

Tri-Party Agreement Milestone Review – Office of River Protection
February 24, 2004
Meeting Minutes

Approval: *Michael A. Wilson*
Michael A. Wilson (B5-18)
Ecology IAMIT Representative

Date: 4/6/04

Approval: *Joel B. Hebdon*
Joel B. Hebdon (A5-12)
RP IAMIT Representative

Date: 4/19/04

Approval: *Jim E. Rasmussen*
Jim E. Rasmussen (H6-60)
Chairman and ORP IAMIT Representative

Date: 4/13/04

Approval: *Nick Ceto*
Nick Ceto (B5-01)
EPA IAMIT Representative

Date: 4/12/04
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Minutes Prepared by:

Approval: *Eileen J. Murphy-Fitch*
Eileen J. Murphy-Fitch (A4-25)
Fluor Hanford, Inc.

EDMC
Date: 4/2/04

Almaraz, A.	INNOV	H6-60*	Hertz, J. S.	FH	A4-25
Aroni, E. S.	CH2M	H6-63	Jackson, D. E.	RL	A4-52
Bartus, D.	EPA	B5-18*	Jackson, G. W.	FH	H5-20
Bilson, H. E.	RL	A3-04	Jarayssi, M. N.	CHG	H6-03
Bird, J.	RL	A2-15	Jentzen, B.	Ecology	B5-18*
Brown, M.	Ecology	B5-18*	Jim, R.	YIN	
Buxbaum, M.E.	FH	B3-53	Keggen, D.	Ecology	B5-18*
Caggiano, J. A.	Ecology	B5-18	LaMont, P.	ORP	H6-60
Callahan, V.	ORP	H6-60	Lijek, S. J.	DPTEC	B5-18
Clark, C. E.	RL	A5-15*	Liou W.	ORP	H6-60
Clark, D.	ORP	H6-60	Lober, R.	ORP	H6-60
Cusack, L.	Ecology	B5-18*	Long, J.	ORP	H6-60
Dahl, S.	Ecology	B5-18*	Louie, C. S.	ORP	H6-60*
Derrick, B. L.	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.	ODE*	
Gay, R.	CTUIR		Navarro, J.	ORP	H6-60
Hebdon, J.	RL	A5-12*	Piippo, R. E.	FH	A4-25
Hedges, J.	Ecology	B5-18*	Quintero, R.	ORP	H6-60*
Heggen, D.	Ecology	B5-18	Rasmussen, J. E.	ORP	H6-60
Henry, D.	ODE*		Ramsay, M.	ORP	H6-60

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Rodriguez, H. M.	RL	A5-15	Uziemblo, N. H.	Ecology	B5-18*
Russell, W.	ORP	H6-60*	Voogd, J.	CH2M	S4-43
Singleton, D.	Ecology	B5-18	Vinson, R.	PEC	H6-60
Skinnarland, E. R.	Ecology	B5-18	Williams, D. J.	ORP	H6-60*
Sobotta, P.	NPT		Yasek, R.	ORP	H6-60
Stanley, R.	Ecology	Lacey*	Administrative Record	EDMC	H6-08*
Stevens, A.	ORP	H6-60	*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
February 24, 2004

Tri-Party Agreement Milestone Performance

Start: 9:08 a.m.

End: 9:30 a.m.

FY 2004 ORP Tri-Party Agreement milestones will be completed on or ahead of schedule.

Action: ORP will prepare a summary of what ORP feels was agreed to during the M-062-08 Tri-Party Agreement negotiations. Review summary with Ecology.

Actionee: John Eschenberg/Mark Ramsay/Laura Cusack/Suzanne Dahl

Action: Provide Master Integration Summary Schedule for the tank farm and WTP process

Actionee: John Eschenberg

Action: Ecology did not agree with the cause for the unfavorable schedule variance (page 19). The Part B strategy was rescoped from a simplistic Research, Development and Demonstration Permit to an extensive Final Part B Permit. Ecology requested that the presentation material be revised accordingly.

Actionee: Diane Clark/Suzanne Dahl

ORP invited Ecology to attend the week meetings conducted by the ORP Manager.

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

Start: 9:30 a.m.

End: 9:45 a.m.

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.

M-043-00, Tank Farm Upgrades

Start: 9:45 a.m.

