

Tri-Party Agreement Milestone Review – Office of River Protection **0061457**
November 18, 2003
Meeting Minutes

Approval: *Michael A. Wilson* Date: 2/24/04
 Michael A. Wilson (B5-18)
 Ecology IAMIT Representative

Approval: *W. Wade Ballard* Date: 2/25/04
 W. Wade Ballard (A5-12)
 RL IAMIT Representative

Approval: *Jim E. Rasmussen* Date: 2/24/04
 Jim E. Rasmussen (H6-60)
 Chairman and ORP IAMIT Representative

Approval: *Nick Ceto* Date: 2/24/04
 Nick Ceto (B5-01)
 EPA IAMIT Representative

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Minutes Prepared by:

Approval: *Eileen J. Murphy-Fitch* Date: 2/24/04
 Eileen J. Murphy-Fitch (A4-25)
 Fluor Hanford, Inc.

EDMC

Aromi, E. S.	CH2M	H6-63	Hertzler, J. S.	FH	A4-25
Bartus, D.	EPA	B5-18*	Jackson, D. E.	RL	A4-52
Bennett, T.	NOV	H6-60	Jackson, G. W.	FH	H5-20
Bilson, H. E.	RL	A3-04	Jentzen, B.	Ecology	B5-18*
Brown, M.	Ecology	B5-18*	Jim, R.	YIN	
Buxbaum, M.E.	FH	B3-53	Keggen, D.	Ecology	B5-18*
Callahan, V.	ORP	H6-60	LaMont, P.	ORP	H6-60
Clark, C. E.	RL	A5-15*	Lober, R.	ORP	H6-60
Clark, D.	ORP	H6-60	Liou W.	ORP	H6-60
Cusack, L.	Ecology	B5-18*	Long, J.	ORP	H6-60
Dahl, S.	Ecology	B5-18*	Lyon, J.	Ecology	B5-18*
DeWitt, K.	Ecology	B5-18	Mattlin, E.	RL	A5-15*
Dixon, B. T.	CH2M	R1-51	Mauss, B.	ORP	H6-60*
Duncan, G. P.	CH2M	R3-76	Miller, P.	CH2M	R1-51
Eschenberg, J.	ORP	H6-60	Morrison, R. D.	FH	A4-25*
Fowler, S. B.	CH2M	H6-22*	Murphy-Fitch, E. J.	FH	A4-25*
Gallagher, R.	FH	H5-20	Niles, K.	OOE*	
Gay, R.	CTUIR		Navarro, J.	ORP	H6-60
Hansen, J. L.	ORP/Inn	H6-60*	Piippo, R. E.	FH	A4-25
Hebdon, J.	RL	A5-12*	Quintero, R.	ORP	H6-60*
Hedges, J.	Ecology	B5-18*			
Henry, D.	OOE*				

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Rasmussen, J. E.	ORP	H6-60	Stevens, A.	ORP	H6-60
Ramsay, M.	ORP	H6-60	Uziemblo, N. H.	Ecology	B5-18*
Rodriguez, H. M.	RL	A5-15	Voogd, J.	CH2M	S4-43
Russell, W.	ORP	H6-60*	Vinson, R.	PEC	H6-60
Singleton, D.	Ecology	B5-18	Williams, D. J.	ORP	H6-60*
Skinnarland, E. R.	Ecology	B5-18	Yasek, R.	ORP	H6-60
Sobotta, P.	NPT		Administrative Record	EDMC	H6-08*
Stanley, R.	Ecology	Lacey*	*w/Attachments		

IF YOU WOULD LIKE TO BE REMOVED FROM DISTRIBUTION, PLEASE LET E. J. MURPHY-FITCH KNOW.

Office of River Protection
Tri-Party Agreement Milestone Review
November 18, 2003

Tri-Party Agreement Milestone Performance

In FY 2004, ORP will go from 10 to 2 PBSs – one for the Waste Treatment Plant (WTP) and one for the remainder of the project (Tank Farms). Ecology asked what the impact will be of DOE-HQ's request to the Field Offices that they return all the uncosted balances (Hanford comprises 20% of those balances).

The cost variance for the expense funded workscope on TWO4, *Retrieve Waste*, shows an unfavorable fiscal year-end cost variance but does not impact the life-cycle cost. Future RCRA closure plans will be less expensive due to precedents established for the 241-C-106 Tank Closure Plan of bundling several tanks together in a single submittal. Ecology asked for the breakdown of the costs.

Ecology did not agree with the description/cause and impact for the TW06, *Treat Waste*, schedule variance. DOE stated that permitting activities were delayed to resolve the Part B Regulatory Path change from Research, Development and Demonstrations (RD&D). Critical path implications are a result of an internal DOE schedule and not the Regulatory Permitting Plan agreed to by the parties. That Plan remains on schedule.

ACTIONS:

- Action: Provide Ecology with the breakdown of RCRA closure plan costs for bundling several tanks together into a single submittal
Actionee: Diane Clark, ORP
- Action: Identify RD&D impact on schedule, and the permitting plan versus schedule
Actionee: Diane Clark, ORP

M-043-00, Tank Farm Upgrades

Progress continues to be made and the milestone is scheduled for on time completion by June 30, 2005.

- Action: Review request for Variance of Secondary Containment
Actionee: Cathy Louie, ORP/Jeff Lyons, Ecology

M-046-00, Double Shell Tank Space Evaluation

A technical expert panel recommended that the tank fill height be increased to 449" contingent upon successful or positive results from a series of actions to demonstrate waste tank integrity. The preliminary recommendations are being reviewed to identify necessary implementation actions. The need to reserve emergency space for DST systems, implementation of tank-by-tank evaluations and the space currently identified as "restricted" space in tanks that contain staged feed for WTP was discussed.

No significant regulatory issues/concerns resulting in follow-on actions were identified.

M-047-00, Tank Waste Treatment, Storage and Disposal Facilities

Construction was completed for the transfer line system from 241-AP Tank Farm to the WTP Facility to support the start of hot commissioning of the Phase I Tank Waste Treatment Complex. Punch list items are being worked. Ecology stated that while the construction is complete, the regulatory commitments are not done.

Interim Stabilization (Consent Decree)

Consent Decree deliverable to reduce total liquids to 2 percent of total volume from the SSTs was completed ahead of the September 30, 2003, due date. Numerous accomplishments were noted. Several Consent Decree target dates were missed. The missed target dates were for pumping of the BY-105, BY-106, U-107, A-101, S-107 and BY-106 Tanks. Issues surrounding the missed target dates are due to encountering more liquid than anticipated which does not impact DST calculations. Ecology asked what ORP do if they continue to find more pumpable liquid than planned for – will pumping continue beyond the September 30, 2004, date. Ecology also requested clarification on how ORP will keep the remaining saltwell pumping systems on line and maintain high pumping efficiencies and flow rates while minimizing system down time. CH2M appears to be to the point where they can start pumping at a higher rate.

Action: Provide clarification to Ecology on how ORP will ensure that the saltwell pumping systems on line will maintain high pumping efficiencies and flow rates while minimizing system down time.

Actionee: John Long, ORP

Action: Will pumping cease on September 30, 2004, if pumpable liquids remain in the tanks.

Actionee: John Long, ORP

M-045-00, SST Closure (page 22)

Negotiations began in November for the second phase SST waste retrieval activities (Tri-Party Agreement Interim Milestone M-045-00C). Discussions are going well and the milestone should be completed on schedule (February 28, 2004). The Tri-Party Agreement Target date M-045-60-T20A, *Submit SST System Implementation Plan I Support of Retrieval and Closure Activities, due June 30, 2004*, will be completed on schedule.

Integrated Mission Execution Schedule (IMES) sequence of events for C-103, C-105 needs to be revised – it currently shows that the retrieval system installation will be completed three months prior to the finish of design. The Functions and Requirements (F&R) document and the Closure Plan will be included in the submittal. In addition, the regulators wanted to know what the latest date is to complete retrieval and closure. Is the milestone in jeopardy? Ecology asked if the resequencing of the evaporator campaigns has any impact on retrieval activities.

Action: Revise sequence of events for the C-103 and C-015 IMES for next presentation
Actionee: Roger Quintero, ORP

Action: Provide Ecology with the latest date to complete retrieval and determine if the milestone is in jeopardy.

Actionee: Roger Quintero, ORP

Ecology asked if there was an impact on retrieval activities if there is a change in the evaporator campaigns.

Action: Identify any impact on the change in the sequencing of the evaporator campaigns on retrieval activities.

Actionee: Roger Quintero, ORP

M-045-50, 60 SST Corrective Actions

Workscope is on schedule. No significant regulatory issues/concerns resulting in follow-on actions were identified.

M-023, Tank Integrity and Monitoring

Ecology is reviewing the schedule provided September 30, 2003 (M-023-26) for performing liquid level assessments as a primary document. ORP met with the regulators prior to submittal and believe that the comments were resolved. The FY 2004 milestones will be completed on or ahead of schedule. During the replacement of the LOW in TX-116, the LOW was damaged. That LOW will be removed and a replacement installed (currently scheduled to be performed in January 2004)

No significant regulatory issues/concerns resulting in follow-on actions were identified.

M-048-00, DST Integrity Assessment Program

The final report for Tandem Synthetic Aperture Focus Techniques (TSAFT) was submitted to Ecology in September 2003. Ecology agreed that the milestone was completed. Ecology approved ORPs request to ultrasonically test in FY 2004 four DSTs not previously examined.

The spalling concrete in AZ-102 remains open although leak detection has not been compromised. Historical construction records are being reviewed, more analysis is being performed, and an engineering evaluation is being made to determine effects if the refractory concrete is exposed to liquid waste and degradation effects due to spalling and cracking.

No significant regulatory issues/concerns resulting in follow-on actions were identified.

In Tank Characterization and Summary

The 4th Quarterly Status Report was submitted to Ecology in October. Three DQO's are under final review:

Tank 241-C-106, Component Closure Action DQO, Rev. 1

Tank 241-C-200 Series Component Closure Action DQO, Rev. 1

Tank 241-S-102 and S-112 Component Closure Action DQO, Rev. 0

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

Near term deliverables are complete; out year deliverables are forecast for on schedule completion. A delay in the record of decision (ROD) for the Solid Waste-Environmental Impact Statement (SW-EIS) could potentially impact start of IDF site clearing in February 2004. There are multiple RODS – ILAW, offsite waste and ERDF. The regulators would like to be briefed as soon as possible on DOE's intention for the ROD. EPA is concerned that they may be the lead regulatory agency for this and found out about it via the rumor mill. If EPA is the lead, how would Ecology's concerns on the IDF Facility be resolved as the workscope goes through the permitting activities, risk allocation issues, secondary waste issues, etc. This approach is not reflected in either the Tank Closure or SW EISs. Ecology voiced there concern that an analysis of groundwater impacts from IDF did not adequately consider secondary waste. In addition, Ecology stated that "analyses" do not "allocate" groundwater impacts from IDF (RCRA regulated), ERDF (unregulated) and past releases.

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

The Waste Treatment Plant Project Controls Smart Sheet was distributed and discussed. Progress continues to be made and the project is on budget and on schedule.

LDR Assessment Status

ORP will issue one report for FY 2003. The plan to do the assessments and report format were approved by Ecology and work is underway.

Agenda
Office of River Protection
Tri-Party Agreement Project Managers Meeting
November 18, 2003
712 Swift Blvd., Suite 5, EPA Conference Room
9:00 a.m. - 12:00 p.m.

Time	Page	Topic	Leads
9:00 a.m.	3	FY 2003 ORP TPA Cost & Schedule Performance (CHG) and TPA Milestone Statistics	Diane Clark/Suzanne Dahl/ Jeff Lyon
9:20 a.m.	36	M-43-00, Tank Farm Upgrades	Cathy Louie/Stephen Lijek
9:30 a.m.	37	M-46-00, Double-Shell Tank Space Evaluation	Cathy Louie/Jeff Lyon
9:40 a.m.	41	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Cathy Louie/Jim Davis/ Steve Lijek
9:50 a.m.	11	M-45-50, 60 Single-Shell Tank Corrective Action	Rob Yasek/Joe Caggiano
10:00 a.m.	13	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
10:10 a.m.	15	M-23, Tank Integrity and Monitoring	Deb Williams/Jeff Lyon
10:20 a.m.	17	Interim Stabilization (Consent Decree)	John Long/Nancy Uziemblo
10:30 a.m.	20	M-48, DST Integrity Assessment Program	Andy Stevens/Vic Callahan/ Brenda Jentzen
10:40 a.m.	22	M-45-00, Single-Shell Tank Closure	Roger Quintero/Dick Heggen
10:50 a.m.		BREAK	
11:00 a.m.	43	In Tank Characterization and Summary	Wen-Shou Liou/Debra Singleton
11:10 a.m.	TBD	LDR Assessment Status	Woody Russell/Jeff Lyon
11:20 a.m.	TBD	BNI Cost & Schedule Performance	John Eschenberg/Suzanne Dahl
11:30 a.m.	TBD	M-62, Complete Pretreatment Processing and Vitrification of Tank Wastes/Supplemental Technologies	John Eschenberg/Suzanne Dahl
11:40 a.m.	TBD	Review of new commitments and actions	Diane Clark/Jeff Lyon/Suzanne Dahl

ATTENDEES

Office of River Protection
 Tri-Party Agreement Milestone Review
 November 18, 2003

<u>NAME</u>	<u>ORGANIZATION</u>	<u>MAILSTOP</u>	<u>ATTACHMENTS</u>
Sandra Fowler	CH2M Hill		Yes
MIKE WILSON	ECOLOGY		
LAURA CUSACK	Ecology		Yes
Jim Navarro	ORP		No
Jim Rasmussen	ORP		
Woody Russell	ORP		Yes
Lery Bennett	ORP		no
E J Murphy	FH TRPA		✓
DALE JACKSON	DOE-RI		NO
ROBINSON	ORP		NO
CATHY LOLLIE	ORP-	H0-60	NO
Phil Miller	CH2M HILL	R7-51	NO
JEFF VOOED	CH2M HILL	54-43	NO
JEFF HERTZEL	FH		
John Long	ORP		
Nancy Dziemba	Ecology		
Brenda Gentry	Ecology		
JANE HODGOS	Ecology		
Melinda J Braxton	Ecology		Yes
VIC CALLAHAN	ORP		
Andy Stevens	ORP		No
John Long	ORP		Yes
Jeff Lyon	Ecology		Yes

