplishments

- Continued baseline development.
- Submitted TWRWP to Ecology.

III. Significant Planned Activities in the Next Six Months

- Complete retrieval system design.
- Initiate retrieval system procurement.
- Issue Closure DQO/SAP.

IV. Issues

- Approval to use supernatant recirculation. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-108

I. Deliverables

- **Submit TWRWP to Ecology**
Completed: 10/08/04
- **Start Waste Retrieval System Installation**
Target Date: 5/2/05
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 4/15/06
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 8/29/06 (Within 120 days after completion of retrieval actions)

- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 5/15/06 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 8/10/07

II. Significant Accomplishments

- Continued review of final design package.
- Submitted TWRWP to Ecology.

III. Significant Planned Activities in the Next Six Months

- Complete retrieval system design.
- Initiate retrieval system procurement.
- Issue Closure DQO/SAP.

IV. Issues

- Approval to use supernatant recirculation. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-109

I. Deliverables

- **Submit TWRWP to Ecology**
Completed: 07/29/04
- **Start Waste Retrieval System Installation**
Target Date: 1/3/05
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 10/19/05
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 3/8/06 (Within 120 days after completion of retrieval actions)

- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 11/17/05 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 2/9/07

II. Significant Accomplishments

- Placed order for slurry pump.
- Completed shielding calculations for final design package.
- Continued review and approval of final design package.
- Submitted TWRWP to Ecology.

III. Significant Planned Activities in the Next Six Months

- Complete retrieval system design.
- Complete retrieval system procurement.
- Initiate retrieval system installation.
- Issue Closure DQO/SAP.

IV. Issues

- Ecology approval to start retrieval system installation requested no later than 11/30/04.
- Approval to use supernatant recirculation. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-110

I. Deliverables

- **Submit TWRWP to Ecology**
Target Date: 12/31/04
- **Start Waste Retrieval System Installation**
Target Date: 5/2/05
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 9/9/06

- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 8/30/07 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 5/17/07 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 8/8/08

II. Significant Accomplishments

- Continued baseline development.
- Draft of TWRWP completed.

III. Significant Planned Activities in the Next Six Months

- Initiate retrieval system design.
- Initiate retrieval system procurement.
- Submit TWRWP to Ecology.
- Issue DQO/SAP.

IV. Issues

- Approval to use supernatant recirculation. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-111

I. Deliverables

- **Submit TWRWP to Ecology**
Target Date: 12/31/04
- **Start Waste Retrieval System Installation**
Target Date: 7/18/05
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 6/16/06

- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 4/6/07 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 12/20/06 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 3/17/08

II. Significant Accomplishments

- Continued baseline development.
- Draft of TWRWP completed.

III. Significant Planned Activities in the Next Six Months

- Initiate retrieval system design.
- Initiate retrieval system procurement.
- Submit TWRWP to Ecology.
- Issue Closure DQO/SAP.

IV. Issues

- Approval to use supernatant recirculation. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-112

I. Deliverables

- **Submit TWRWP to Ecology**
Completed: 10/08/04
- **Start Waste Retrieval System Installation**
Target Date: 3/1/05
- **Issue Closure DQO/[SAP]**
Target Date: 1/25/05 [4/20/05]
- **Start Waste Retrieval Operations**
Target Date: 1/10/06

- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 6/13/06 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 3/1/06 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 5/18/07
Status: Target date subject to change due to implementation of Management Directives MD-38 and MD-43, resource availability, and inter-project logic ties with W-211 and W-314. Project Team working on schedule efficiencies to meet TPA commitments.

II. Significant Accomplishments

- Completed 30% design.
- Submitted TWRWP to Ecology.

III. Significant Planned Activities in the Next Six Months

- Complete retrieval system design.
- Complete retrieval system procurement.
- Initiate retrieval system installation.
- Issue Closure DQO/SAP.

IV. Issues

- Approval to use supernatant recirculation. Retrieval design proceeding at risk assuming DST supernatant recycle.
- Management Directives MD-038 and MD-043 for radiological control compensatory measures and mercury monitoring, respectively, are impacting work in tank farms.
- All tank farm entries require use of respiratory protection until further notice due to vapor concerns.