End: 9:53 a.m.

Significant progress continues to be made and the milestone will be completed on schedule. ORP requested a closure for a variance from secondary containment standards for 10 double-shell tank (DST) system dangerous waste transfer lines. Ecology requested additional information from ORP. ORP responded to Ecology's request on January 29, 2004. Ecology was unaware of a response and requested

that ORP provide them with another copy. Ecology does not have any issues with the variance, they just wanted more information. This workscope is currently being performed as if there isn't a variance.

Action: Provide Ecology with ORP letter 04-TOD-007, dated 1/29/2004
Actionee: Cathy Louie

M-046-00, Double Shell Tank Space Evaluation

Start: 9:53 a.m.
End: 10:18 a.m.

The Double-Shell Tank Space Evaluation Plan, Tri-Party Agreement Milestone M-046-00J, was completed ahead of the September 30, 2004, due date. Concurrence of Additional Tank Acquisition (Tri-Party Agreement Milestone M-046-01J) is an Ecology action. Ecology's review and concurrence of the report was deferred in accordance with Tri-Party Agreement Change Request M-46-03-02. Baseline changes are being developed to track implementation of space optimization recommendations and tank space management efforts. There are four alternatives under review:

1. Increase the DST fill height
2. Reserve emergency space to reflect compliance with DOE Order 43.1 for the DST system (provides 1.1 million gallons of DST space)
3. Implement tank-by-tank evaluations to allow greater concentration of wastes beyond current 2.41 SpG limit
4. Use space currently identified as {restricted} space in tanks that contain staged feed for WTP.

Activities needed to implement DST space initiatives were planned and drafted into a logically linked schedule. A draft Expert Panel Recommendations Report was issued for CH2M Hill review. Significant planned actions are the evaporator campaigns and the establishment of process/controls for use of restricted WTP feed tank head space. Ecology wants to have visibility on the other space savings – i.e., how you feed SST retrieval, use of supernate from another tank, etc. The question was raised on why there will be only one evaporator campaign in FY 2004 instead of the three planned. Tank pumping is behind schedule

Action: Include all DST space saving measures in the Project Manager Meeting.
Actionee: Cathy Louie

Interim Stabilization (Consent Decree)

Start: 10:55 a.m.
End: 10:59 a.m.

Tank 241-U-108 is the only tank remaining to be pumped. Pumping was stopped due to a failed proximity switch, compressor malfunction, and partially plugged transfer line; repairs are underway and anticipate restart in March/April with completion of pumping three months ahead of the Consent Decree schedule.

The Consent Decree target date for D-001-11-T01, *Complete pumping of U-108, U-107, S-111 and SX-102*, was missed. The Interim Stabilization Evaluation Form for U-107 was issued. Both SX-102 and SX-111 were interim stabilized and are in evaluation to document completing of pumping and satisfaction of interim stabilization criteria. Tank U-108 continues to pump. Remaining pumpable liquids must be removed by September 30, 2004, or sooner, as required under Consent Decree Milestone D-001-00.

Based on the current pumping system performance, it is anticipated that pumping will be completed in the May/June 2004 time frame.

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 +/- one or two months.

M-045-00, SST Closure

Start: 10:59 a.m.

End: 11:16 a.m.

Full scale C-106 waste retrieval was not completed by the November 1, 2003, due date. Retrieval was to be completed in January 2004. Risk assessment on residual tanks will be part of the deliverable for Tri-Party Agreement Milestone M-045-05H, *Interim Completion of Tank C-106 SST Waste Retrieval and Closure Demonstration Project*; the Tri-Party Agreement milestone will be completed on time.

Retained gas was discovered in 241-SY-101. Retrieval was paused by realignment of transfer line to 241-SY-102. The discovery of solids inventory with 241-SY-101 required rerouting of transfer system to 241-SY-102. Retrieval was halted on November 25, 2003, to address conduct of operations issues. Resource constraints may jeopardize completion of Tri-Party Agreement Milestone M-045-05C, *Complete S-102 Initial Waste Retrieval Project Construction (all Physical Systems Including LDMM Provisions)*, by March 31, 2004. If missed, there may be impacts to the Interim Stabilization Consent Decree.