Office of River Protection

Tri-Party Agreement
Quarterly Milestone Review Meeting
November 18, 2003



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

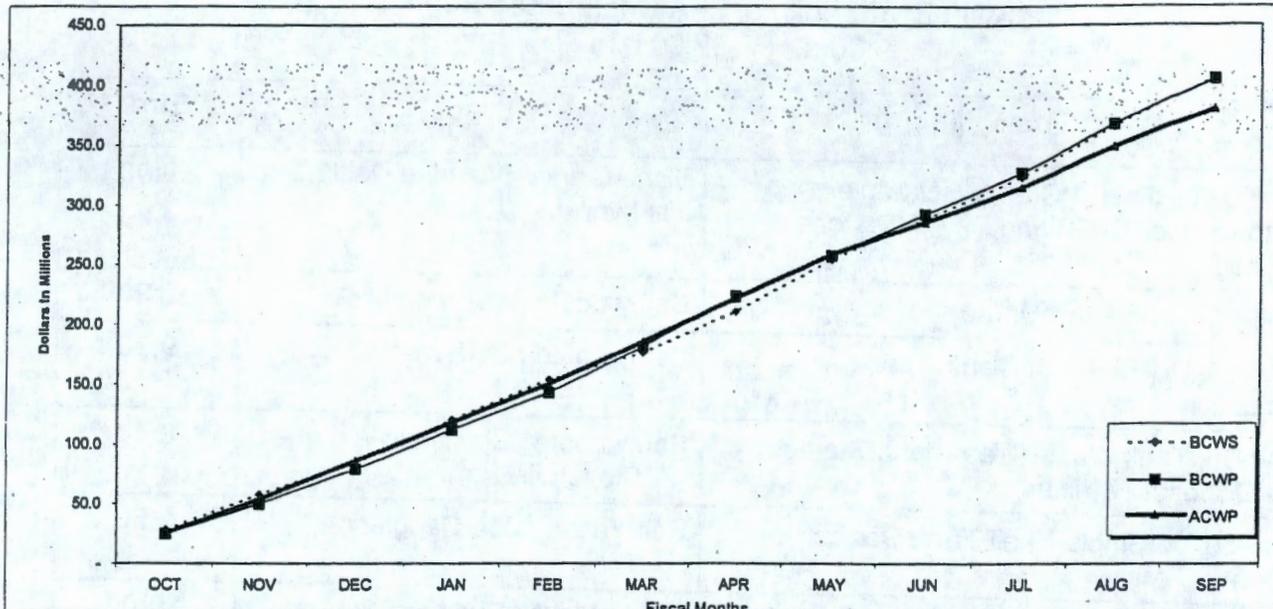
4th Quarter of FY 2003

Agenda
 Office of River Protection
 Tri-Party Agreement Project Managers Meeting
 November 18, 2003
 712 Swift Blvd., Suite 5, EPA Conference Room
 9:00 a.m. – 12:00 p.m.

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37	• M-46-00, Double-Shell Tank Space Evaluation	Cathy Louie / Jeff Lyon	9:30
41	• M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Cathy Louie / Jim Davis / Steve Lijek	9:40
11	• M-45-50, 60 Single-Shell Tank Corrective Action	Rob Yasek / Joe Caggiano	9:50
13	• 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
15	• M-23, Tank Integrity and Monitoring	Deb Williams / Jeff Lyon	10:10
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TBD	• Review of new commitments and actions	Diane Clark / Jeff Lyon / Suzanne Dahl	11:40

Cost/Schedule Performance

CH2M HILL HANFORD GROUP, INC.
 FY 2003 - ALL DIRECT FUNDED ACTIVITIES (CH2M HILL ONLY) - SEPTEMBER



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
FY02 CURRENT APPROVED PERFORMANCE MEASUREMENT BASELINE												
CURRENT PERIOD												
BCWS	28.5	29.3	27.3	35.3	33.3	22.4	34.3	43.6	34.5	34.5	42.3	41.0
BCWP	24.8	25.1	29.4	32.9	30.6	38.5	42.0	34.1	34.8	34.5	40.7	37.8
ACWP	25.5	28.4	32.6	31.8	32.0	35.1	35.9	37.3	27.0	29.1	33.7	32.0
CUMULATIVE YEAR TO DATE												
BCWS	28.5	57.8	85.1	120.4	153.7	176.1	210.4	254.0	288.5	323.0	365.3	406.3
BCWP	24.8	49.9	79.3	112.2	142.8	181.3	223.3	257.4	292.2	326.7	367.4	405.2
ACWP	25.5	53.9	86.5	118.3	150.3	185.4	221.3	258.6	285.6	314.7	348.4	380.4
SV %	-12.9%	-13.6%	-6.9%	-6.8%	-7.1%	3.0%	6.1%	1.3%	1.3%	1.2%	0.6%	-0.2%
CV %	-2.8%	-7.9%	-9.1%	-5.4%	-5.3%	-2.2%	0.9%	-0.4%	2.3%	3.7%	5.2%	6.1%

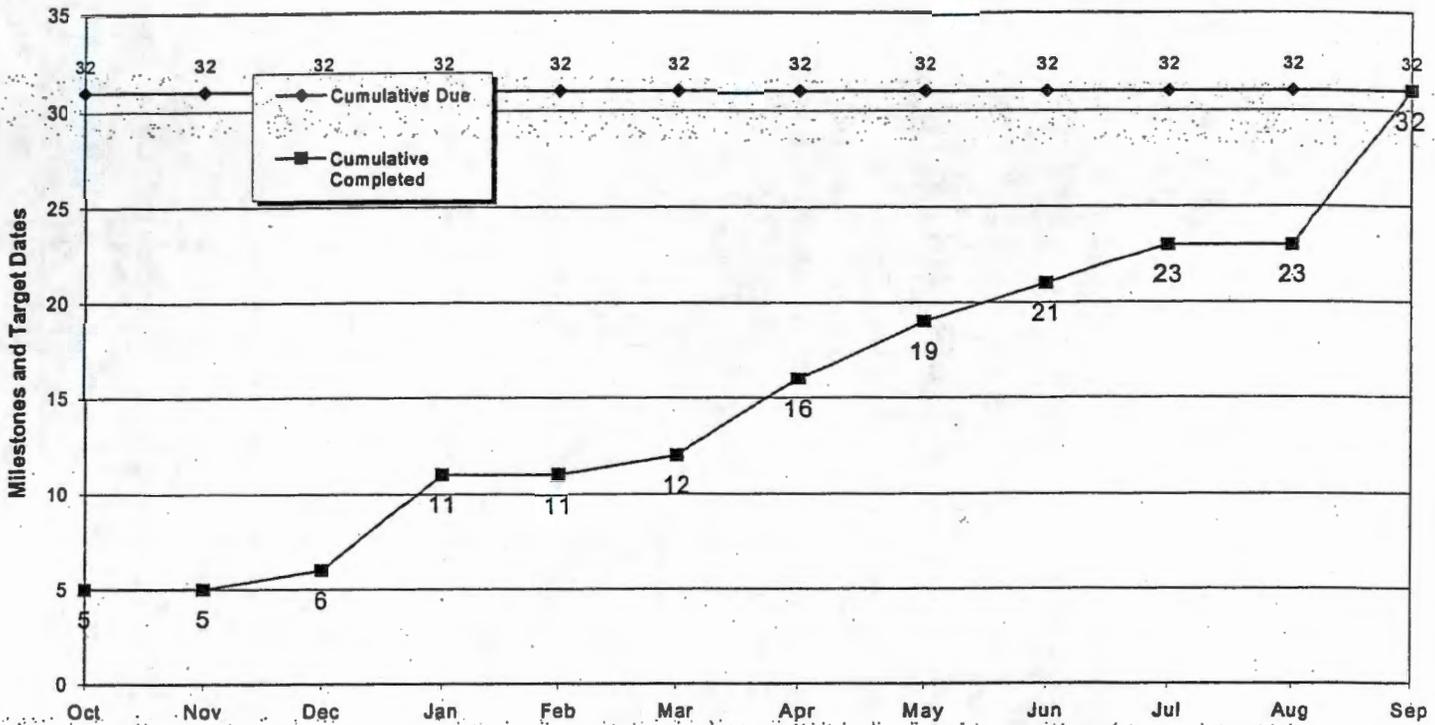
TPA Milestone Statistics

(Including target milestones)

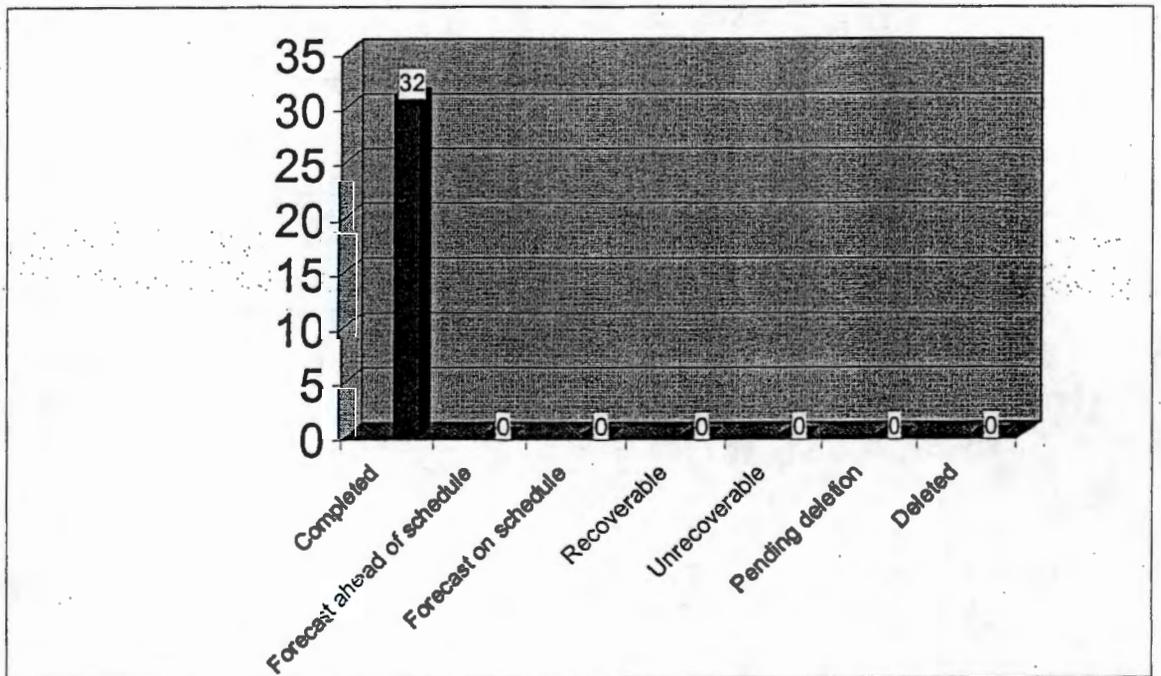
Milestone	Due Date	Total Active as of 10/7/03	Milestone Number	Due Date	Milestone Number	Due Date
M-20-00, Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	2/28/2004 (M-20-00)	0				
M-23-25, Tank Integrity and Monitoring	9/30/2004 (M-23-25)	4	M-23-25F M-23-25	3/31/04 9/30/04	M-23-25G M-23-27	9/30/04 12/30/04
M-42-00, Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-43-00, Complete Tank Farm Upgrades	6/30/2005 (M-43-00)	1	M-43-00	6/30/05		
M-45-00, Complete Closure of all SST Farms	9/30/2024 (M-45-00)	76	M-45-05L-T01	11/1/03	M-45-05-T06	9/30/08
			M-45-05M-T01	2/27/04	M-45-06E	12/31/08
			M-45-00C	2/28/04	M-45-14-T01	6/30/09
			M-45-05C	3/31/04	M-45-02R	9/30/09
			M-45-05H	4/30/04	M-45-05-T07	9/30/09
			M-45-06-T20A	6/30/04	M-45-05G-T01	10/31/09
			M-45-02M	9/30/04	M-45-06-T20C	6/30/08
			M-45-03H	9/30/04	M-45-16	7/31/10
			M-45-06B	9/30/04	M-45-02S	9/30/10
			M-45-06C	9/30/04	M-45-05-T08	9/30/10
			M-45-05N-T01	12/31/04	M-45-00D	6/30/11
			M-45-55-T03	1/31/05	M-45-16-T01	7/31/11
			M-45-05-T17	4/30/05	M-45-02T	9/30/11
			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	9/30/05	M-45-06-T20D	6/30/12
			M-45-13	12/31/05	M-45-02U	9/30/12
			M-45-02O	9/30/06	M-45-05-T10	9/30/12
			M-45-03I	9/30/06	M-45-02V	9/30/13
			M-45-00B	9/30/06	M-45-05-T11	9/30/13
			M-45-05E	6/30/07	M-45-06-T04	3/31/14
			M-45-06D	6/30/07	M-45-06-T20E	6/30/14
			M-45-55	1/31/07	M-45-02W	9/30/14
			M-45-13-T01	12/30/06	M-45-05-T12	9/30/14
			M-45-15	12/31/05	M-45-02X	9/30/15
			M-45-02P	9/30/07	M-45-05-T13	9/30/15
			M-45-03F	9/30/07	M-45-06-T20F	6/30/16
			M-45-05-T05	9/30/07	M-45-02Y	9/30/16
			M-45-06-T20B	6/30/06	M-45-05-T14	9/30/16
			M-45-14	6/30/08	M-45-02Z	9/30/17
			M-45-15-T01	12/31/06	M-45-05-T15	9/30/17
			M-45-02Q	9/30/08	M-45-06-T20G	6/30/18
			M-45-05F	9/30/08	M-45-05	9/30/18
M-45-60	9/30/07	M-45-06-T20J	6/30/20			
M-45-56	TBD	M-45-06-T20K	6/30/22			
		M-45-06	9/30/24			
		M-45-00	9/30/24			
		M-45-58	6/30/07			
		M45-59	TBD			
Milestone	Due Date	Total Active as of 10/7/03	Milestone Number	Due Date	Milestone Number	Due Date

Milestone	Due Date	Total Active as of 10/7/03	Milestone Number	Due Date	Milestone Number	Due Date
M-46-00, Double Shell Tank Space Evaluation	11/30/2006 (M-46-01)	9	M-46-01J	11/30/03	M-46-01K	11/30/04
			M-46-03	7/30/04	M-46-00L	9/30/05
			M-46-00K	9/30/04	M-46-01L	11/30/05
					M-46-21	12/31/05
					M-46-00M	9/30/06
				M-46-01M	11/30/06	
M-47-00, Complete All Work for Phase 1 Operations	2/28/2018 (M-47-00)	8	M-47-05	5/31/04	M-47-04	6/30/09
			M-47-01	3/31/06	M-47-03A	2/28/09
			M-47-05A	4/30/06	M-47-06	6/30/10
			M-47-02	3/31/07	M-47-00	2/28/18
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)	16	M-62-07A	10/30/03	M-62-01M	7/31/06
			M62-01H	1/31/04	M-62-03	12/31/06
			M-62-01I	7/31/04	M-62-09	12/31/07
			M-62-01J	1/31/05	M-62-10	1/31/11
			M-62-01K	7/31/05	M-62-11	1/31/14
			M-62-08	7/31/05	M-62-00A	2/28/18
			M-62-07B	11/30/05	M-62-00	12/31/28
			M-62-01L	1/31/06	M-62-12	TBD
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	4	M-90-08	2/28/05	M-90-11	8/31/10
			M-90-10	8/31/08	M-90-00	TBD
M-48-00, DST Integrity Program, Submit Results of 4 DSTs not Previously Examined	9/30/2007	5	M-48-12	9/30/04	M-48-14	3/31/06
			M-48-13	9/30/05	M-48-15	9/30/07
			M-48-00	9/30/07		
Interim Stabilization Consent Decree	9/30/2004 (D-001-00)	6	D-001-00-R18	10/31/03	D-001-00-R21	7/31/04
			D-001-00-R19	1/31/04	D-001-00	9/30/04
			D-001-00-R20	4/30/04	D-001-00-R22	10/31/04
Total Active Milestones:		133				