Tank 241-C-201

I. Deliverables

- **Issue Closure DQO/[SAP]**
Target Date: 10/11/04 [11/18/04]
- **Start Waste Retrieval Operations**
Target Date: 4/14/05
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**

Target Date: 8/31/05 (Within 120 days after completion of retrieval actions)

- **Submit Closure Plan (Rev. 0) to Ecology**

Target Date: 8/31/05 (Within 120 days after completion of retrieval actions)

- **Complete Interim Closure**

Target Date: 5/31/06

II. Significant Accomplishments

- Released C-200 series tanks fill design.
- Awarded design contract for tank preparation and Phase 1 tank fill.
- Received WDOH approval of the C-200 series tanks NOC.
- Generated C-200 series tanks Auto Tank Characterization Report.
- Prepared C-200's Release Rate Studies Report.
- Inserted pre-retrieval inventory for C-200's into Decision Management Tool.
- Met with Ecology to define path forward on Global Data Quality Objectives (DQO) and Global Sampling and Analysis Plan (SAP) for SSTs.
- Continued working with Ecology to finalize C-200's F&R.
- Completed C-200's Laboratory Data Package Validation/Verification.
- Completed C-200's Best-Basis Inventory updates.
- Revised and released the Process Control Plan to reflect updated commitments included in the C-200's Functions and Requirements document.
- Completed the continuous air monitor source functional and ANSI N13.1 compliance checks for exhaustor POR-03.
- Revised the Camera/CAD Modeling System test results report to include C-200 tank configuration data.

III. Significant Planned Activities in the Next Six Months

- Obtain Ecology approval of the C-200's F&R document
- Issue C-200's Risk Assessment for Interim Closure Data Report.
- Issue Global DQO and SAP for SSTs.
- Submit C-200's certified Closure Plan to Ecology.
- Completed C-200's retrieval operations.

IV. Issues

- Work has been impacted by vapor concerns and supplied air requirements, and work stoppage to address radiological controls compensatory measures and mercury monitoring in tank farms.
- Waste removal rate for the vacuum retrieval system is less than expected.

Tank 241-C-202**I. Deliverables**

- **Issue Closure DQO/[SAP]**
Target Date: 10/11/04 [11/18/04]
- **Start Waste Retrieval Operations**
Target Date: 3/17/05
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 10/31/05 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 10/31/05 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 6/30/06

II. Significant Accomplishments

- See accomplishments under Tank C-201.

III. Significant Planned Activities in the Next Six Months

- See planned activities under Tank C-201.
- Initiate retrieval operations.

IV. Issues

- See issues under Tank C-201.

TANK 241-C-203**I. Deliverables**

- **Issue Closure DQO/[SAP]**
Target Date: 10/11/04 [11/18/04]
- **Start Waste Retrieval Operations**
Target Date: 7/1/04
Status: Retrieval started 7/1/04, ~ 70% completed
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 4/30/05 (Within 120 days after completion of retrieval actions)

- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 4/30/05 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 1/19/06

II. Significant Accomplishments

- See accomplishments under Tank C-201.
- Initiated retrieval operations in C-203 during July 2004, roughly 70% completed.
- Completed C-203 mock-up testing at the CTF.
- Completed replacement and calibration of the failed limit switch LS-02.
- Completed revisions and release of operating procedures.
- Complete installation of remote heat trace power indicator.
- Commenced signoff of the Operations Acceptance Checklist.
- Continued planning sessions to reconfigure the waste slurry vacuum line.

III. Significant Planned Activities in the Next Six Months

- See planned activities under Tank C-201.
- Reconfigure waste slurry vacuum line.
- Resume and complete retrieval operations; initiate preparation of post-retrieval documentation.

IV. Issues

- Testing at CTF conducted to evaluate retrieval rate of vacuum system; recommendation was to reconfigure the waste slurry vacuum line; C-203 retrieval shutdown to reconfigure waste slurry vacuum line.
- See issues under Tank C-201.

TANK 241-C-204

I. Deliverables

- **Issue Closure DQO/[SAP]**
Target Date: 10/11/04 [11/18/04]
- **Start Waste Retrieval Operations**
Target Date: 5/12/05
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 10/31/05 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 10/31/05 (Within 120 days after completion of retrieval actions)

- **Complete Interim Closure**

Target Date: 9/30/06

II. Significant Accomplishments

- See accomplishments under Tank C-201.

III. Significant Planned Activities in the Next Six Months

- See planned activities under Tank C-201.