Action: Follow-up with Ecology on the retrieval issue for S-102 (high resolution) LDDM
Actionee: Roger Quinterro

M-045-50, 60 SST Corrective Actions

Start: 10:21 a.m.

End: 10:28 a.m.

Progress continues to be made and the work is on schedule. No significant regulatory issues/concerns resulting in follow-on actions were identified.

M-023, Tank Integrity and Monitoring

Start: 10:58 a.m.

End: 10:59 a.m.

Progress continues to be made. During replacement of the TX-116 liquid observation well (LOW), the LOW was damaged. The LOW will be removed and a replacement installed in late February 2004.

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

M-048-00, DST Integrity Assessment Program

Start: 10:42 a.m.

End: 10:59 a.m.

Ecology and DOE have approved the four DSTs to be ultrasonically tested (UT) during FY 2004.

Spalling and cracking of the air slots in 241-AZ-102 was found. CH2M Hill acquired the services of a recognized technical expert in concrete (Dr. Crowley) to review the data and provided a briefing to ORP. It was the expert's opinion that the cracking and spalling discovered in the air slots was due to a construction artifact during the pouring and forming of the insulating concrete. It was his opinion that the cracking and spalling did not appear to be a significant threat to the structural integrity of the primary tank itself. PNNL is being tasked to simulate a seismic event under the accident analysis scenario with updated material properties of the insulating concrete, and to analyze its effect on tank integrity. The tanks that may not be able to sample include SY, AZ and AY.

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

In Tank Characterization and Summary

Start: 11:24 a.m.

End: 11:27 a.m.

Completed 32 of the 32 best basis inventories (BBI) planned for the 1st quarter of FY 2004. There are 27 BBI updates planned for the 2nd quarter of FY 2004. Sampling of ammonia concentration in the headspace of each DST will begin in March 2004.

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

Start: 10:28 a.m.

End: 10:55 a.m.

TPA Milestone M-090-08, *Initiate ILAW Disposal Facility Construction*, is forecast for early completion by August 2004. Notable achievements include the completion of the design of the Integrated Disposal Facility (IDF); completion of the IDF RCRA Part B Permit Application; and, the continued review of the Canister Storage Building (Project W-454) detailed design for the multi-canister overpacks- handling machine modification, cask transport, and construction specifications. The delay in the ROD for the SW EIS has impacted the start of the IDF site clearing scheduled for 2004. A workaround was developed based on a projected ROD issue date of March 15, 2004.

Action: Ecology/ORP meet to discuss CSB permitting

Actionee: Phil LaMont

LDR Assessment Status

Start: 11:27 a.m.

End: 11:28 a.m.

ORP will issue one report for the FY 2003 assessments. 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 Quarterly Review Meeting
February 24, 2004
712 Swift Blvd, Suite 5 / EPA Conference Room
9:00 a.m. – 12:00 p.m.

Page	Topic	Leads	Time
	M-35-09D, Assessment of Data Management needs at Hanford	Jeff Bird	9:00
	<ul style="list-style-type: none"> • BNI Cost & Schedule Performance and • M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes/Supplemental Technologies 	John Eschenberg / Suzanne Dahl	9:10
	<ul style="list-style-type: none"> • TPA Milestone Statistics • FY 2003 ORP TPA Cost & Schedule Performance (CHG) 	Diane Clark / Suzanne Dahl / Jeff Lyon	9:20
	M-43-00, Tank Farm Upgrades	Cathy Louie / Steve Lijek	9:30
	M-46-00, Double-Shell Tank Space Evaluation	Cathy Louie / Jeff Lyon	9:40
	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Cathy Louie / Jim Navarro / Steve Lijek	9:50
	M-45, -50, -60 Single-Shell Tank Corrective Action	Rob Yasek / Joe Caggiano	10:00
	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
	M-23-00, Tank Integrity and Monitoring	John Long / Jeff Lyon	10:20
	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	10:30
	M-48-00, DST Integrity Assessment Program	Andy Stevens / Vic Callahan / Brenda Jentzen	10:40
	M-45-00, Single-Shell Tank Closure	Roger Quintero / Dick Heggen	10:50
	BREAK		11:00
	In Tank Characterization and Summary	Wen-Shou Liou / Debra Singleton	11:10
	LDR Assessment Status	Woody Russell / Jeff Lyon	11:20
	Review of new commitments and actions	Diane Clark / Jeff Lyon / Suzanne Dahl	11:30