FY 2003 Milestone Plan



FY 2003 MILESTONE PERFORMANCE



Fiscal Year 2003 Tri-Party Agreement Milestone Status

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
D-001-00-R14	SUBMIT QUARTERLY REPORT FOR TANK STABILIZATION ACTIVITIES	10/31/02	X						
M-045-05-T16	SUBMIT DOCUMENT: S-102 INITIAL WASTE RETRIEVAL FUNCTIONS & REQUIREMENTS	10/30/02	X						
D-001-13	INITIATE PUMPING OF TANKS U-111, S-109, S-112, S-101, AND S-107	11/30/02	X						
P-045-06A	SUBMIT SST SYSTEM CLOSURE PLAN & C-106 WASTE RETRIEVAL & CLOSURE REPORT	12/19/02	X						
M-062-06	START OF CONSTRUCTION - PHASE I TREATMENT COMPLEX	12/31/02	X						
M-045-55-T02	SUBMIT SST WMA PHASE 1 RFI/CMS WORK PLAN FOR WMA PHASE I	1/31/03	X						
M-062-01F	SUBMIT SEMI-ANNUAL PROJECT COMPLIANCE REPORT	1/31/03	X						
P-045-05I-T01	CONDUCT C-106 WASTE RETRIEVAL & CLOSURE DEMO PRODUCT 30% DESIGN CONSULTATION	1/31/03	X						
D-001-00-R15	SUBMIT QTRLY REPORT FOR TANK STABILIZATION ACTIVITIES	1/31/03	X						
D-001-08-T01	COMPLETE PUMPING OF SX-105, SX-103, SX-101, AND U-106	2/28/03	X						
M-023-25C	COMPLETE INSTALLATION OF LOWs. BEGIN WEEKLY LIQUID OBSERVATION & MONITORING OF 4 SSTs	3/31/03	X						
(Ecology) M-046-01I	OBTAIN CONCURRENCE (BY TPA PARTIES) ON ADDITIONAL TANK ACQUISITION	4/30/03	X						
D-001-14	INITIATE PUMPING TANK C-103	4/30/03	X						
M-045-05J-T01	COMPLETE C-106 WASTE RETRIEVAL & CLOSURE DEMO PROJECT DESIGN	4/30/03	X						
M-045-05D	ESTABLISH COMPLETION DATE FOR SECOND TANK, INITIAL WASTE RETRIEVAL	4/30/03	X						
D-001-00-R16	SUBMIT QTRLY REPORT FOR TANK STABILIZATION ACTIVITIES	4/30/03	X						

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
M-45-03D	COMPLETE S-112 SALTCAKE WASTE RETRIEVAL TECH DEMO DESIGN	5/30/03	X						
M-090-09-T01	COMPLETE DETAILED DESIGN OF ILAW DISPOSAL FACILITY CRITICAL SYSTEMS TO 80%	5/30/03	X						
M-020-56	SUBMIT CANISTER STORAGE FACILITY PART B DANGEROUS WASTE PERMIT APPLICATION	6/30/03	X						
M-020-57	SUBMIT ILAW DISPOSAL FACILITY CERTIFIED PART B PERMIT APPLICATION	6/30/03	X						
M-043-16	START CONSTRUCTION UPGRADES IN 9 TH TANK FARM	6/30/03	X						
D-001-00-R17	SUBMIT QRTLTY REPORT ON TANK STABILIZATION	7/31/03	X						
M-062-01G	SUBMIT SEMI-ANNUAL PROJECT COMPLIANCE REPORT	7/31/03	X						
M-023-25D	COMPLETE INSTALLATION OF LOWs & BEGIN WEEKLY LIQUID OBSERVATION / MONITORING 4 SSTs	9/30/03	X						
D-001-00V	REDUCE TOTAL LIQUIDS TO 2% OF TOTAL VOLUME FROM SSTs	9/30/03	X						
M-023-26	SUBMIT SCHEDULE AS PRIMARY DOC FOR PERFORMING LIQUID LEVEL ASSESSMENTS	9/30/03	X						
M-045-02L	SUBMIT ANNUAL UPDATE OF SST RETRIEVAL SEQUENCE DOC.	9/30/03	X						
M-045-11	COMPLETE 244-AR VAULT INTERIM STABILIZATION	9/30/03	X						
M-046-00J	COMPLETE ANNUAL DST SPACE EVALUATION REPORT	9/30/03	X						
M-048-11	SUBMIT RESULTS OF 4 DSTs NOT PRE. EXAMINED	9/30/03	X						
M-045-05K-T01	COMPLETE C-106 WASTE RETRIEVAL/CLOSURE DEMO PROJECT CONSTRUCTION	9/30/03	X						
M-048-02G	SUBMIT TO ECOLOGY REPORT ASSESSING TECHNOLOGY DEVELOPMENT	9/30/03	X						
TOTAL			32	0	0	0	0	0	0

M-45-11, Complete 244-AR Vault Interim Status Actions

I. Near-Term Deliverables:

- **M-45-11A, Complete 244-AR Vault Interim Stabilization**

Due: 9/30/03

Status: Completed.

II. Significant Accomplishments:

- Completed facility interim stabilization and isolation on August 18, 2003.

III. Significant Planned Actions in Next Six Months:

None

IV. Issues:

None

M-45-50, -60 Single-Shell Tank Corrective Action**I. Near-Term Deliverables:**

- **M-45-55-T02**, 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 B, BX, and BY
Due: 01/31/03
Status: **Complete**. Ecology has completed their review and provided comments to DOE-ORP.
- **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: 1/31/05
Status: Fieldwork completed, lab work continues, writing of document has begun.
- **M-45-55-T04**, Submit to Ecology for review and comment a draft of the A-AX, C, and U Field Investigation Report.
Due: 1/31/06
Status: Field work to be completed in FY04 and FY05, lab work to begin after 1/04, 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: 6/30/07
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: 9/30/07
Status: Work not started; forecast on schedule.

II. Significant Accomplishments:

- The Site-Specific Work Plan for WMA's C, A-AX, and U has been completed and transmitted to Ecology for review.
- Submitted a work plan addendum for Vadose Zone characterization activities in Waste Management Areas A-AX, C, and U to ORP for transmittal to Ecology.

- Completed drilling of six Resource Conservation and Recovery Act (RCRA) groundwater monitoring wells scheduled for FY 2003. FY 2003 wells officially accepted by Pacific Northwest National Laboratory and will be placed on the monitoring schedule.
- Stoller completed geophysical logging of 28 tank farm boreholes in September. BX-Farm logging was completed and the Radiation Assessment System van was moved to S-Farm.
- Met with Ecology to formally change the Tri-Party Agreement milestones associated with the A-AX, C, and U Field Investigation Reports, and the RCRA Remedial Field Investigation and Corrective Measures Study Reports.
- Used DOE-owned well casing will be shipped for cutting and threading in support of FY 2004 characterization drilling and sampling in C-Farm at a significant savings over purchasing new.

III. Significant Planned Actions in the Next Six Months:

- Participate in C3T exercise for ground water monitoring.
- Continue work on T/TX-TY Field Investigation Report.
- Start Vadose Zone field work in C Farm.

IV. Issues:

- None

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: On schedule

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:

- Continued detailed design of W-464 systems for the CSB –October 2003
- Received and initiated team review of Project W-464 Canister Storage Tube Specification – October 2003
- Performed W-464 field verification in vaults 2 and 3 at the Canister Storage Building – October 2003
- Submitted 2003 Annual Summary of the Integrated Disposal Facility (IDF) Performance Assessment to HQ – October 2003
- Transmitted revised IDF NOI and SEPA checklist to Ecology – September 2003
- Finalized and gained Ecology concurrence on 14 month IDF Permitting Plan – October 2003
- Initiated detailed design of non-critical systems and completion of detailed design for critical systems for the IDF – October 2003
- Initiated ILAW transportation optimization study – October 2003

- ORP approved IDF Safety Basis path forward i.e. revise tank farm Documented Safety Analysis to include IDF activities – October 2003
- Completed IDF New Source Review and Exemption for Construction – September 2003

III. Significant Planned Actions in the Next Six Months:

- Prepare Project W-464 draft Construction modification, Multi-Canister Overpack Handling Machine, and Cask Transport specifications for team review – November 2003
- Complete W-464 Detailed Design – June 2004
- Continue formal issue resolution process with Ecology for IDF Part B Permit – October 2003 through February 2004
- Complete IDF Detailed Design and initiate clearing the site – February 2004
- Complete ILAW transportation optimization study – March 2004

IV. Issues

- A delay in the Record of Decision for the Solid Waste Environmental Impact Statement could potentially impact start of the IDF site clearing in February 2004.

M-23, Tank Integrity and Monitoring**I. Near-Term Deliverables:**

- **M-23-23**, Submit SST System Leak Detection and Monitoring F&R Document
Due: 6/15/02
Status: **Complete**.
- **M-23-25B**, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Liquid Observation.
Due: 9/30/02
Status: **Complete**.
- **M-23-25C**, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Liquid Observation
Due: 3/31/03
Status: **Complete**
- **M-23-25D**, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Monitoring.
Due: 9/30/03
Status: **Complete**.
- **M-23-26**, Submit a Schedule, as a Primary Document, for Performing Liquid Level Assessments.
Due: 9/30/03
Status: **Complete**
- **M-23-25F**, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Monitoring.
Due: 3/31/04
Status: On schedule
- **M-23-25G**, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Monitoring.
Due: 9/30/04
Status: On schedule
- **M-23-27**, Complete 244-CR Liquid Level Assessments
Due: 12/30/04
Status: On schedule

II. Significant Accomplishments:

- M-23-26 schedule for liquid level assessments submitted for Ecology approval.
- LOWs have been installed in tanks B-101, B-109, SX-111 and TX-105. Monitoring has been initiated.

III. Significant Planned Actions in the Next Six Months:

- Install LOWs for M-23-25F and begin monitoring.

IV. Issues:

- During replacement of the LOW in TX-116, the LOW was damaged. That LOW will be removed and a replacement installed. (Currently scheduled to be performed in January 2004.)

Interim Stabilization Consent Decree

I. Near-Term Deliverables:

- Reduce Total Liquids to 2% of Total Volume from SSTs (D-001-00V)
Due: 9/30/03
Status: **Complete.** Letter sent to Ecology 9/10/03.
- Complete Interim Stabilization of all 29 SSTs (D-001-00)
Due: 9/30/04
Status: On schedule

II. Significant Accomplishments:

- Completed 2% Pumpable Liquid Remaining Consent Decree Milestone (D-001-00V) on 8/31/03, roughly 30-days ahead of schedule.
- Sixteen (16) remaining SSTs included in FY 2003 scope: 5 tanks documented as being interim stabilized (BY-105, C-103, SX-101, SX-103, U-111). 5 tanks continue to be pumped (A-101, BY-106, S-101, S-111, U-108). 2 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 9/9/03 (S-102, S-112). 4 tanks completed pumping and are in evaluation to document that interim stabilization criteria have been met (AX-101, S-107, SX-102, U-107).
- Declared SX-102 interim stabilized on 8/28/03 under the Consent Decree provision of "major equipment failure" (shaft/impellor damaged). In evaluation to document satisfaction of interim stabilization criteria.
- Declared S-107 interim stabilized on 8/20/03 under the Consent Decree provision of "major equipment failure" (pump motor seized). In evaluation to document satisfaction of interim stabilization criteria.
- Issued "Single-Shell Tank Interim Stabilization Evaluation Form" for SX-101 on 8/22/03 documenting satisfaction of interim stabilization criteria.
- Completed "Justification for Continued Operation" (JCO) for 244-BX Double-Contained Receiver Tank (DCRT) allowing DCRT transfers and resumption of pumping in BY-106 on 8/23/03.
- Third Amendment to the Consent Decree signed on 9/9/03 by a District Court Judge officially transitioning S-102 and S-112 to accelerated retrieval in lieu of interim stabilization.
- Completed "Interim Stabilization Activity Report for the Fourth Quarter of FY 2003" (Consent Decree Milestone D-001-00-R18) and transmitted to ORP on 10/21/03; due from ORP to Ecology by 10/31/03.
- Placed U-107 in evaluation on 10/7/03 to document completion of pumping and satisfaction of interim stabilization criteria.
- Approximately 73.2 Kgal of pumpable liquids transferred to the double-shell tank (DST) system during the fourth quarter of FY 2003 and roughly 572 Kgal of pumpable liquids transferred to the DST system during FY 2003.
- Approximately 3021.1 Kgal of pumpable liquids have been removed from SSTs and transferred to DSTs since pumping began in June 1998 through the end of the fourth quarter of FY 2003 (excluding S-102 and S-112).

- As of 9/30/03, the estimated percentage of pumpable liquid remaining in unstabilized SSTs was roughly 1.54% or 47.1 Kgal. The remaining pumpable liquid volume is to be transferred to the DST system by 9/30/04 under Consent Decree Milestone D-001-00.

III. Significant Planned Actions in the Next 6 Months: [NOTE: Moved before "Issues" to be consistent with format used elsewhere in this report.]

- Complete the Interim Stabilization Evaluation Forms for tanks AX-101, S-107, U-107, and SX-102 documenting that interim stabilization criteria have been met.
- Keep remaining saltwell pumping systems on-line and maintain high pumping efficiencies and flowrates, while minimizing system down time.
- Complete removal of pumpable liquids from A-101, BY-106, and U-108. Projected completion of pumping in S-101 and S-111 is 5/31/04 and 5/24/04, respectively.
- Issue draft First Quarter Interim Stabilization activity report to ORP by 12/31/04; final due from ORP to Ecology by 1/31/04.