IV. Issues

- See issues under Tank C-201.

OTHER 200 SERIES TANKS

241-B-200 Series Tanks

I. Deliverables

- **Submit TWRWP to Ecology**

Target Date: 2/28/05

- **Start Waste Retrieval System Installation**

Target Date: 3/29/05

- **Issue Closure DQO/[SAP]**

Target Date: TRU: 12/10/04 [6/15/05] Non-TRU: 3/22/05 [6/15/05]

- **Start Waste Retrieval Operations**

Target Date: 3/1/06

- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**

Target Date: 8/3/06 (Within 120 days after completion of retrieval actions)

- **Submit Closure Plan (Rev. 0) to Ecology**

Target Date: 5/30/06 (Within 120 days after completion of retrieval actions)

- **Complete Interim Closure**

Target Date: 9/26/07

II. Significant Accomplishments

- Early completion of final retrieval system design.
- Continued with fabrication and factory testing of the B-200 series vacuum retrieval system. Estimated delivery in November 2004.

III. Significant Planned Activities in the Next Six Months

- Complete fabrication, factory acceptance testing, and delivery of vacuum retrieval system.
- Submit TWRWP to Ecology.
- Issue Closure DQO/SAP.
- Complete revision of the Decision Management Tool including insertion of Waste Management Area B inventory into the tool.

IV. Issues

- No retrieval work scope approved for FY 2005 with impacts to out-year target dates.

241-T-200 Series Tanks

I. Deliverables

- **Submit TWRWP to Ecology**
Target Date: 2/28/05
- **Start Waste Retrieval System Installation**
Target Date: 12/12/05
- **Issue Closure DQO/[SAP]**
Target Date: TRU: 12/10/04 [6/15/05] Non-TRU: 3/22/05 [6/15/05]
- **Start Waste Retrieval Operations**
Target Date: 5/10/06
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 11/20/06 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 8/10/06 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 1/14/08

II. Significant Accomplishments

- Nothing to report. Continued with the fabrication and factory testing of the T-200 series vacuum retrieval system.

III. Significant Planned Activities in the Next Six Months

- Complete fabrication, factory acceptance testing, and delivery of vacuum retrieval system; forecast completion by 11/30/04.
- Commence with retrieval system installation and startup testing.

- Submit TWRWP to Ecology.
- Issue Closure DQO/SAP.

IV. Issues

- No retrieval work scope approved for FY 2005 with impacts to out-year target dates.

241-U-200 Series Tanks

I. Deliverables

- **Submit TWRWP to Ecology**
Target Date: 11/30/04
- **Start Waste Retrieval System Installation**
Target Date: 5/31/05
- **Issue Closure DQO/[SAP]**
Target Date: 1/31/05 [4/26/05]
- **Start Waste Retrieval Operations**
Target Date: 9/30/05
- **Submit Retrieval Data Report to Ecology or Request for Exception per Appendix H**
Target Date: 4/30/06 (Within 120 days after completion of retrieval actions)
- **Submit Closure Plan (Rev. 0) to Ecology**
Target Date: 4/30/06 (Within 120 days after completion of retrieval actions)
- **Complete Interim Closure**
Target Date: 12/7/06

II. Significant Accomplishments

- Completed final design and new layout of retrieval system.
- Received articulated mast systems.
- Completed fabrication and delivery of articulated mast containment boxes.
- Completed procurement and delivery of hose-in-hose transfer lines.
- Completed fabrication and delivery of ventilation system demisters.
- Completed installation of the grounding grid outside of U-Farm.
- Completed revision of U-200's Decision Making Tool (DMT); initiated insertion of Waste Management Area U inventory into the DMT.
- Placed contract for the supply of the U-200's tank wash down system.
- Completed installation and inspection of grounding grid outside U-Farm.
- Continued redesign of the U-200 retrieval system to include deployment of the new skids at U-Farm.

- Completed the shop assembly and pressure testing of the U-200 inlet breather filter assemblies.
- Commenced replacement of SY-102 drop leg; installed camera to facilitate replacement of drop leg.

III. Significant Planned Activities in the Next Six Months

- Complete replacement and flushing of the SY-102 slurry drop leg.
- Complete installation of hose-in-hose transfer line between U-Farm and SY-Farm.
- Complete retrieval system construction and testing.
- Complete insertion of Waste Management Area U inventory into the DMT.
- Complete U-200's Risk Assessment for RCRA Closure Plan.
- Submit TWRWP to Ecology.
- Issue Closure DQO/SAP.
- Submit Closure Plan to Ecology.