ATTENDEES
 Tri-Party Agreement Milestone Review
 Office of River Protection
 February 24, 2004
 Mike Wilson, Chairperson

<u>NAME</u>	<u>ORGANIZATION</u>	<u>MAILSTOP</u>	<u>ATTACHMENTS</u>
JEFF HERTZEL	FH-TPA		
Suzanne Dahl	Ecology		✓
Billie Mauss	DOE-ORP	H6-60	
Laura Cosack	Ecology		✓
John Eschenberg	ORP	H6-60	
Nick Ceto	EPA		
Joel Heddon	DOE-RL		
Cathy Louie	DOE-ORP	H6-60	✓
Re Vinson	DOE-ORP	H6-60	
Jim Navarro	DOE-ORP	H6-60	—
Diane Clark	DOE-ORP	H6-60	
Brenda Jeter	BCY		
Deborah Singleton	Ecology		
JANE HEDGOS	Ecology		
JEFF VOOGD	CHAM HILL	54-43	
Jim Rasmussen	DOE/ORP	H6-60	
Roger Quintero	DOE/ORP	H6-60	
DEANNA HENRY	OREGON DEPT. OF ENERGY		
Jeff Louk	CHAM HILL		
Andy Stevens	ORP	H6-60	

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

M-35-09D Summary

Date: 02/24/04

1. Significant Activities Last Three Months

Meeting was held with all parties to identify and work any data management requests. Items have been identified and are currently being worked, with several already resolved.

2. Budget Status (within budget or explain variance)

N/A

3. Issues

N/A

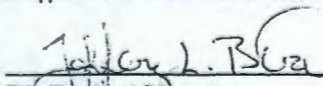
4. Non-TPA Regulatory Issues with Potential Impact to TPA Milestone

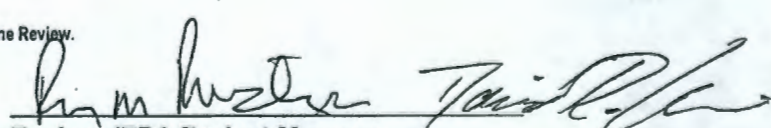
N/A

5. Significant Activities Planned Next Three Months

1. Assist Department of Ecology with the relocation of their office from 1315 W 4th Ave. in Kennewick to 3100 Port of Benton in Richland. Meetings and planning are already in the works for this with Ecology, DOE-RL and LMIT.
2. Completion of TPA milestone M-35-09D which is due March 31, 2004 and reads:
"Conduct biennial assessment of information and data access needs with EPA and Ecology. DOE-RL will propose implementation schedules (TPA milestones) for enhancements as a result of the biennial assessments."
3. Continue to address data management requests as identified in the meeting.

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


RL Project Manager


Ecology/EPA Project Manager

Safety Statistics

Total Recordable Injuries	37
Lost-Time Accidents	3
Recordable Rate	0.53
Lost-Time Injury Rate	0.042
Hours Worked Since LWC	184,571
Const Hours Worked Since LWC	46,142
Days w/Zero OSHA Recordables	8
Total Near Misses	8

Contingency (\$ in Millions)

	Total
Contingency Plan	550.00
Trends	-11.0
Contingency Total	538.90

	Plan	Actual
Engineering	618%	60.6%
Construction	22.1%	22.6%
Total Project	310%	30.8%

Self-Performed vs Outsourced

	Self	Out
To Date	47.4	52.6

Performance Indexes (Based on \$)

	BOF	HLW	LAB	LAW	PT	Share Serv	UBM	Eng	Cons	Total Project
CPI	111	109	109	104	101	0.99	0.92	0.98	101	101
SPI	105	0.95	0.98	0.99	101	0.99	1.21	0.98	102	0.99
CSPI	108	102	104	101	101	0.99	1.06	0.98	102	1.00