IV. Issues:

- The Consent Decree target date of June 30, 2003, for Milestone D-001-09-T01, "Complete pumping of BY-105 and BY-106," was missed. Tank BY-105 has been interim stabilized but tank BY-106 continues to pump beyond its originally estimated pumpable liquid volume. Remaining pumpable liquids will be removed by 9/30/04, or sooner, as required under Consent Decree Milestone D-001-00.
- The Consent Decree target date of August 30, 2003, for Milestone D-001-11-T01, "Complete pumping of U-108, U-107, S-111, and SX-102," was missed. SX-102 and U-107 have been interim stabilized and are in evaluation to document completion of pumping and satisfaction of interim stabilization criteria. U-108 and S-111 continue to pump. The current projection for completion of pumping in U-108 is 1/17/04. S-111 is projected for completion of pumping by 5/24/04. Remaining pumpable liquids will be removed by 9/30/04, or sooner, as required under Consent Decree Milestone D-001-00.
- The Consent Decree target date of September 30, 2003, for Milestone D-001-06-T01, "Complete pumping of A-101 and AX-101," was missed. AX-101 has been interim stabilized. A-101 was shut down on 8/29/03 due to low flow conditions and is currently under investigation by Engineering to determine the cause and appropriate path forward. Remaining pumpable liquids will be removed by 9/30/04, or sooner, as required under Consent Decree Milestone D-001-00.
- The Consent Decree target date of September 30, 2003, for Milestone D-001-13-T01, "Complete pumping of U-111, S-109, S-112, S-101, and S-107," was missed. Tank S-101 is projected to complete pumping around 5/31/04. Tank S-112 has transitioned to retrieval operations in lieu of interim stabilization in accordance with the Third Amendment to the Consent Decree. Tanks S-107, S-109, and U-111 have been interim stabilized. S-107 was placed in evaluation on 8/20/03 to document completion of pumping and satisfaction of interim stabilization criteria. Remaining pumpable liquids will be removed by 9/30/04, or sooner, as required under Consent Decree Milestone D-001-00.
- Pumping durations are based on "best estimates" of pumpable liquid volumes, tank waste drainage rates, and operating efficiencies of saltwell pumping systems; however,

considerable uncertainty exists in pumping durations and can be on the order of \pm one or two months.

- BY-106 continues to pump beyond the originally estimated pumpable liquid volume of 86 Kgal. BY-106 has pumped roughly 89.7 Kgal as of 10/26/03. This results in slight increases to the pumpable liquid volume and volume pumped to date. Adjustments are made and are reported in the Interim Stabilization Daily Report to reflect continuation of pumping in BY-106. Remaining pumpable liquids will be removed by 9/30/04, or sooner, as required under Consent Decree Milestone D-001-00.

M-48-00, DST Integrity Assessment Program**I. Deliverables:**

- **M-48-02**, Submit to Ecology a Report Assessing Technology Development
Due: 9/17/00 and every six months thereafter until equipment is deployed
Status: **Complete** The "Tandem Synthetic Aperture Focus Techniques (TSAFT) Final Report was delivered to Ecology 9/3/03. ORP letter 03-TOD-064. Ecology letter of October 24, 2003 (Jeff Lyon to Roy Schepens) acknowledges ORP letter and considers this milestone closed.
- **M-48-10**, Submit Results of Four DSTs not Previously Examined
Due: 9/30/02
Status: **Complete**
- **M-48-11**, Submit Results of Four DSTs not Previously Examined
Due: 9/30/03
Status: **Complete**. ORP letter 03-TOD-063 sent to Ecology on 9/4/03.
Ecology letter of October 24, 2003 (Jeff Lyon to Roy Schepens) approves ORP's request for proposed DSTs to be ultrasonically tested in FY 2004.
- **M-48-12**, Submit Results of Four DSTs not Previously Examined
Due: 9/30/04
Status: On schedule
- **M-48-13**, Submit Results of Four DSTs not Previously Examined
Due: 9/30/05
Status: On schedule
- **M-48-14**, Submit Written Integrity Report for the DST System
Due: 3/31/06
Status: On schedule
- **M-48-15**, Submit a Report to Ecology for the Re-examination of Six DSTs by Ultrasonic Testing
Due: 9/30/07
Status: On schedule
- **M-48-00**, Complete Tank Integrity Assessment Activities for Hanford Double Shell Tanks System
Due: 9/30/07
Status: On schedule

II. Significant Accomplishments:

- Completed M-48-11 milestone.
- Completed final M-48-02 technology report (TSAFT).
- Tank 241-SY-103 UT in progress. Completed first pass vertical wall scan, second pass scan in progress. Deployment of RUTI to scan tank bottom was unsuccessful due to

inability of retractable arm to deploy through the cut-out holes in the steel belt surrounding the air slots (physical limitation of the RUTI). This same configuration exists for all of the SY DSTs. AN-104 was selected as an alternated tank for bottom examination in FY 2004.

- Have started some portions of visual inspections of AP tanks. Will continue through the springtime to complete.

III. Significant Planned Actions in the Next Six Months:

- Initiate FY04 UT inspections of four DSTs not previously examined (SY-103, SY-102, SY-101, AP-104).
- Complete video inspections of AP-101 through AP-106.

IV. Issues:

- The spalling concrete in AZ-102 is still an open issue although leak detection has not been compromised. Historical construction records are being reviewed, more analysis is being performed, and an engineering evaluation is being made to determine effects if the refractory concrete is exposed to liquid waste and degradation effects due to spalling and cracking.

Milestone M-45-00, Complete Closure of All Single-Shell Tank Farms**I. SST Retrieval and Closure Program**

- **M-45-00C, "Complete Renegotiation of Second Phase SST Waste Retrieval Activities"**
(September 30, 2006 through September 30, 2015)
Due: 2/28/04
Status: On schedule. Negotiations began in November 2003.
- **M-45-06-T20A, "Submit SST System Implementation Plan in Support of Retrieval and Closure Activities"**
Due: 6/30/04
Status: On schedule. Draft annotated outline provided to Ecology in November 2003, for review and comment.
- **M-45-06-T20B, "Submit SST System Implementation Plan in Support of Retrieval and Closure Activities"**
Due: 6/30/06
Status: On schedule
- **M-45-06-T20C, "Submit SST System Implementation Plan in Support of Retrieval and Closure Activities"**
Due: 6/30/08 (and every 2 years thereafter)
Status: On schedule
- **M-45-00D, "Complete Renegotiation of the Remainder of the SST Waste Retrieval and Closure Program"**
Due: 6/30/2011
Status: On schedule
- **M-45-06-T03, "Initiate Closure Actions on an Operable Unit or Tank Farm Basis. Closure shall follow completion of the retrieval actions under proposed milestone M-45-05."**
Due: 3/31/2012
Status: On schedule
- **M-45-06-T04, "Complete Closure Actions on one Operable Unit or Tank Farm"**
Due: 3/31/2014
Status: On schedule
- **M-45-00, "Complete Closure of all SST Farms"**
Due: 9/30/2024
Status: On schedule
- **M-45-06, "Complete Closure of all SST Farms in Accordance with Approved Closure/Post Closure Plans"**
Due: 9/30/2024
Status: On schedule

II. SST Retrieval Sequence Document

- **M-45-02L**, "Submit Annual Updates to SST Retrieval Sequence Document"
Due: 9/30/03
Status: **Complete**. ORP letter 03-TPD-093, dated 9/25/03.
- **M-45-02M**, "Submit Annual Updates to SST Retrieval Sequence Document"
Due: 9/30/04
Status: On schedule
- **M-45-02N**, "Submit Annual Updates to SST Retrieval Sequence Document"
Due: 9/30/05
Status: On schedule
- **M-45-02O**, "Submit Annual Updates to SST Retrieval Sequence Document"
Due: 9/30/06
Status: On schedule
- **M-45-02P**, "Submit Annual Updates to SST Retrieval Sequence Document"
Due: 9/30/07 (and annually thereafter)
Status: On schedule

III. SST Retrieval Demonstration Projects

- **M-45-00B**, "Complete Near-Term SST Waste Retrieval Activities"
Due: 9/30/06
Status: On schedule per supporting milestones, as noted below.

C-103 (Per IMES)

- Complete Retrieval System Design and Engineering
Due: 7/1/04
Status: On schedule
- Complete Retrieval System Installation
Due: 4/21/04
Status: On schedule
- Complete Retrieval Operations
Due: 9/30/04
Status: On schedule
- Complete Interim Closure
Due: 8/17/05
Status: On schedule

Significant Accomplishments:

- Initiated C-103 Project on 10/01/03

- Initiated pre-equipment removal activities for C-103 on 10/10/03
- Approved the Statement of Work for the Functions and Requirements document on 10/22/03
- Prepared the process description on 10/24/03
- Prepared the preliminary piping and instrumentation diagram on 10/24/03

Significant Planned Activities in the Next 6 Months:

- Complete pre-equipment removal activities
- Complete the Functions and Requirements document
- Complete retrieval system procurement
- Initiate retrieval system installation, startup, and readiness

Issues: None

C-105 (Per IMES)

- Complete Retrieval System Design and Engineering
Due: 6/17/04
Status: On schedule
- Complete Retrieval System Installation
Due: 4/21/04
Status: On schedule
- Complete Retrieval Operations
Due: 9/17/04
Status: On schedule
- Complete Interim Closure
Due: 7/29/05
Status: On schedule

Significant Accomplishments:

- Initiated C-105 Project on 10/1/03
- Initiated C-105 pre-equipment removal activities on 10/10/03
- Approved Statement of Work for Functions and Requirements document on 10/22/03
- Prepared the process description on 10/24/03
- Prepared the preliminary piping and instrumentation diagram on 10/24/03

Significant Planned Activities in the Next 6 Months:

- Complete pre-equipment removal activities
- Complete the Functions and Requirements document
- Complete retrieval system procurement
- Initiate retrieval system installation, startup, and readiness

Issues: None

C-106

- **M-45-06A**, "Submit a Certified (Framework) SST System Closure Plan and C-106 Waste Retrieval and Closure Demonstration Plan
Due: 12/19/02
Status: **Complete**. 12/17/02.
- **M-45-05J-T01**, "Complete C-106 Waste Retrieval and Closure Demonstration Project Design (including all physical systems and design/operating strategies for LDMM)"
Due: 4/30/03
Status: **Complete**. C-106 was pumped week of 3/31/03.
- **M-45-05K-T01**, "Complete C-106 Waste Retrieval and Closure Demonstration Project Construction (including all physical systems and design/operating strategies for LDMM)"
Due: 9/30/03
Status: **Complete**. ORP letter 03-TPD-082, dated 8/21/03.
- **M-45-05L-T01**, "Complete Full Scale C-106 Waste Retrieval"
Due: 11/1/03
Status: Behind schedule. Retrieval still in progress, expect to complete in November 2003. ORP letter 03-TPD-108 reported status of retrieval to Ecology.
- **M-45-05M-T01**, "Submit C-106 Waste Retrieval Results, Analysis of Residual Waste(s), and (if appropriate) Request for Exemption to the Criteria Pursuant to Agreement Appendix H"
Due: 2/27/04
Status: On Schedule
- **M-45-05H**, "Interim Completion of Tank C-106 SST Waste Retrieval and Closure Demonstration Project"
Due: 4/30/04
Status: On schedule
- **M-45-05N-T01**, "Final Completion of Tank C-106 SST Retrieval and Closure Demonstration Project"
Due: 12/31/04
Status: On schedule

Significant Accomplishments:

- Completed C-106 retrieval and closure demonstration project construction (M-45-05K-T01) two months early.
- Completed the Operational Acceptance checklist to support the Level 3 Readiness Assessment on 8/4/03.
- Completed installation of mixer pump and startup of the Acid Dissolution activity.
- Transferred roughly 8,000 gallons of liquid from C-106 to AN-106 on 8/5/03.
- Fabricated raw water addition hose and check valves to install C-106 replacement pumping system on 8/11/03.
- Completed Batch-1 Oxalic Acid addition to C-106 on 8/13/03.

- Pumped first batch of Oxalic Acid to AN-106 on 8/26/03.
- Completed second batch addition of Oxalic Acid to C-106 on 8/28/03.
- Validated Acid Dissolution effectiveness.
- Started informal review of SST System Closure Plan.
- Completed Interim Isolation Plan on 9/18/03.
- Complete C-106 Level III Readiness Assessment for Acid Dissolution retrieval.
- Retrieved approximately 5,000 gallons and an estimated 270,000 curies from C-106 on 9/23/03.
- Removed the C-106 Flygt Pump Assembly from C-106B on 9/25/03.
- Installed the replacement pumping assembly on C-106 on 9/26/03.
- Initiated approvals for C-106 Isolation Design Media on 9/30/03.
- Installed Gorman Rupp pumping system on 10/6/03
- Released design media for Interim Isolation of C-106 on 10/8/03
- Sluiced C-106 and transferred wastes to AN-106
- Performed 4 batches of acid dissolution
- Retrieved over 10 Kgal of waste; approximately 7 Kgal (950 cubic feet) remain to be retrieved.

Significant Planned Activities in the Next Six Months: [NOTE: Moved before "Issues" to be consistent with format used elsewhere in this report.]

- Continue informal review of SST System Closure Plan.
- Continue and complete Acid Dissolution and sluicing retrieval of C-106.
- Prepare C-106 for interim isolation.
- Conduct post retrieval sampling for closure.
- Continue to collect lessons learned for improvements; evaluate and implement.
- Complete design and procurement for all near-term retrievals.
- Implement Value Engineering (VE) Study recommendations.
- Continue challenging schedules and processes.

Issues:

- SST System Closure Plan, Revision 1 certification on hold.
- Incorporate lessons learned for future startup of retrieval operations.
- C-106 pump failure required installation of backup transfer pump.
- Removal of additional waste requires installation of new sluice nozzle and ancillary equipment.

S-112

- **M-45-03D**, "Complete S-112 Saltcake Waste Retrieval Technology Demonstration Design" (all physical systems including LDMM provisions)
Due: 5/31/03
Status: **Complete**. ORP letter 03-TPD-048, dated 5/22/03.

- **M-45-03E**, "Complete S-112 Saltcake Waste Retrieval Technology Demonstration Construction (all physical systems including LDMM provisions)"
Due: 3/31/04
Status: **Complete**. ORP letter 03-TPD-112, dated 11/7/03.
- **M-45-06B**, "Submit a Certified (Framework) SST System Closure Plan and S-112 Waste Retrieval and Closure Demonstration Plan"
Due: 9/30/04
Status: On an accelerated schedule
- **M-45-03C**, "Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Tank S-112 (all physical systems including LDMM provisions)"
Due: 3/31/05
Status: On an accelerated schedule.
- **M-45-13**, "Interim Completion of Tank S-112 Waste Retrieval and Closure Demonstration Project"
Due: 12/31/05
Status: On an accelerated schedule.
- **M-45-13-T01**, "Final Completion of Tank S-112 SST Retrieval and Closure Demonstration Project"
Due: 12/30/06
Status: On an accelerated schedule.