IV. Issues

- U-200 series tanks construction schedule continuing to be negatively impacted by C-200 series tanks delays.
- Work impacted by vapor concerns and supplied air requirements, and work stoppage to address radiological controls compensatory measures and mercury monitoring in tank farms.

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: Cone penetrometer sampling in T and TY farms is planned for Fall 2004. Lab work continues, writing of document is underway.

- **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: Cone penetrometer sampling in C Farm started in October 2004. 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: 1/31/07

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:

- Analysis of corrosion samples is continuing to determine the cause of corrosion of two groundwater monitoring wells at WMA A-AX.
- Six RCRA Groundwater monitoring detection wells were installed at SST WMA's and accepted into Groundwater monitoring by PNNL.
- Measurement and sampling activities are underway at C Farm using the cone penetrometer.

- Moisture monitoring was completed in the drywells around tank C-106.

III. Significant Planned Actions in the Next Six Months:

- Continue work on T/TX-TY Field Investigation Report.
- Continue Vadose Zone field work in C Farm, with cone penetrometer measurement/sampling.
- Initiate geophysical logging in laterals beneath 241-A and 241-SX tank farms.

IV. Issues:

- Continue work under new respiratory procedures at Vadose zone sites in Tank Farms.

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 IHLW Shipping/Storage Pre-conceptual Study – September 2004.
- Issued IDF Closure Plan – October 2004

III. Significant Planned Actions in the Next Six Months:

- Begin IHLW Permit NOD Workshops – November 2004.
- Complete raw water and electrical tie-ins for IDF - November 2004
- Construct two additional groundwater monitoring wells for IDF – TBD.
- Complete IDF operation support documents (i.e. Operations and Maintenance Philosophy, System Design Description) – November 2004.
- Complete IDF excavation – December 2004.

- Initiate construction of IDF Critical Systems – TBD (RCRA permit dependent).
- Initiate air sampling and groundwater monitoring to support development (one year effort) of the pre-operational baselines – TBD.
- Issue FY04 Performance Assessment Annual Summary– December 2004.
- Prepare draft air permit for IDF operations – January 2005.
- Issue draft IDF PDSA for DOE approval – January 2005.
- Issue IDF Operations Performance Specification – January 2005.
- Draft IHLW FDSA for DOE Approval – April 2005

IV. Issues

- Delay in issuance of an IDF final status RCRA permit beyond March 1, 2005 will impact the schedule for construction.
- IHLW permit NOD workshops needed to start in September 2004 in accordance with the permitting plan to support procurement and construction activities in 2006. The current permitting plan needs to be revised to address the late start of review/workshops.

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
Deleted per approved Change Request M-23-04-02.
- **M-23-27, Complete 244-CR Liquid Level Assessments**
Due: 12/30/04
Status: On schedule

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.
- Completed installation of tank and sump riser extensions in pits 002 and 011 at 244-CR Vault to facilitate equipment removal.
- Continued efforts to re-format field work packages in response to Management Directive MD-38 and MD-43 for radiological controls compensatory measures and mercury monitoring in tank farms.

III. Significant Planned Actions in the Next Six Months:

- Continue monitoring LOWs installed under M-23-25F.
- Remove remaining equipment from 011 pit and sump.
- Prepare the pit and remove equipment from 003 and 001 pits.
- Perform liquid level measurements and video assessments in pits 001, 002, 003, and 011 at 244-CR Vault.

IV. Issues:

- Work has been temporarily suspended at 244-CR Vault pending replanning of work packages to implement compensatory measures required by Management Directive MD-038 following overexposure during removal of thermocouple from pit 002.

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).
- Completed Consent Decree Milestone D-001-00-R21, "Single-Shell Tank Interim Stabilization Activity Report for the Third Quarter of Fiscal Year 2004." Final report was transmitted from ORP to Ecology on 7/19/04 (Letter #04-TOD-048).
- Completed Consent Decree Milestone D-001-00-R22, "Single-Shell Tank Interim Stabilization Activity Report for the Fourth Quarter of Fiscal Year 2004," and transmitted to ORP for review. Final report is due from ORP to Ecology by 10/31/04.
- Issued the Single-Shell Tank Interim Stabilization Evaluation Form for Tank 241-U-108 documenting completion of pumping and satisfaction of interim stabilization criteria.
- 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).