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	0.37	0.39	0.46	0.47	0.26	0.27	0.40	0.38	0.47	0.46	40.96	43.20	0.00	0.00	43.11	45.17
Business Mgmt	0.71	0.73	0.69	0.71	0.43	0.49	0.66	0.70	0.81	0.77	29.88	27.94	0.00	0.00	33.75	31.47
Commissioning	2.29	2.61	2.21	2.43	1.47	1.75	2.01	2.38	1.90	2.27	22.15	23.05	0.00	0.00	32.03	34.50
Communications	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.17	2.43	0.00	0.00	2.17	2.43
Construction	30.89	33.68	18.34	23.81	0.31	0.35	21.63	22.40	47.55	45.35	206.89	203.73	37.99	28.77	364.66	358.09
Contracts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.11	4.45	0.00	0.00	4.11	4.45
Controller	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.44	0.00	0.00	3.41	3.44
E&NS	0.81	0.85	1.81	1.86	0.94	1.16	1.43	1.41	3.14	2.81	40.35	40.80	0.00	0.00	48.52	48.70
Engineering	2105	2110	8159	8619	13.32	14.17	66.55	67.76	8183	82.52	159.71	154.20	0.00	0.00	424.78	426.01
Human Resources	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.84	54.91	0.00	0.00	56.84	54.91
IS&T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.52	43.60	0.00	0.00	40.52	43.60
PADC	0.10	0.06	0.12	0.06	0.11	0.06	0.11	0.07	0.12	0.11	24.50	26.81	0.00	0.00	25.21	27.18
Project Controls	0.82	0.91	1.27	1.09	0.61	0.72	0.96	0.98	0.92	1.03	28.42	27.68	0.00	0.00	33.08	32.46
Plant Equipment	4.42	4.95	28.05	39.61	0.70	1.17	18.74	22.99	52.18	53.71	0.01	0.26	0.00	0.00	104.10	122.70
Process Tech	3.96	3.91	135	136	0.33	0.36	144	137	3.06	3.10	14.3	14.48	0.00	0.00	24.27	24.59
QA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.02	16.12	0.00	0.00	16.02	16.12
R&T	0.00	0.00	3156	34.25	0.00	0.00	43.53	45.91	50.43	50.41	44.34	44.76	0.00	0.00	170.23	175.75
Support Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.64	48.40	0.00	0.00	43.64	48.40
WBS Totals	65.43	69.03	167.45	191.84	18.47	20.51	174.5	186.34	242.41	242.53	778.05	780.25	37.99	28.77	1470.44	1499.96

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	Rate
Engineering	309.92	310.77	122.46	118.68	195.90	208.97	856.15	858.13	1278.83	1267.41	2,019.52	2,056.71	5,785.75	5,869.48	8.1%
Const Manual	345.22	432.36	224.70	378.88	0.00	0.00	293.93	296.20	399.50	500.98	789.88	923.92	2,053.22	2,332.34	15%
Const Non-Man	27.48	142.17	93.89	104.85	4.05	5.56	93.35	102.81	111.80	119.18	983.79	990.14	14,540	1,464.56	15%
Acq Services	4.48	4.55	4.68	4.69	3.32	3.87	4.82	4.71	4.67	4.60	55.12	520.02	537.01	542.25	15%
E&NS	7.35	9.14	24.05	27.58	11.84	14.22	19.85	20.80	32.37	32.57	419.99	428.47	515.55	532.78	3.7%
R&T	0.00	0.00	19.49	19.42	0.00	0.00	13.02	15.13	27.72	29.80	47.99	47.06	108.97	111.77	0.6%
Process Tech	23.48	25.90	24.03	25.07	5.72	6.66	26.41	25.94	43.01	46.34	95.68	98.54	213.37	228.52	2.8%
Commissioning	34.32	39.58	31.22	35.15	20.97	24.36	29.15	34.58	28.15	33.34	254.18	254.31	398.13	421.43	0.5%
Bus Serv & LOE	22.22	22.40	26.71	25.91	15.70	17.65	22.87	22.47	24.46	25.85	2,366.75	2,419.55	2,481.62	2,535.02	4.2%
WBS Totals	874.47	986.85	1571.23	1790.22	258.51	279.10	1,359.34	1,380.55	1,950.49	2,060.08	7,492.90	7,738.71	13,540.02	14,238.17	4.8%