Significant Accomplishments:

- Completed installation of POR04 exhauster.
- Completed installation of high-efficiency particulate air (HEPA) filters.
- Completed installation of the instrument manifold riser extension and pump.
- Received Ecology approval of S-102 retrieval action.
- Completed S-112 risk assessment geology/hydrology data package.
- Completed S-112 Level 2 Specification.
- Completed CH2M/ORP concurrent review of S-112 WMA/Framework Closure Plan.
- Completed CH2M/ORP review and started Ecology review of S-112 Data Quality Objectives.
- Completed installation of S-A to SY-101 Hose-In-Hose Transfer Line.
- Completed readiness preparation.
- Completed installation of SY-101 to S-112 heat trace and leak detector.
- Completed exhauster Operations Test Procedure (OTP).
- Reviewed and issued S-112 Operability Test Report.
- Completed leak detection functional test.
- Initiated retrieval of S-112 wastes.
- Transferred approximately 220,000 gallons of waste to SY-101.
- Performed high volume flush of SY-102 hose-in-hose transfer line to support reconfiguration of transfer route on 10/15/03
- Completed modifications of S-A jumper connections to reroute to SY-102 on 10/22/03
- Completed modifications of heat trace and leak detector circuits on 10/22/03

- Completed troubleshooting of POR04 glycol heater on 10/22/03
- Completed modification of transfer pump administrative key lock on variable frequency drive on 10/23/03
- Completed control system changes for reroute to SY-102 on 10/23/03
- Completed S-112 construction; meeting TPA Milestone M-45-03E on 10/25/03

Significant Planned Activities in Next Six Months: [NOTE: Moved before "Issues" to be consistent with format used elsewhere in this report.]

- Complete retrieval of S-112
- Conduct post retrieval sampling of C-106 and S-112 for closure
- Submit WMA/Framework Closure Plan for S-112 to Ecology for review and approval
- Complete Ecology review of S-112 Data Quality Objectives.

Issues:

- Retained gas discovered in SY-101. Retrieval paused pending realignment of transfer line to SY-102.
- Discovery of solids inventory issue with SY-101 required rerouting of transfer system to SY-102.

S-102

- **M-45-05B**, "Complete S-102 Initial Retrieval Project Design (all physical systems including LDMM provisions)
Due: 5/31/03
Status: **Complete**. ORP letter 03-TPD-048, dated 5/22/03.
- **M-45-05C**, "Complete S-102 Initial Waste Retrieval Project Construction (all physical systems including LDMM provisions)"
Due: 3/31/04
Status: On an accelerated schedule.
- **M-45-06C**, "Submit a Certified (Framework) SST System Closure Plan and S-102 Waste Retrieval and Closure Demonstration Plan
Due: 9/30/04
Status: On an accelerated schedule
- **M-45-05A**, "Complete Initial Waste Retrieval from SST S-102"
Due: 3/31/05
Status: On an accelerated schedule.
- **M-45-15**, "Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project"
Due: 12/31/05
Status: On an accelerated schedule.
- **M-45-15-T01**, "Final Completion of Tank S-102 SST Retrieval and Closure Demonstration Project"

Due: 12/31/06

Status: On an accelerated schedule.

Significant Accomplishments:

- Completed fabrication of S-102 equipment.
- Issued revision of S-102 Functions & Requirements (F&R) document.
- Received Ecology approval of S-102 retrieval action.
- Completed S-102 risk assessment geology/hydrology data package.
- Completed S-102 Level 2 Specification.
- Completed CH2M/ORP review and started Ecology review of S-102 Data Quality Objectives.
- Reviewed S-112 work package lessons learned and incorporated changes into S-102 work packages
- Completing design, work packages, and procedure changes on Portable Exhauster POR05 to modify/upgrade for use on S-102 using experience from POR04 on S-112

Significant Planned Activities in Next Six Months: [NOTE: Moved before "Issues" to be consistent with format used elsewhere in this report.]

- Continue S-102 Waste Retrieval System installation
- Submit WMA/Framework Closure Plan for S-102 to Ecology
- Install stilling well.
- Remove interim stabilization equipment.
- Install Remote Water Distribution Devices in risers 11, 14, 16, and Central Water Distribution Device.

Issues: None

C-200s (no milestones, due dates per Integrated Mission Execution Schedule (IMES)):

- Complete Retrieval Design
Due: 6/30/03
Status: Complete
- Submit Closure Plan Rev. O to Ecology
Due: 9/16/03
Status: On hold

- Complete Construction for Retrieval
Due: 12/11/03
Status: On schedule
- Declaration of Readiness Complete
Due: 12/23/03
Status: On schedule
- Start Retrieval
Due: 1/10/04
Status: On schedule
- Complete Retrieval
Due: 2/4/04
Status: On schedule
- Interim Completion of Retrieval and Closure Activities
Due: 8/17/04
Status: On schedule
- Final Completion of Retrieval and Closure Activities
Due: 9/30/04
Status: On schedule

Significant Accomplishments:

- Completed fabrication of the utility valve manifold.
- Completed aerosol testing and analysis for the vacuum system air return line.
- Completed installation of exhauster POR03 in the field.
- Completed the acceptance testing of the vacuum system, water skid, air compressor, and control trailer at the Cold Test Facility.
- Submitted the Documented Safety Analysis/Technical Safety Requirement (DSA/TSR) amendment package to ORP for independent review team approval.
- Replaced the tank inlet filter breather assemblies to C-201 through C-204.
- Removed the thermocouples from C-201, C-202, and C-203.
- Installed water skid and air skid outside C-Farm.
- Completed major equipment deliveries with receipt of Hose-In-Hose Transfer Lines.
- Completed installation and tie-in to the 13.8 KV power supply of the electrical substation and transformer.
- Commenced with calibration of instrumentation to approved maintenance procedures at the Cold Test Facility.
- Received comments from the Washington State Department of Ecology on the C-200 Series Functions and Requirements Document.
- Completed C-204 solid tank sample collection.
- Completed CH2M/ORP concurrent review of C-200 WMA/Framework Closure Plan.
- Completed installation of four articulated masts in the four C-200 series tanks on 10/30/03

- Completed calibration of the Vacuum System instrument calibrations at the Cold Test Facility on 10/20/03
- Demobilized the Vacuum Retrieval System from the Cold Test Facility to C-Farm
- Installed the control trailer at C-Farm on 10/31/03
- Completed the removal of four condenser pit filters and cover plates on 11/5/03

Significant Planned Activities in the Next Six Months: [NOTE: Moved before "Issues" to be consistent with format used elsewhere in this report.]

- Continue operator training on the Vacuum Retrieval System ongoing at the Cold Test Facility. Currently three operators are qualified on the operation of the system.
- Declare readiness by completing the Readiness Assessment
- Retrieval operations scheduled 12/20/03 – 1/28/04
- Complete field installation and instrument calibration activities.
- Submit WMA/Framework Closure Plan for C-200s tanks to Ecology
- Finalize C-200 Series Functions and Requirements document.

Issues:

- Receipt of approval from Ecology associated with a revision to the Notice of Construction for the removal of the existing C-200 condenser filter plates is pending.

C-104

- **M-45-03G**, "Complete C-104 Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Cold Demonstration"
Due: 6/30/04
Status: **Complete** (11 months ahead of schedule); ORP letter 03-TPD-074, 8/13/03
- **M-45-03H**, "Complete C-104 Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Demonstration Design (all physical systems including LDMM provisions)"
Due: 9/30/04
Status: On schedule.
- **M-45-03I**, "Complete C-104 Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Demonstration Construction (all physical systems including LDMM provisions)"
Due: 9/30/06
Status: On schedule
- **M-45-06D**, "Submit a Certified (Framework) SST System Closure Plan and C-104 Waste Retrieval and Closure Demonstration Plan"
Due: 6/30/07
Status: On schedule
- **M-45-03F**, "Complete Full-Scale Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Demonstration a SST C-104"
Due: 9/30/2007

Status: On schedule

- **M-45-14**, "Interim Completion of Tank C-104 SST Waste Retrieval and Closure Demonstration Project"
Due: 6/30/08
Status: On schedule
- **M-45-14-T01**, "Final Completion of Tank C-104 SST Retrieval and Closure Demonstration Project"
Due: 6/30/09
Status: On schedule

Significant Accomplishments:

- Prepared Statement of Work for the Functions and Requirements document for C-104 on 10/21/03
- Prepared Statement of Work for final design services on 10/27/03

Significant Planned Activities in Next Six Months: [NOTE: Moved before "Issues" to be consistent with format used elsewhere in this report.]

- Initiate C-104 Final Design
- Complete Functions and Requirements document

U-200 Series Tanks (4, Per IMES)

- Complete Retrieval System Design and Engineering
Due: 7/30/04
Status: On schedule
- Complete Retrieval System Installation
Due: 4/7/04
Status: On schedule
- Complete Retrieval Operations
Due: 6/14//04
Status: On schedule
- Complete Interim Closure
Due: 4/9//05
Status: On schedule

Significant Accomplishments:

- Commenced with the design and engineering for the U-200 series tanks retrieval system

Significant Planned Work for the Next 6 Months:

- Complete design and engineering for the U-200 series tanks retrieval system
- Complete retrieval system procurement
- Initiate retrieval system installation, startup, and readiness

Issues: None

B-200 Series Tanks (4, Per IMES)

- Complete Retrieval System Design and Engineering
Due: 2/8/04
Status: On schedule
- Complete Retrieval System Installation
Due: 11/22/04
Status: On schedule
- Complete Retrieval Operations
Due: 12/25/04
Status: On schedule
- Complete Interim Closure
Due: 10/21/05
Status: On schedule

Significant Accomplishments:

- Initiated early planning activities to commence design and engineering activities
- Mobilized Industrial Design (IDC) design leads to the Hanford Site

Significant Planned Work in the Next 6 Months:

- Complete design and engineering activities

Issues: None

S-105/S-106/S-103

- M-45-05-T17, "Submit S-105, S-106, and S-103 Waste Retrieval and Closure Demonstration Functions and Requirements Document"
Due: 4/30/05
Status: On schedule
- M-45-05E, "Complete S-105, S-106, and S-103 Waste Retrieval and Closure Demonstration Project Design (including all physical systems and design/operating strategies for LDMM for each tank)"
Due: 6/30/07
Status: On schedule

- **M-45-05F**, "Complete S-105, S-106, and S-103 Waste Retrieval and Closure Demonstration Project Construction (including all physical systems and design/operating strategies for LDMM for each tank)"
Due: 9/30/08
Status: On schedule
- **M-45-06E**, "Submit a Certified (Framework) SST System Closure Plan Modification for Tanks S-105, S-106, and S-103 Closure Demonstration Plan"
Due: 9/30/08
Status: On schedule
- **M-45-05G-T01**, "Complete S-105, S-106, and S-103 Waste Retrieval"
Due: 10/31/09
Status: On schedule
- **M-45-16**, "Interim Completion of Tank S-105, S-106, and S-103 SST Waste Retrieval and Closure Demonstration Project"
Due: 7/31/10
Status: On schedule
- **M-45-16-T01**, "Final Completion of Tank S-105, S-106, and S-103 SST Retrieval and Closure Demonstration Project"
Due: 7/31/11
Status: On schedule

Significant Accomplishments

- None. Activities are planned in out-years.

Significant Planned Activities in the Next Six Months: [NOTE: Moved before "Issues" to be consistent with format used elsewhere in this report.]

- Work on S-103 planned to start in FY 2004. Work on S-105 and S-106 planned to start in FY 2006, except for Functions and Requirements that will be addressed along with S-103 under M-45-05-T17.

Issues: None

IV. SST Retrieval from Remaining Tanks

- **M-45-05-T05**, "Initiate Tank Retrieval from 5 Additional SSTs"
Due: 9/30/2007
Status: On schedule
- **M-45-05-T06**, "Initiate Tank Retrieval from 5 Additional SSTs" by 9/30/2008
Due: 9/30/2008
Status: On schedule
- **M-45-05-T07**, "Initiate Tank Retrieval from 7 Additional SSTs" by 9/30/2009

Due: 9/30/2009
 Status: On schedule

- **M-45-05-T08**, "Initiate Tank Retrieval from 8 Additional SSTs" by 9/30/2010
 Due: 9/30/2010
 Status: On schedule
- **M-45-05-T09**, "Initiate Tank Retrieval from 10 Additional SSTs" by 9/30/2011
 Due: 9/30/2011
 Status: On schedule
- **M-45-05-T10**, "Initiate Tank Retrieval from 12 Additional SSTs" by 9/30/2012
 Due: 9/30/2012
 Status: On schedule
- **M-45-05-T11**, "Initiate Tank Retrieval from 14 Additional SSTs" by 9/30/2013
 Due: 9/30/2013
 Status: On schedule
- **M-45-05-T12**, "Initiate Tank Retrieval from 17 Additional SSTs" by 9/30/2014
 Due: 9/30/2014
 Status: On schedule
- **M-45-05-T13**, "Initiate Tank Retrieval from 20 Additional SSTs" by 9/30/2015
 Due: 9/30/2015
 Status: On schedule
- **M-45-05-T14**, "Initiate Tank Retrieval from 20 Additional SSTs" by 9/30/2016
 Due: 9/30/2016
 Status: On schedule
- **M-45-05-T15**, "Initiate Tank Retrieval from 20 Additional SSTs" by 9/30/2017
 Due: 9/30/2017
 Status: On schedule
- **M-45-05**, "Retrieve Waste from All Remaining SSTs" by 9/30/2018
 Due: 9/30/2018
 Status: On schedule

Milestone M-43-00, Tank Farm Upgrades

I. Near-Term Deliverables:

- **M-43-00, Complete Tank Farm Upgrades**
Due: 6/30/05
Status: On schedule.
Projects W-314 and E-525 are on schedule to complete Tank Farm upgrades in FY05.

II. Significant Accomplishments:

- W-314, Phase 2 AW Farm, Completed Pit 01A Upgrade and turnover of Operations
- W-314, Phase 2 AW Farm, Completed Pit 04A Upgrade and turnover to Operations
- W-314, Phase 2 AW Farm, Received and installed HVAC exhausters skids (trains A&B)
- W-314, Phase 2 AY/AZ Farm, Started excavation
- W-314, DCRT Bypass, Started installation of piping
- E-525, Issued Request for Proposal, 204-AR Construction Contract
- E-525, Awarded AZ-301 fabrication contract
- E-525, Initiated clean out box excavation

III. Significant Planned Actions in the Next Six Months:

- W-314, Phase 2 AW Farm, Complete pit upgrades, electrical, instr. & HVAC construction
- W-314, Phase 2 SY Farm, Complete pit upgrades, electrical and instr. Construction
- W-314, A-A Valve pit bypass, Award contract and initiate construction
- E-525, Issue request for proposal for AZ-301 construction contract
- E-525, Award AZ-301 condensate piping fabrication contract
- E-525, Initiate construction field work for 241-AW Clean Out Boxes

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

- Review request for Variance of Secondary Containment

V. Issues:

- Nothing to report.