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.

- Issue the last quarterly Single-Shell Tank Interim Stabilization Activity Report to Ecology by 10/31/04 (Consent Decree Milestone D-001-00-R22).

IV. Issues:

- Interim stabilization of S-102 and S-112 held in "abeyance" by third amendment to Consent Decree provided both tanks are retrieved by 3/31/05. S-112 retrieval forecasted for completion by 2/5/05. Completion of retrieval of S-102 by 3/31/05 may be in jeopardy given delays due to breathing air requirements and work stoppage to address radiological compensatory measures, mercury monitoring in tank farms, and concerns regarding formation of sodium phosphate gels during waste retrieval and transfer operations. Completion of retrieval operations is currently forecasted by 6/1/05.

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:

- Milestone M-48-12 was met by submittal of examination reports for tanks SY-103, SY-101, SY-102 and AP-104. "There were no crack-like indications in the walls or in any of the heat affected zones and no pitting or thinning exceeding the established acceptance criteria." There were several areas that did meet the criteria for reporting and tracking.
- Request made to Ecology for approval of the next (also the last) four tanks for UT examinations.
- Completed AP-106 and AP-104 tank annulus video examination.

III. Significant Planned Actions in the Next Six Months:

- Complete primary video inspection of tank AP-106.
- Complete UT examination of tank AP-106.
- Complete annulus video examination of tank AP-102.
- Begin UT examination of tank AP-102.
- Begin UT examination of tank AN-103
- Begin UT examination of tank AN-104

IV. Issues:

- The recovery action associated with meeting the M-48-14 milestone consists of bringing on a second UT crew which is scheduled to begin work November 15, 2004.

The second UT crew will perform field set up activities associated with all M-48-13/M-48-14 UT activities. The second UT crew will also perform the remaining annulus and primary tank videos and primary transfer line video activities associated with the M-48-14 milestone. The existing primary UT crew will perform all M-48-13 milestone UT activities in the first half of FY05 and will then perform the residual UT activities associated with the M-48-14 milestone in the remainder of FY05. The recovery plan also consists of a two UT crawler scanning approach at each tank. The two crawler approach will allow for a tank UT scan activity to be performed using two crawlers simultaneously thus cutting the scan time of each tank in half.

In Tank Characterization and Summary

As of November 15, 2004

I. Significant Accomplishments:

- Sampling Activities:
 - Took Condensate samples from the SX-114 breather filter and grab samples from dilution tanks for salt well pumping of BY-105 and BY-106 to support closure project.
 - Planned to take grab samples from Tank S-112 to support Supplemental Technology Program.
 - Planned to take vapor samples from U Farm to support Industrial Hygiene Program.

BBI Updates:

- Completed 32 BBI updates during the fourth quarter of FY 2004.

DQO:

- The following DQOs are in circulation for review
 - Single-Shell Tank Component Closure DQO
 - Evaluation of Tank Chemical Emission For Worker Safety DQO
 - DQO for the Demonstration Bulk Vitrification System

II. Planned Action Within the Next Six Months:

- Continuation of BBI updates. 55 updates are planned for the first Quarter of FY05.
- Complete and publish DQO for the Demonstration Bulk Vitrification System by the end of November 2004.

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: **On schedule**

- **Complete assessment of 242-S and 242-T Evaporators**
Due: 6/30/05 (second quarter 2005)
Status: **On schedule**

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:

- CHG conduct assessment and prepare draft report - 12/31/04 (fourth quarter 2004)
- CHG/ORP internal review of draft report
- CHG submit final report to ORP – 1/25/05
- Submit Assessment Report to Ecology – 1/31/05.

IV. Issues

- None

Hanford Waste Treatment and Immobilization Plant (WTP) 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 facility, the High Level Waste vitrification facility, the Low Activity Waste vitrification facility, the Analytical Laboratory, and the Balance of Facilities. A brief status is provided below for each facility. Status of these individual facilities is provided during the monthly Program Manager's Meeting. This status reflects September 2004 data.

Pretreatment (PT) Facility:

The PT Facility mission is to separate radioactive tank waste into Highly Radioactive Waste and Low Activity Waste fractions and transfer each waste to its respective vitrification facilities. Construction of the facility began November 2002 and is scheduled to be completed in January 2008. This project is approximately 36% complete.