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	Frost
Acq Services	0.85	0.72	0.46	0.58	0.72	0.45	0.00	0.00	0.00	0.00	137.56	137.84	0.00	0.00	137.56	137.84	
Bus Mgmt	0.84	2.10	1.70	2.09	1.98	2.140	0.00	0.00	0.00	0.00	80.11	39.73	0.00	0.00	80.11	39.73	
Commis	45.34	79.62	81.75	79.83	94.88	265.28	0.00	0.00	0.00	0.00	646.49	681.17	0.00	0.00	646.49	681.17	
Commun	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.02	8.27	0.00	0.00	8.02	8.27	
Construct	18.91	254.65	41.38	173.78	388.15	515.96	10.74	1623.55	1622.81	0.00	0.00	1163	1154	0.00	0.00	1163	1154
Contracts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1104	1148	0.00	0.00	1104	1148	
Controller	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1104	1148	0.00	0.00	1104	1148	
E&NS	192	7.85	4.35	4.90	9.93	132.54	0.00	1149	179.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Engineering	33.48	135.02	24.79	117.3	120.73	273.59	0.00	689.33	688.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Human Res	0.00	0.00	0.00	0.00	0.00	0.00	0.00	79.51	82.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
IS&T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00	96.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PADC	0.28	0.32	0.30	0.31	0.89	76.96	0.00	79.06	39.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Proj Controls	190	2.45	1.74	1.84	2.78	57.34	0.00	68.05	67.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Plant Equip	33.05	235.33	30.74	142.77	212.20	20.35	0.00	674.45	708.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Process Tech	12.53	3.08	0.82	3.33	7.15	39.29	0.00	66.19	58.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Quality Assur	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66.15	67.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
R&T	0.00	57.89	0.00	55.35	54.01	73.19	0.00	240.43	237.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Support Serv	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.09	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
WBS Totals	268.90	779.01	188.00	566.49	893.21	2,033.82	10.74	4,840.17	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mar 03 Frost	300.14	813.83	210.11	579.14	948.04	2,004.51	0.00	-	4,855.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Milestone Summary

Construction Completion	Con	PMB	APM
SBS Collection Vessel Installed	12/03	11/03A	
Pre-assembly 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

Set Feed Receipt Tanks in PT	03/05	03/05	03/05
Assembly of HLW Meter #1 Complete	12/07	06/07	06/07
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 Meter #1	12/07	06/07	06/07
Start Cold Commissioning	02/09	08/08	08/08
Completion of Hot Commissioning*	01/11	07/10	01/11

* Also Contract Milestone

Total Project Commodity Summary

Commodity	Engineering		Vendor		Construction		Total Project
	Released	Scheduled	Delivered	Scheduled	Installed	Scheduled	
Concrete (yd3)	12,476	142,060	-	-	91,57	94,267	254,426
Structural Steel (ton)	7,953	5,865	57	6	528	653	21,043
Piping (LF)	87,503	92,294	886	-	4,461	5,088	720,133
Conduit (LF)	44,286	40,243	-	-	8,099	6,039	750,663
Cable Tray (LF)	7,353	8,367	-	-	866	710	107,465
Cable (LF)	68,281	49,109	-	-	-	-	5,148,784
HVAC Duct (lb.)	516,694	310,713	-	-	72,543	81,543	3,845,716

LWC- Lost Work Case

Plan- BCWS
UBM- Undistributed Bulk Materials
PMB- Performance Measurement Baseline
EAC- Estimate at Completion
TPA- Tri-Party Agreement
Con- Contract
APM

Percent Complete (Based on \$)	Plan		Actual
	Plan	Actual	
Engineering	19%	15%	
Construction	10%	0.7%	
Total Project	0.8%	0.7%	

Performance Indexes (Based on \$)	BOF		HLW		LAB		LAW		PT		Share Serv		UBM		Eng		Cons		Total Project	
	BOF	HLW	LAB	LAW	PT	Share Serv	UBM	Eng	Cons	Total Project	BOF	HLW	LAB	LAW	PT	Share Serv	UBM	Eng	Cons	Total Project
CPI	0.45	144	184	139	0.74	0.72	152	107	0.61	0.79										
SPI	0.91	0.70	0.61	0.91	0.70	0.85	122	0.81	0.64	0.83										
CSPI	0.68	107	122	115	0.72	0.79	137	0.94	0.62	0.81										

Project Cost Current Month (\$ in Thousands)