Milestone M-46-00, Double-Shell Tank Space Evaluation**I. Deliverables:**

- **M-46-00J, Double-Shell Tank Space Evaluation**
Due: 9/30/03
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: 11/30/03
Status: Ecology Action.
- **M-46-00K, Double-Shell Tank Space Evaluation**
Due: 9/30/04
Status: On schedule.
- **M-46-01K, Concurrence of Additional Tank Acquisition**
Due: 11/30/04
Status: On schedule
- **M-46-00L, Double-Shell Tank Space Evaluation**
Due: 9/30/05
Status: On schedule
- **M-46-01L, Concurrence of Additional Tank Acquisition**
Due: 11/30/05
Status: On schedule
- **M-46-00M, Double-Shell Tank Space Evaluation**
Due: 9/30/06
Status: On schedule
- **M-46-01M, Concurrence of Additional Tank Acquisition**
Due: 11/30/06
Status: On schedule
- **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

1) Increase the DST fill height

Status: A technical expert panel met October 14-16 to provide recommendations for tank fill height increase. The panel indicated that tank maximum operating fill height could be increased to 449" contingent upon successful or positive results from a series of actions to demonstrate waste tank integrity. The contingent actions include:

- UT examination and analysis of upper regions of the tank
- Video surveillance of annulus and primary tank interior for defects
- Updated structural and seismic analysis
- Evaluation of safety analysis scenarios and calculations
- Additional operational monitoring during waste fills above 422"
- Provide the IQRPE with a position paper on "code equivalency"

The final report from the Panel is anticipated to be complete in December 2003. The preliminary recommendations are being reviewed to identify necessary implementation actions.

2) Reserve emergency space to reflect compliance with DOE Order 435.1 for the DST system (provides 1.1 M gallons of DST space).

Status: **Complete**

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

Status: The Tank Farm Waste Transfer Compatibility Program, HNF-SD-WM-OCD-015, Rev. 5, establishes criteria and logic processes for the criteria, that if met, provides a high degree of confidence the waste can be safely handled, including at SpG above 1.41. It allows for further evaluation in cases where one or more of the default criteria is exceeded. Plans to safely manage solids within tank farms are being developed.

Evaporator campaign plans are being updated to support SST transfer logistics for S-112 and Tank Farm summer outage. Preliminary schedule dates are shown in the attached table. Updated model calculations are planned for late November to provide projected "Waste Volume Reduction" numbers.

4) Use space currently identified as "restricted" space in tanks that contain staged feed for WTP.

Status: Waste feed controls are being developed to preserve the characteristics of WTP near term feed while allowing concentration and consolidation of waste in the tanks currently designated as feed tanks for the WTP. Discussions between ORP, CHG, and BNI are ongoing.

II. Significant Accomplishments:

Expert Panel met October 14-16 to provide recommendations for DST fill height increase.

III. Significant Planned Actions in the Next Six Months:

- Evaporator campaigns as shown in the table above.
- Issue Expert Panel Recommendations Report.

IV. Issues:

- None to report.

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

	Nov-02	Jan-03	Feb-03	July-03	Aug-03	Feb 04	Mar 04	May 04	Oct 04	Nov 04	Feb 05	Dec 04	Feb 05
Campaign	2002-02	2003-01	2003-02	2003-03	2003-04	2004-01	2004-02	2004-03					
Staging Tk	AP-107	AP-108	AP-107	AP-108	SY-101	AP-105	AP-107	AP-104	AP-105	AP-107	AP-108	AN-106	AP-101
Campaign - Upper Planned Limit- kGallons	387.1	268.4	241.4	497.0	120.9	280*	420*	430*	Tbd	Tbd	Tbd	Tbd	Tbd
Campaign - Actual kGallons	384.2	281.7	243.1	464.6	136.1								
Target WVR% (Post-Flush)	38.0%	25.0%	25.0%	40.0%	20.0%		Awaiting	HTWOS	Model	Runs	Update		
Actual WVR% (Post-Flush)	38.0%	26.0%	25.0%	39.0%	22.5%								
Specific Gravity				1.46	tbd								

Data Sources:

Evaporator Schedule from:

Campaign Upper Limits:

Actual WVR and SpG:

Historical records, IMES 10-20-2003

Boil down tests

Campaign and laboratory reports

*Preliminary Upper Planned Limit boil off gallons, pending model update, laboratory boil off tests and process control plan

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-47-01**, Complete construction of the transfer line system from the 241-AP Tank Farm to the WTP Facility to support the start of hot commissioning of the Phase I Tank Waste Treatment Complex
Due: 3/31/06
Status: Construction complete. Working off punch list items. Official notification of completion will be prepared for Ecology.
- **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: 3/31/07
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 AP-02A and AP-O2D pit modifications construction. (See M-47-01).
- **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: 6/30/07

Status: Ahead of schedule.

Startup and turnover follow AP-101 transfer pump installation, as shown in M-47-05A and M-47-01.

Currently scheduled for completion in FY 2004.

- **M-47-05**, Start construction of waste retrieval and mobilization systems for selected initial low-activity waste feed tank (other than AZ-101 and AZ-102)
Due: 5/31/04
Status: **Complete**. Electrical upgrades for the AP-101 transfer pump began October 7. A formal notification letter has been prepared and is being routed for approval. New pump installation is scheduled for completion in FY04.
- **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: 4/30/06
Status: Ahead of schedule.

Field work for AP-101 pump installation has begun.

Turnover to operations is scheduled for FY 2004.

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: 2/28/09
Status: Ahead of schedule. AY-102 Title II design has been initiated.
- **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: 6/30/10
Status: Negotiations are not yet underway.

II. Significant Accomplishments:

- W-211, AZ-101 Retrieval system: completed ATPs, set new temporary pump head riser plug
- W-211, AP-02A/02D Pit Upgrades: completed back fill of transfer piping
- W-211, AZ-156 bldg, completed equipment upgrades
- W-211, AN-101, completed transfer pump fabrication
- W-211, AN-107, completed final design review
- W-211, AY-102, awarded contract for title II design
- AP-101, initiated electrical upgrades for transfer pump installation

III. Significant Planned Actions in the Next Six Months:

- W-211, AZ-101 Retrieval System, complete construction (delayed transfer pump installation to FY08).
- W-211, AN infrastructure, complete construction
- W-211, AN-101, install new temperature probe and transfer pump
- W-211, AZ-102 award construction contract
- AP-101, install transfer pump

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

- Nothing to report

V. Issues:

- Nothing to report

In Tank Characterization and Summary

As of October 29, 2003

I. Significant Accomplishments:

- Sampling Activities:

<u>Program</u>	<u>Tank Completed</u>			
	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Cross-Site Transfer / Compatibility				
Chemistry Control	AY-102 (C)			
SST Retrieval / Closure	SY-101 (G)			
	C-106 (G)			
Evaporator Operations				
Supplemental Technology	S -112 (G)			

- Complete FY 2003 4th Quarterly Status Report and submitted to Ecology in October 31, 2003.
- Completed 32 BBI updates during 4th Quarter of FY 2003.
- The following DQOs are under final review:
 - Tank 241-C-106 Component Closure Action DQO, Rev. 1
 - Tank 241-C-200 Series Component Closure Action DQO, Rev. 1.
 - Tank 241-S-102 and S-112 Component Closure Action DQO, Rev. 0

II. Planned Action Within the Next Six Months:

- 31 BBI updates are planned for 1st Quarter of FY04.

III. Issues:

- None

September 2003 WTP Cumulative Status

	Budget	Installed	% Cplt	Engineered	% Cplt
Concrete (CY)	254,432	76,234	30.0%	106,720	41.9%
Struc.Steel (Tons)	21,052	119	0.6%	2,360	11.2%
Piping (LF)	731,741	3,962	0.5%	25,628	3.5%
Conduit (LF)	750,663	3,772	0.5%	18,857	2.5%
Cable Tray (LF)	131,225	866	0.7%	6,485	4.9%
Cable (LF)	4,867,313	0	0.0%	31,010	0.6%
HVAC Duct (lbs)	3,845,718	72,543	1.9%	270,389	7.0%

General Accomplishments

- BNI Submitted the Regulatory Data Quality Objectives (RDQO) data review package to DOE and Ecology for review. The package includes achievable detection limits and reporting limits for RDQO analyte listing and review of the regulatory methods applicable to tank waste matrices.
- Quantities Progress in September:
 - 9,900 cubic yards concrete
 - 680 tons of rebar
 - 187,000 pounds of embedded metal
 - 28,800 square feet of formwork
 - 51 tons of structural steel
 - 22,200 cubic yards of earthwork

PT Facility

- 37.0% complete with scheduled concrete
- Completed basemat one week ahead of project milestone schedule.
 - 45,200 cubic yards of concrete
 - 7,200 tons of rebar
 - 600,000 pounds of embedded steel plate
- Underway with concrete wall placements

- Underway with steel and pipe installations in fire water pit
- Continuing with fabrication of 4-pack tanks (Feed Receipt Vessels), which are now 65% complete.
- Submitted the Dangerous Waste Permit Design packages, PTF-007 and PTF-008, to DOE and Ecology. These design packages are associated with the underground waste transfer lines. Temporary authorization received from Ecology for piping at -21 ft. elevation.

HLW Facility

- 24.9% complete with scheduled concrete
- Received the submerged bed scrubber (SBS) condensate collection vessel to be set in place by December 2003 according to a contract performance milestone.
- Received the Ecology permits to set and install the SBS vessel.
- Continuing concrete placements for walls and thickened slabs

LAW Facility

- 47.4% complete with scheduled concrete
- Design packages for elevations 3 to 28 feet were released to Construction.
- Continued structural steel installations in the northwest areas.
- Below-grade wall placements nearly complete
- Placed C1/C2 non-radioactive drain tank

Balance of Facilities

- 6.1% complete with scheduled concrete
- Complete structural backfill around non-radioactive liquid disposal tank foundations and completed backfill on the north side of the LAW facility to planned grade.
- Began steel erection in Switchgear Building and completed the utility and cable tray installations.
- Ductbank installation continues for 13.8 and 4.16 KV power, controls, and instrumentation cable systems.

Analytical Laboratory Facility

- Submitted DWP Package Number LAB-001 to Ecology for approval
- Awarded the C2 and C3 effluent vessels

Major Accomplishments Planned for Next Six Months

- Set #1 Melter Submerged Scrubber Condensate Vessel in HLW facility -12/03
- Commence +3 ft. El. Slab Form Rebar and Embeds for LAW facility – 11/03
- Commence Installation of HVAC Duct in LAW facility at El.-21ft – 3/04

- Commence +3 ft. El. Interior Wall Form Rebar Embeds in LAW facility – 3/04
- Complete Switchgear Building Construction Testing – 4/04

Backup Information: Cost and Schedule Variance Analysis

2.0 TW03 - STORE WASTE

2.1 PERFORMANCE SUMMARY

FY 2003 Cumulative Performance - Store Waste						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
TW03	136,971	135,649	137,386	(1,322) -1.0%	(1,737) -1.3%	136,969

2.1.1 SCHEDULE VARIANCE

Description and Cause: The unfavorable schedule variance (-\$1.3M; -1.0%) is attributed to the following.

Late completion of the technical safety requirements (TSR) delayed the 242-A Evaporator portion of the DSA. Progress on the 242-A Evaporator DSA has been delayed until the tank farms DSA is implemented.

Initiation of the DST space options implementation activity was delayed because of higher priority activities. The DST space options implementation activity is an effort to establish the DST design and operation maximum liquid level.

Impact: These activities had a fiscal year-end unfavorable schedule variance.

Corrective Action: The tank farms DSA implementation is scheduled for October 27, 2003, ahead of the milestone date of October 31, 2003. This will allow for recovery of the schedule for completion of the 242-A Evaporator DSA Implementation by the milestone date of November 17, 2003.

2.1.2 COST VARIANCE

Description and Cause: The unfavorable cost variance (-\$1.7M; -1.3%) is attributed to the following.

Interim Stabilization has incurred unplanned costs on the failed S/SX transfer line for design, engineering, planning, and fabrication of a new hose-in-hose transfer line (HIHTL) from S-A valve pit to Tank 241-SY-102, as well as increased requirements resulting from corrective actions surrounding the failed SX HIHTL. Extra resources were used to expedite the startup of Tank 241-C-103 pumping and to repair unexpected equipment failures. Additionally, maintenance costs were higher than planned because of efforts to keep the tanks pumping, including multiple transfer line flushes, treatment with caustic, and pump replacement.

The WFO and SST/DST Maintenance has a higher than planned number of operators and Health Physics Technicians (HPT) supporting basic maintenance and monitoring activities. In addition, extra resources were required on unplanned equipment failures, inspections, and cleaning and testing of DST facilities. Also, management support to WFO was more than planned.

The DSA and associated TSR cross-table reviews with ORP resulted in additional work to resolve technical issues. This additional work included the development of various tank modes (e.g., maintenance, operations, and retrieval) that will provide improved safety and added flexibility during SST retrieval activities. In addition, subcontract costs for Unreviewed Safety Question (USQ) work for all programs are being charged to this Project Baseline Summary (PBS), causing an overrun condition.

Impact: These activities had a fiscal year-end unfavorable cost variance.

Corrective Action: Interim Stabilization's labor charges are being closely monitored and resources will be redeployed as tank pumping and equipment repairs are completed.

An agreement was reached with FH for the transfer of 24 HPTs and 13 nuclear chemical operators, which will reduce future costs.

Partial recovery of the DSA Completion/Maintenance cost variance has been realized by the transfer of USQ costs to appropriate accounts.

3.0 TW04 - RETRIEVE WASTE

3.1 PERFORMANCE SUMMARY

FY 2003 Cumulative Performance - Retrieve Waste						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
TW04 - Expense	68,386	63,444	71,846	(4,942) -7.2%	(8,402) -13.2%	68,385
W-211	23,760	31,887	21,664	8,127 34.2%	10,223 32.1%	23,760
W-314	39,038	39,141	33,630	103 0.3%	5,511 14.1%	39,040

3.1.1 SCHEDULE VARIANCE

3.1.1.1 RETRIEVE WASTE – EXPENSE

Description and Cause: The unfavorable schedule variance (-\$4.9M; -7.2%) is because of delays in C Farm Retrieval/Closure activities caused by labor prioritization and mobilization issues.

Impact: These activities had a fiscal year-end unfavorable schedule variance. However, it is anticipated that this variance will be recovered by the end of the first quarter in FY 2004.

Corrective Action: Activities are being monitored with greater emphasis on securing the required resources.