High Level Waste (HLW) Facility:

The HLW Facility will receive the HLW fraction from the PT Facility and vitrify it to immobilize this HLW waste. Construction began July 2002 and is scheduled for completion in November 2007. This Project is approximately 32%.

Low-Activity Waste (LAW):

The LAW Facility will receive the LAW fraction from the PT Facility and vitrify it to immobilize this LAW. Construction began July 2002 and is scheduled for completion November 2007. This facility is approximately 37% complete.

Analytical Laboratory (LAB):

The LAB Facility will 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. The LAB will outsource low level and non-radioactive (environmental) samples. This project as a whole is approximately 15%.

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. This project is approximately 41% complete.

Project Baseline Cost:

Through September 2004, the project cost is provided in the table below. The contingency is \$455 million which allows approximately 15% contingency for remaining

to go work (reported 15% in August). BNI submitted the 2004 Estimate at Completion (EAC) package on July 29, 2004 (last column in the table).

	March 2003 Approved Baseline	Current June 2004	Estimate at Completion July 29, 2004*
PMB	4,856M	4,951M	5,045M
Contingency	550M	455M	422M
Fee	225M	225M	225M
Transition Costs	50M	50M	50M
TPRA	100M	100M	88M
TOTAL	5.781 B	5.781	5,830M

* EAC increased potential costs; contingency by \$48 million in commissioning; increased contingency in schedule by \$25 million; maintained 80% confidence level.

Baseline Schedule:

Engineering is approximately 72 percent complete; construction is 33 percent complete; and the overall Project is approximately 40 percent complete (based on dollars). In the November reporting, the baseline schedule will be reflect resolved trends, the non-Newtonian mixing and hydrogen control issue resolution, and the next 18-month working schedule detail update. This update is expected to have a 3-5 month impact to the facility schedules, but the contractor still anticipates meeting the baseline milestones.

Project Summary:

Construction installation is about 28% complete based on quantities installed and is 33% spent compared to a 30% planned expenditure (based on dollars). [Construction dollars include craft labor, management, supervision, field engineering, QC, subcontracts, and other support functions.] An average of 1,230 craft and 600 non-manual staff were working on-site. The summary is for the data reported through June 2004.

Total Project Commodity Summary							
<i>Commodity</i>	Engineering		Vendor		Construction		Total Project
	<i>Released</i>	<i>Scheduled</i>	<i>Delivered</i>	<i>Scheduled</i>	<i>Installed</i>	<i>Scheduled</i>	<i>Budgeted</i>
Concrete (yd3)	164,135	201,500	-	-	119,255	138,648	253,309
Structural Steel (ton)	13,763	11,612	4,760	0	1,716	2,566	24,953
Piping (LF) ¹	424,836	491,514	96,396	0	94,355	78,611	981,616
Conduit (LF) ²	244,921	377,095	-	-	173,240	126,640	1,040,314
Cable Tray (LF)	19,781	27,503	-	-	1,937	2,804	109,737
Cable (LF)	238,000	182,611	-	-	36,596	15,625	4,865,130
HVAC Duct (lb.)	776,745	1,145,874	-	-	145,152	179,800	3,509,510

- (1) Includes above and underground pipe
- (2) Include building and underground conduit