3.1.1.2 RETRIEVE WASTE – CAPITAL PROJECTS

3.1.1.2.1 Project W-211 - Initial Tank Retrieval Systems

Description and Cause: The favorable schedule variance (\$8.1M; 34.2%) is the result of several construction contracts, including AZ-101 and AN-101 Retrieval Systems construction and the transfer system construction, which are progressing significantly ahead of the baseline completion dates.

Impact: There is no forecasted impact.

Corrective Action: None required.

3.1.1.2.2 Project W-314 - Tank Farm Restoration and Safe Operations

Description and Cause: The favorable schedule variance (\$0.1M; 0.3%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

3.1.2 COST VARIANCE

3.1.2.1 RETRIEVE WASTE – EXPENSE

Description and Cause: The unfavorable cost variance (-\$8.4M; -13.2%) is attributed to the following.

Additional engineering support was required to resolve issues to complete fabrication and installation of the S-112 Retrieval/Closure System.

The C-201 Retrieval/Closure activity has incurred more costs than planned because the planning was developed from a top-down standpoint and was based on first-of-a-kind work scope.

The C-106 Retrieval/Closure activity has incurred more costs than planned because of the establishment of a first-of-a-kind product and path forward for the "Resource Conservation and Recovery Act of 1976 (RCRA)" closure plan development.

Impact: These activities had a fiscal year-end unfavorable cost variance. However, future RCRA closure plans will be less expensive because of precedents established for the Tank 241-C-106 closure plan of bundling several tanks together in a single submittal.

Corrective Action: Costs on Tanks 241-S-112, 241-C-201, and 241-C-106 activities will be monitored and reduced where possible. In addition, cost efficiencies are being realized on other Retrieval/Closure activities by the use of Tank 241-S-112 design and spare parts.

3.1.2.2 RETRIEVE WASTE - CAPITAL PROJECTS

3.1.2.2.1 Project W-211 - Initial Tank Retrieval Systems

Description and Cause: The favorable cost variance (\$10.2M; 32.1%) is the result of contract awards for five construction contracts that were less than planned in the baseline.

Impact: There is no forecasted impact.

Corrective Action: None required.

3.1.2.2.2 Project W-314 - Tank Farm Restoration and Safe Operations

Description and Cause: The favorable cost variance (\$5.5M; 14.1%) is a result of cost savings that are being achieved through competitive bidding for the Phase 2 definitive designs on 241-AY, 241-AZ and 241-AP tank farms and Phase 2 construction on 241-SY and 241-AW and 241-AP tank farms. In addition, cost savings were realized on the HVAC procurement for AW Phase 2 because of the use of a contract option on the AN Phase 2 HVAC procurement.

Impact: There is no forecasted impact.

Corrective Action: None required.

4.0 TW06 - TREAT WASTE

4.1 PERFORMANCE SUMMARY

FY 2003 Cumulative Performance - Treat Waste (\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
TW06 - Expense	23,239	22,089	19,618	(1,150) -4.9%	2,471 11.2%	23,238
W-519	0	0	(97)	0 0.0%	97 0.0%	0

4.1.1 SCHEDULE VARIANCE

4.1.1.1 TREAT WASTE - EXPENSE

Description and Cause: The unfavorable schedule variance (-\$1.1M; -4.9%) is because of procurement, development testing, and engineering activities on the TRU/LLW Packaging System, which were delayed to match the retrieval schedule. In addition, permitting activities were delayed to resolve the Part B Regulatory Path change from Research, Development, and Demonstration to Final Permit. Also, the certification program was delayed to resolve Hanford facility use options.

Impact: The critical path on the packaging system is impacted by 128 days as a result of the Part B Regulatory Path change.

Corrective Action: A recovery schedule for the critical path was developed, modifying the effective Part B date. This strategy will be finalized through issuance of a Permitting Plan, jointly approved by CH2M HILL, ORP, and State of Washington, Department of Ecology (Ecology).

4.1.1.2 TREAT WASTE - CAPITAL PROJECTS¹

4.1.1.2.1 Project W-519 - Privatization Phase I Infrastructure Support

Description and Cause: The schedule variance (\$0.0M; 0.0%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

4.1.2 COST VARIANCE

4.1.2.1 TREAT WASTE - EXPENSE

Description and Cause: The favorable cost variance (\$2.5M; 11.2%) is the result of efficiencies realized on project management activities of the TRU/LLW Packaging System and early engineering work of the LAW project. In addition, the cost of electricity for the WTP Infrastructure project has been less than planned.

Impact: There is no forecasted impact.

Corrective Action: None required.

4.1.2.2 TREAT WASTE - CAPITAL PROJECTS

4.1.2.2.1 Project W-519 - Privatization Phase I Infrastructure Support

Description and Cause: The cost variance (\$0.1M; 0.0%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

¹ Values for Project W-519 represent residual accrual activity from FY 2002.

5.0 TW09 - DISPOSE WASTE

5.1 PERFORMANCE SUMMARY

FY 2003 Cumulative Performance - Dispose Waste						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
TW09	10,244	10,067	10,521	(177) -1.7%	(454) -4.5%	10,243

5.1.1 SCHEDULE VARIANCE

5.1.1.1 DISPOSE WASTE

Description and Cause: The unfavorable schedule variance (-\$0.2M; -1.7%) is within the reporting threshold.

Impact: This PBS had a fiscal year-end unfavorable schedule variance.

Corrective Action: None required.

5.1.2 COST VARIANCE

5.1.2.1 DISPOSE WASTE

Description and Cause: The unfavorable cost variance (-\$0.5M; -4.5%) is within the reporting threshold.

Impact: This PBS had a fiscal year-end unfavorable cost variance.

Corrective Action: None required.

6.0 TW10 - MANAGE PROJECT

6.1 PERFORMANCE SUMMARY

FY 2003 Cumulative Performance – Manage Project						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
TW10	75,072	75,071	58,728	(1) 0.0%	16,343 21.8%	75,071

6.1.1 SCHEDULE VARIANCE

Description and Cause: The favorable schedule variance (\$0.0M; 0.0%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

6.1.2 COST VARIANCE

Description and Cause: The favorable cost variance (\$13.7M; 20.1%) is attributable to: receipt of a B&O tax credit from the State of Washington for businesses that perform research in specific high technology categories; severance cost related to workforce reductions was less than anticipated; there was a reduction in the rate for shared services as a result of lower than anticipated business volume; and FY 2003 fee is less than original projections as several milestones will be delayed until FY 2004.

Impact: There is no forecasted impact.

Corrective Action: None required. Favorable variances were used to offset existing overruns and to accelerate work where possible.

7.0 TW11 - CLOSE FACILITIES

7.1 PERFORMANCE SUMMARY

FY 2003 Cumulative Performance – Close Facilities						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
TW11	27,076	25,427	24,610	(1,649) -6.1%	(817) -3.2%	27,078

7.1.1 SCHEDULE VARIANCE

Description and Cause: The unfavorable schedule variance (-\$1.6M; -6.1%) is a result of deferring the Isolation of Transfer System Components, 244-CR vault clean-out, and Vadose Zone RCRA Corrective Action work scopes.

Impact: These activities have unfavorable variances at fiscal year-end.

Corrective Action: None.

7.1.2 COST VARIANCE

Description and Cause: The unfavorable cost variance (-\$0.8M; -3.2%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

8.0 PED - PROJECT ENGINEERING AND DESIGN

8.1 PERFORMANCE SUMMARY

FY 2003 Cumulative Performance – Project Engineering and Design						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
PED	1,557	1,556	1,589	(1) -0.1%	(33) -2.1%	1,557

8.1.1 SCHEDULE VARIANCE

8.1.1.1 PROJECT ENGINEERING AND DESIGN - CAPITAL PROJECTS

8.1.1.1.1 Project W-464 - Immobilized High-Level Waste Interim Storage (Line Item)

Description and Cause: The favorable schedule variance (-\$0.0M; -0.1%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

8.1.2 COST VARIANCE

8.1.2.1 PROJECT ENGINEERING AND DESIGN – CAPITAL PROJECTS

8.1.2.1.1 Project W-464 - Immobilized High-Level Waste Interim Storage (Line Item)

Description and Cause: The favorable cost variance (-\$0.0M; -2.1%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

9.0 RL-CP02 – 242-A EVAPORATOR - OPERATION

9.1 PERFORMANCE SUMMARY

FY 2003 Cumulative Performance –242-A Evaporator - Operation						
(\$000)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
RL-CP02	550	550	550	0 0.0%	0 0.0%	550

9.1.1 SCHEDULE VARIANCE

Description and Cause: The schedule variance (\$0.0M; 0.0%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

9.1.2 COST VARIANCE

Description and Cause: The cost variance (\$0.0M; 0.0%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

10.0 RL73600 – 242-A EVAPORATOR - SPARES

10.1 PERFORMANCE SUMMARY

FY 2003 Cumulative Performance –242-A Evaporator-Spares						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
RL73600	359	360	356	1 0.3%	4 1.1%	360

10.1.1 SCHEDULE VARIANCE

Description and Cause: The schedule variance (\$0.0M; 0.0%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

10.1.2 COST VARIANCE

Description and Cause: The cost variance (\$0.0M; 0.0%) is within the reporting threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

Bechtel Smart Sheet

Safety Statistics	
Total Recordable Injuries	35
Lost-Time Accidents	1
Recordable Rate	0.59
Lost-Time Injury Rate	0.02
Hours Worked Since LWC	3,339,880
Const Hours Worked Since LWC	978,980
Days w/Zero OSHA Recordables	26
Total Near Misses	5

Contingency (\$ in Millions)	
Contingency Plan	550.00
Trends	4.92
Contingency Total	554.92

	Percent Complete (Based on \$)	
	Plan	Actual
Engineering	53.3%	53.2%
Construction	8.7%	8.8%
Total Project	26.8%	26.4%

	Self-Performed vs Outsourced	
	Self	Out
To Date	46.2%	53.8%

Performance Indexes (Based on \$)											
	BOF	HLW	LAB	LAW	PT	Share	Serv	UBM	Eng	Cons	Total Project
CPI	106	102	104	101	0.97	102	150	0.99	104	101	101
SPI	104	0.99	101	100	103	0.99	0.61	100	101	101	100
CSPI	105	100	102	100	100	101	105	0.99	102	100	100

Project Cost to Date (\$ in Millions)																
	BOF		HLW		LAB		LAW		PT		Shared		UBM		OBS Totals	
	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan
Acq Services	0.32	0.33	0.41	0.41	0.22	0.23	0.35	0.33	0.41	0.40	34.56	38.79	0.00	0.00	36.39	40.49
Business Mgmt	0.61	0.64	0.60	0.61	0.37	0.40	0.58	0.59	0.66	0.67	20.35	27.23	0.00	0.00	23.70	30.28
Commissioning	1.97	2.06	1.90	1.87	1.26	1.32	1.73	1.82	1.61	1.73	9.15	24.56	0.00	0.00	27.63	33.37
Communications	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.93	2.06	0.00	0.00	1.93	2.06
Construction	24.56	25.47	21.98	25.44	0.28	0.28	19.03	19.57	45.13	41.81	175.40	177.83	5.42	13.39	295.10	303.80
Contracts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.87	4.06	0.00	0.00	3.88	4.06
Controller	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.36	2.97	0.00	0.00	3.29	2.97
E&NS	0.54	0.48	1.47	1.38	0.57	0.68	1.16	1.03	2.58	2.36	37.83	38.24	0.00	0.00	44.17	44.16
Engineering	7.64	7.36	70.39	72.12	11.41	11.67	59.18	59.46	67.94	66.59	138.70	134.93	0.00	0.00	365.73	362.19
Human Resources	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.94	52.93	0.00	0.00	53.94	52.93
IS&T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.10	38.19	0.00	0.00	37.17	38.19
PADC	0.07	0.05	0.07	0.05	0.07	0.05	0.06	0.05	0.07	0.07	20.00	21.80	0.00	0.00	20.39	22.06
Project Controls	0.62	0.66	0.83	0.71	0.46	0.50	0.63	0.64	0.61	0.65	25.54	24.76	0.00	0.00	28.75	27.96
Plant Equipment	2.45	2.33	30.54	29.03	2.81	2.84	12.93	12.42	43.53	36.31	0.34	0.00	0.00	0.00	92.60	82.94
Process Tech	2.79	3.02	1.16	1.17	0.29	0.30	1.26	1.21	2.83	2.73	13.32	13.19	0.00	0.00	21.63	21.62
QA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.87	13.87	0.00	0.00	13.87	13.87
R&T	0.00	0.00	28.98	30.48	0.00	0.00	42.35	43.90	47.00	46.96	39.22	39.71	0.00	0.00	158.08	161.47
Support Services	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.01	0.00	39.72	41.69	0.00	0.00	39.77	41.69
WBS Totals	51.58	52.39	158.34	163.26	17.74	18.26	139.29	141.03	212.37	200.27	677.01	696.81	5.42	13.39	1268.01	1286.10

Project Hours to Date (in Thousands)																
	BOF		HLW		LAB		LAW		PT		Shared		OBS Totals		O/T	
	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Rate
Engineering	261.92	257.08	975.34	979.13	169.02	172.04	761.83	747.63	1067.23	1028.94	1778.63	1792.92	5,017.98	4,978.56	8.0%	
Const Manual	241.70	336.24	160.34	263.57	0.00	0.00	222.62	241.39	249.85	337.41	679.85	779.64	1,554.36	1,958.24	1.6%	
Const Non-Man	103.32	109.92	73.83	80.58	3.64	4.39	72.06	76.49	85.65	87.38	811.78	805.48	1,514.3	1,643.30		
Acq Services	3.96	3.93	4.11	4.06	2.83	3.02	4.05	4.05	4.02	3.97	431.02	433.97	450.99	453.01	1.4%	
E&NS	6.33	6.12	20.56	20.34	6.49	7.09	14.51	14.37	27.28	25.54	392.76	402.08	471.56	475.54	4.0%	
R&T	0.00	0.00	17.29	17.40	0.00	0.00	11.63	13.09	25.55	26.12	414.4	40.81	96.62	97.79	0.6%	
Process Tech	18.58	20.34	20.86	21.33	5.03	5.51	23.56	22.70	38.94	39.64	84.83	86.76	191.82	196.35	2.9%	
Commissioning	29.88	30.93	27.93	27.41	17.81	18.52	25.26	26.45	24.09	25.35	221.29	219.68	346.39	348.49	0.6%	
Bus Serv & LOE	16.84	16.86	19.24	18.30	12.25	12.50	16.42	16.10	17.60	18.22	2,066.48	2,078.47	2,151.32	2,161.63	4.4%	
WBS Totals	682.53	781.43	1319.49	1432.13	217.08	223.06	1,519.5	1,462.28	1,540.20	1,592.57	6,508.07	6,639.82	11,432.48	11,833.92	5.0%	

Project Cost Estimate at Completion (\$ in Millions)																		
	BOF		HLW		LAB		LAW		PT		Shared		UBM		OBS Tot		Mar 03	
	PMB	PMB	PMB	PMB	PMB	PMB	PMB	PMB	PMB	PMB	PMB	PMB	PMB	PMB	PMB	PMB	Frct	Frct
Acq Services	0.65	0.72	0.46	0.56	0.72	0.72	134.41	0.00	37.52	137.84								
Bus Mgmt	0.84	2.10	1.70	2.02	1.98	514.00	0.00	60.04	39.73									
Commis	45.34	79.63	81.75	79.83	94.68	267.37	0.00	648.60	661.17									
Commun	0.00	0.00	0.00	0.00	0.00	8.02	0.00	8.02	8.27									
Construct	166.77	261.11	416.69	176.29	400.62	54.08	98.12	1,628.69	1,622.81									
Contracts	0.00	0.00	0.00	0.00	0.00	11.63	0.00	11.63	14.54									
Controller	0.00	0.00	0.00	0.00	0.00	11.04	0.00	11.04	11.46									
E&NS	1.44	6.22	2.58	3.26	6.28	139.60	0.00	151.41	179.36									
Engineering	32.79	100.90	24.12	89.90	113.68	278.07	0.00	679.46	668.39									
Human Res	0.00	0.00	0.00	0.00	0.00	79.59	0.00	79.59	82.70									
IS&T	0.00	0.00	0.00	0.00	0.00	90.00	0.00	90.00	96.34									
PADC	0.28	0.32	0.30	0.31	0.89	76.96	0.00	79.06	39.88									
Proj Controls	1.90	2.24	1.74	1.71	2.57	57.16	0.00	67.33	67.92									
Plant Equip	32.21	239.52	32.13	146.60	206.51	20.23	0.00	677.19	708.09									
Process Tech	12.53	3.08	0.82	3.33	7.5	39.29	0.00	66.19	58.77									
Quality Assur	0.00	0.00	0.00	0.00	0.00	66.16	0.00	66.16	67.46									
R&T	0.00	57.89	0.00	55.35	54.01	73.18	0.00	240.42	237.54									
Support Serv	0.00	0.00	0.00	0.00	0.00	127.09	0.00	127.09	153.50									
WBS Totals	264.75	783.73	187.29	569.18	891.09	2,045.28	98.12	4,839.44	-									
Mar 03 Frct	300.14	813.83	210.11	579.14	948.04	2,004.51	0.00	-	4,855.77									

Milestone Summary			
Construction Completion	Con	PMB	APM
SBS Collection Vessel Installed		12/03	12/03
Pre-asm & Inst Black Cell Pipe Mod		11/04	11/04
Cesium Ion Exchange Vessel Installed		02/05	02/05
Simulator Process Model Complete		05/06	05/06
Contract Schedule			
PT LAW Feed Receipt Tanks Installed	03/05	03/05	03/05
Assembly of HLW Melt # 1 Complete	12/07	02/07	02/07
Completion of Contract Requirements	07/11	07/11	07/11
TPA			
Start of Construction	07/02	07/02	07/02A
Begin Erection LAW First Struct Steel	10/03	08/03	07/03A
Complete Assembly LAW Melt # 1	11/05	08/07	08/07
Start HOT Commissioning	12/07	12/09	12/09
Completion of Hot Commissioning*	01/11	07/10	01/11

Total Project Commodity Summary							
Commodity	Engineering		Vendor		Construction		Total Project Budgeted
	Released	Scheduled	Delivered	Scheduled	Installed	Scheduled	
Concrete (yd3)	16,720	12,802	-	-	76,234	72,820	254,432
Structural Steel (ton)	2,360	2,368	754	713	119	114	21,052
Piping (LF)	25,828	24,918	3,982	13,613	3,982	3,832	73,174
Conduit (LF)	18,857	15,981	-	-	3,772	3,600	750,883
Cable Tray (LF)	6,485	8,294	-	-	866	-	13,125
Cable (LF)	31010	21979	-	-	-	-	4,867,313
HVAC Duct (lb.)	270,389	310,713	-	-	72,543	72,543	3,845,718

Critical Path

Item No.	Activity Description	Required Start	Current Forecast Start	Required Finish	Current Forecast Finish	Variance from Required Start or Finish
M-46-01J	Concurrence of Add'l Tank Acquisition			30NOV03*	10NOV03	20
M-45-05L-T01	Compl. Full Scale C-106 Waste Ret.			01NOV03*	18NOV03	-17
M-45-06C,	Submit Cert SST Sys Plan/S-102 PI			30SEP04*	16JAN04	258
M-45-06C,	Submit Cert SST Sys Plan/S-112 PI			30SEP04*	16JAN04	258
M-45-03C	Complete S-112 Saltcake Retrieval			31MAR05*	11MAR04	385
M-23-25F	Complete Install of (4) LOWs			31MAR04*	28MAR04	3
M-45-05M-T01	SUBMIT C-106 WASTE RESIDUAL RESULTS			27FEB04*	31MAR04	-33
M-45-05C	Complete S-102 Retrieval Construction			31MAR04*	31MAR04	0
M-45-05H	INTERIM COMPLETION OF C-106			30APR04*	12MAY04	-12
M-45-05A	Comp. Initial Waste Retrieval S-102			31MAR05*	03JUN04	301
M-23-25G	Complete Install of (4) LOWs			31AUG04*	13JUN04	79
M-45-03G	Complete C-104 Retrieval Demo Cold			30JUN04*	30JUN04	0
M-23-25	Complete Install of (24) LOWs			30SEP04*	13JUL04	79
M-45-06-T20A,	Submit SST Sys Impl Plan (C106)			30JUN04*	17JUL04	-17
M-45-03H	Complete C-104 Retrieval Demo Design			30SEP04*	29AUG04	32
M-90-08:	Initiate IDF Construction	28FEB05*	02SEP04			120
M-45-02M	- Annual Update SST Retrieval Seq Doc			29SEP04*	29SEP04	0
M-48-12	4 DST UT Reports to Ecology			30SEP04*	29SEP04	1
M-46-00K	- Annual DST Space Evaluation			30SEP04*	30SEP04	0
M-45-05N-T01,	Final Completion of Tank C-106			31DEC04*	01OCT04	91
M-47-05A	Complete AP-101 SU/System TO			30APR06*	03OCT04	574
M-46-01K	Concurrence of Add'l Tnk Acquisition			30NOV04*	10NOV04	20
M-23-27	244-CR Consent Decree due 12/30/04			30DEC04*	30DEC04*	0
M-45-55-T03	T,TX-TY FIR to Ecology			31JAN05*	13JAN05	12
M-45-13	Interim Complete S-112 Ret & Close Demo			31DEC05*	28JAN05	337
M-45-15	Interim Complete S-102 Ret & Close Demo			31DEC05*	25FEB05	309
M-43-00	Complete TF Upgrades			30JUN05*	22APR05	69

Start Date 01MAY99 IMES
 Finish Date 06JUL07
 Data Date 03NOV03
 Run Date 05NOV03 10:47

Sheet 1 of 2

**Remaining
TPA Milestone Status**



Item No.	Activity Description	Required Start	Current Forecast Start	Required Finish	Current Forecast Finish	Variance from Required Start or Finish
	M-45-03I Complete C-104 Retrieval Demo Construct			30SEP06*	06MAY05	512
	M-48-13 4 DST UT Reports to Ecology			30SEP05*	29SEP05	1
	M-45-02N - Annual Update SST Retrieval Seq Doc			30SEP05*	30SEP05	0
	M-46-00L - Annual DST Space Evaluation			30SEP05*	30SEP05	0
	M-46-01L Concurrence of Add' I Tnk Acquisition			30NOV05*	11NOV05	19
	C/A-AX/U FIR M-45-55-T04 to Ecology			31JAN06*	21JAN06	10
	M-45-03F (TBE) Complete C-104 Waste Retrnl			06JUL07*	26FEB06	495
	M-45-14 Interim Comp C-104 SST Wst/Retr Demo			06JUL07*	26FEB06	495
	M-48-14 DST System IA Report to Ecology			31MAR06*	31MAR06	0
	M-46-00M DST Space Evaluation			30SEP06*	09JUN06	113
	M-45-02O - Annual Update SST Retrieval Seq Doc			30SEP06	30AUG06	31
	M-45-02O - Annual Update SST Retrieval Seq Doc			30SEP06*	14SEP06	16
	FY06 Work Complete (M-48-)			29SEP06*	29SEP06	0
	M-90-10 Ready to Accept ILAW Waste			07JUN07*	29SEP06	172
	M-45-55 Submit RFI Roll-up Report to Ecology			31JAN07*	01NOV06	91

Start Date 01MAY99 IMES
Finish Date 06JUL07
Data Date 03NOV03
Run Date 05NOV03 10:47

Sheet 2 of 2

Remaining
TPA Milestone Status



Item No.	Activity Description	Required Start	Current Forecast Start	Required Finish	Current Forecast Finish	Variance from Required Start or Finish
	M-45-05L-T01 Compl. Full Scale C-106 Waste Ret.			01NOV03*	18NOV03	-17
	M-45-05M-T01 SUBMIT C-106.WASTE RESIDUAL RESULTS			27FEB04*	31MAR04	-33
	M-45-05H INTERIM COMPLETION OF C-106			30APR04*	12MAY04	-12
	M-45-06-T20A, Submit SST Sys Impl Plan (C106)			30JUN04*	17JUL04	-17

Start Date 01MAY99
 Finish Date 06JUL07
 Data Date 03NOV03
 Run Date 05NOV03 10:50

IMES Sheet 1 of 1

**TPA Milestones
That are Not on Schedule**



Item No.	Forecast Start	Forecast Finish	Required Finish	Days Ahead + or Behind - Required Finish	2003			
					OCT		NOV	
					27	3	10	17
	04NOV03	17NOV03	31OCT03	-11				
	06NOV03	06NOV03	22OCT03	-11				
	07NOV03	07NOV03	23OCT03	-11				
	09NOV03	17NOV03	31OCT03	-17				
	13NOV03	17NOV03	31OCT03	-11				
	17NOV03	17NOV03	31OCT03	-11				
		18NOV03	01NOV03*	-17				

Start Date 01MAY99
 Finish Date 06JUL07
 Data Date 03NOV03
 Run Date 04NOV03 14:41

IMES

**Longest Path for TPA
 Milestone M-45-05L-T01**

Sheet 1 of 1

"Complete Full Scale C-106 Waste Retrieval"

LT-ZL WHP TPA Longest Path Analyses



Item No.	Forecast Start	Forecast Finish	Required Finish	Days Ahead + or Behind Required Finish	2003												2004											
					NOV			DEC			JAN			FEB			MAR											
					0	3	10	17	24	1	8	15	22	29	5	12	19	26	2	9	16	23	1	8	15	22	29	
10NOV03*	11NOV03	10OCT03		-22	C-106 SOLID SAMPLE COLLECTION - In-Process CDC106375A																							
12NOV03	13NOV03	14OCT03		-22	C-106 SHIPMNT (SOLID-In-Procs) TO 222-S/PNNL LAB CDC106380A																							
14NOV03	13FEB04	14JAN04		-22	C-106 SAMPLE ANALYS 222-S (FORMAT IV) - In-Proces CDC106405A																							
17FEB04				-22	C-106 Receive In-Process Format IV Sampl Analys CDC106406A																							
17FEB04	18FEB04	16JAN04		-22	C-106 PREPARE STAGE I SUBMITTAL CDC106536																							
19FEB04	01MAR04	28JAN04		-22	C-106 STAGE I CHG/GRP RVW/COMMENT RES/TECH EDIT CDC106551																							
	01MAR04	28JAN04		-33	CM for M-45-05M-T01.SUBMIT C-106 WASTE RESID RSLT CD106TPC1 Letter is submitted to ORP for exemption from Contractor Milestone 30 day requirement.																							
	31MAR04	27FEB04*		-33	M-45-05M-T01 SUBMIT C-106 WASTE RESIDUAL RESULTS CD106TPA1 2/27/04.TPA due date 1. 222-S Lab analysis (prelim) (2/13/04 Format IV Report) 2. Post-retrieval campaign report																							

Start Date 01MAY99
 Finish Date 06JUL07
 Data Date 03NOV03
 Run Date 04NOV03 14:58

IMES

**Longest Path for TPA
 Milestone M-45-05M-T01**

Sheet 1 of 1

"Submit C-106 Waste Residuals Results"

LT-ZL WHP TPA Longest Path Analyses



Item No.	Forecast Start	Forecast Finish	Required Finish	Days Ahead + or Behind - Required Finish	2003			2004			
					NOV	DEC	JAN	FEB	MAR	APR	MAY
	06NOV03	06NOV03	22OCT03	-11	C-106 Perform Acid Transfer (Batch-5) TU66DAA511						
	07NOV03	07NOV03	23OCT03	-11	C-106 Perform Acid Add (Batch-6) - Trucks 1 & 2 TU66DAA601						
	17NOV03	17NOV03	31OCT03	-11	C-106 Perform Acid Transfer (Batch-6) TU66DAA611						
	18NOV03	18NOV03	03NOV03	-11	C-106 Spray Down Walls of Tank TU66DAA650						
	19NOV03	19NOV03	04NOV03	-11	C-106 Transfer Liquids after Sluicing TU66DAA655						
	20NOV03	26NOV03	11NOV03	-11	C-106 Perform Caustic Addition TU66DAB110						
	21NOV03	01DEC03	12NOV03	-11	C-106 RETRIEVAL COMPLETES LIQUID REMOVAL CDC106370						
		01DEC03	12NOV03	-11	C-106 RETRIEVAL COMPLETE CDC106300						
	01DEC03	01DEC03	12NOV03	-11	Pred=C-106 Perform Caustic Transfer TU66DAB310						
	01DEC03	01DEC03	12NOV03	-11	C-106 Perform Caustic Transfer TU66DAB310						
	02DEC03	15JAN04	30DEC03	-11	C-106 REVIEW IN-TANK VIDEOS/PREP CALC BRIEF/ECN CDC106390						
	16JAN04	22JAN04	07JAN04	-11	C-106 CHG ECN REVIEW CDC106395						
	23JAN04	29JAN04	14JAN04	-11	C-106 INCORP COMMENTS & ISSUE APPROVED ECN CDC106400						
	30JAN04			-11	C-106 RECEIVE CALCULATED RESIDUAL VOLUME CDC106535						
	30JAN04	02FEB04	21JAN04	-8	C-106 ADD RISK ASSESSMENT TO DATA REPORT CDC106545						

Start Date 01MAY99
 Finish Date 06JUL07
 Data Date 03NOV03
 Run Date 05NOV03 11:13

IMES

**Longest Path for TPA
 Milestone M-45-05H**

Sheet 1 of 2

"Interim Completion of C-106"

LT-ZL WHP TPA Longest Path Analyses