I. Deliverables: (WTP Project Specific)

- **M-50-00, Complete Pretreatment Processing of Hanford Tank Waste**
Due: December 31, 2028
Status: On schedule. "River Protection Project System Plan," ORP-11242, Revision 2, model runs show completion can be met. Revision 3 will be issued next spring. The WTP is designed with the capacity and is progressing to support this milestone.
- **M-51-00, Complete Vitrification of Hanford High Level Tank Waste**
Due: December 31, 2028
Status: On schedule. "River Protection Project System Plan," ORP-11242, Revision 2, model runs show completion can be met. Revision 3 will be issued next spring. The WTP is designed with the capacity and is progressing to support this milestone.
- **M-61-00, Complete Pretreatment and Immobilization of Hanford Low Activity Waste (LAW)**
Due: December 31, 2028
Status: On schedule. "River Protection Project System Plan," ORP-11242, Revision 2, model runs show completion can be met. Revision 3 will be issued next spring. The WTP is designed with the capacity and is progressing to support this milestone.
- **M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High Level (HLW) and Low Activity (LAW) Tank Waste**
Due: December 31, 2028
Status: On schedule. "River Protection Project System Plan," ORP-11242, Revision 2, model runs show completion can be met. Revision 3 will be issued next spring. The WTP is designed with the capacity and is progressing to support this milestone.
- **M-62-00A, Complete WTP PT, Processing and Vitrification of Hanford HLW and LAW Tank Wastes (i.e., completed pretreatment and vitrification of no less than 10 percent of Hanford's tank waste by mass* and 25 percent by activity)**
Due: February 28, 2018
Status: On schedule. "River Protection Project System Plan," ORP-11242, Revision 2, model runs show completion can be met. Revision 3 will be issued next spring. The WTP is designed with the capacity and is progressing to support this milestone.
- **M-62-01, Submit Semi-Annual Project Compliance Report**
Due: Semi-Annual Beginning July 31, 2000
Status: Ongoing and on schedule. M-62-01J will be due January 31, 2005.

- **M-62-07B, Complete Assembly of LAW Melter #1** so that it is ready for transport and installation in the LAW vitrification building (BNI baseline schedule activity 4DL321A3200 as part of DOE Contract No. DE-AC27-01RV14136), and complete schedule activity ID 4DH46102A2 – Move #1 melter into the HLW vitrification facility.
 Due: December 31, 2007
 Status: On Schedule. Melter awards were made August 2004.
- **M-62-09, Start Cold Commissioning –Waste Treatment Plant**
 Due: February 28, 2009
 Status: On Schedule.
- **M-62-10, Complete Hot Commissioning - Waste Treatment Plant**
 Due: January 31, 2011
 Status: On Schedule.

II. Significant Accomplishments (in the last three months):

- Completed setting the four LAW Feed Receipt Tanks in the PT Facility on August 26, 2004 ahead of Contract milestone of March 2005.
- Successfully completed hydrostatic testing of the four LAW Feed Receipt Tanks the first week of November.
- HLW awarded the contract for the Carbon Bed Adsorber.
- HLW placed all the walls at the -21' elevation and began slabs on the 0' elevation.
- LAW completed placement of walls and slabs at the +3 foot elevation and installation of the stainless steel liner plates for the process cells.
- The LAB placed the first structural concrete one month ahead of schedule.
- BOF awarded the Glass Former Facility equipment design and supply contract.

III. 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
LAW	Set all +3' elevation major process vessels	7/04	12/04
	Complete placement of slabs at el. +28'	05/05	05/05
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	01/05
	Complete Installation of In-slab Pipe	08/05	08/05
BOF	Complete Cooling Tower Facility Construction	11/04	11/04
	Complete NLD pump house Construction	11/04	11/04
	Complete Fire Water Pump Houses Construction	12/04	12/04
	Complete Fuel Oil pump house Construction	12/04	12/04
	Complete 8 Field Erected Tanks Construction	01/05	01/05
	Complete BOF Switchgear Facility (91) Construction	02/05	02/05

Facility	Milestone	Scheduled	Projected Aug 04
	Complete Steam Plant Construction	05/05	05/05
	Complete Switchgear Facility bldg 87 Construction	07/05	07/05

IV. Issues:

- Mixing and Hydrogen Control:** Thirty-nine WTP tanks use pulse jet mixers. Five Pretreatment vessels contain non-Newtonian fluids. The test program has optimized configurations for mixing. A near full-scale (one-half scale tank size) demonstration of normal and post-Design Basis Event (DBE: loss-of-power and the associated normal plant air supply to the fluidics equipment) non-Newtonian slurry vessel operations is ongoing. Testing (13 tests) are scheduled for completion in December 2004.
- Load Path Analysis/Summary Structural Reports (SSR):** For the HLW SSR, Revision B is currently scheduled for October 30, 2004. The ORP chartered Peer Review Team and the DNFSB staff raised four main issues for resolution that may impact reaching closure including: (1) redistribution of lateral loads due to seismic induced out-of-plane wall cracking, (2) load redistribution out of load channel B in the E-W direction, (3) seismic contribution to demand/capacity ratios, and (4) mesh density used in BNI's finite element model has reached the limits of the GTStrudl modeling capability. All issues are anticipated to be closed the end of November.