	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	9.5	12.8	3.7	12.8	4.6	9.6	7.6	9.6	15.0	13.0	1,792.2	-3,222.8	0.0	0.0	1,273.9	-3,184.9
Business Mgmt	19.9	19.0	15.3	19.1	12.3	18.3	13.4	19.1	66.0	18.3	1,128.4	525.3	0.0	0.0	1,231.5	619.0
Commissioning	33.9	116.4	53.8	108.3	30.0	91.2	18.8	112.7	33.2	111.8	363.0	977.5	0.0	0.0	532.6	1,577.6
Communications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.0	72.1	0.0	0.0	49.1	72.1
Construction	2,297.6	206.1	955.8	3,135.0	6.0	13.2	1,192.8	1,027.1	3,512.9	4,333.1	8,076.0	5,794.2	2,029.8	2,533.5	18,018.9	17,042.2
Contracts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	419	75.1	0.0	0.0	37.4	75.1
Controller	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	92.2	93.7	0.0	0.0	93.5	93.7
E&NS	12.1	14.8	15.1	63.8	52.8	86.8	43.5	40.9	16.6	54.4	557.6	643.5	0.0	0.0	696.2	884.2
Engineering	571.4	784.8	1,610.5	3,274.8	372.8	577.0	989.4	1,739.4	2,468.3	2,861.2	3,398.3	3,953.5	0.0	0.0	9,883.4	12,990.4
Human Resources	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	495.9	391.6	0.0	0.0	495.9	391.6
IS&T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	732.4	1,031.1	0.0	0.0	811.9	1,031.1
PADC	0.0	3.5	5.7	3.5	7.2	3.5	8.0	3.5	6.6	6.9	638.6	961.4	0.0	0.0	665.7	982.1
Project Controls	34.5	44.5	75.1	68.8	26.9	43.6	53.2	69.7	52.1	68.1	499.3	586.1	0.0	0.0	740.1	880.7
Plant Equipment	887.3	802.4	920.5	-235.9	-1,275.9	-3,085.7	1,400.2	1,950.2	3,624.3	2,935.8	0.0	159.7	0.0	0.0	5,736.3	2,526.6
Process Tech	555.2	149.6	30.5	31.9	7.7	7.8	27.0	32.2	43.3	61.5	107.1	189.7	0.0	0.0	770.8	492.4
QA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	408.3	464.4	0.0	0.0	407.2	464.4
R&T	0.0	0.0	-102.1	922.2	0.0	0.0	-192.7	429.9	59.7	409.7	1015.4	1,327.0	0.0	0.0	792.5	3,088.6
Support Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	981.3	1,468.8	0.0	0.0	986.8	1,468.8
WBS Totals	4,401.3	2,153.9	3,583.9	7,404.0	-753.8	-2,255.0	3,581.1	5,434.1	10,096.0	10,893.6	17,763.8	15,169.9	2,029.8	2,533.5	43,203.7	41,133.9

Project Hours Current Month (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	
Engineering	8.16	11.23	25.03	41.00	5.35	8.40	16.68	23.58	36.44	40.00	42.91	58.90	134.14	181.12	7.3%
Const Manual	10.11	-28.31	13.37	60.32	0.00	0.00	8.55	14.95	21.63	52.81	36.17	32.15	89.83	131.93	0.6%
Const Non-Man	4.69	6.78	3.77	5.05	0.07	0.24	3.52	5.73	4.59	7.36	32.51	38.87	48.65	64.03	
Acq Services	0.09	0.13	0.04	0.13	0.06	0.14	0.08	0.14	0.14	0.13	14.54	17.45	14.96	18.12	15%
E&NS	0.14	0.28	0.63	0.94	0.73	0.94	0.71	0.73	0.85	0.81	4.80	7.58	7.64	11.27	0.0%
R&T	0.00	0.00	0.38	0.42	0.00	0.00	0.22	0.42	0.56	0.72	108	104	2.34	2.60	0.9%
Process Tech	0.89	1.03	0.50	0.63	0.12	0.13	0.42	0.63	0.58	1.44	162	2.02	4.12	5.87	17%
Commissioning	0.46	1.81	0.48	1.58	0.39	1.26	0.21	1.64	0.41	1.62	4.10	7.21	6.02	15.12	0.0%
Bus Serv & LOE	0.77	0.98	1.30	1.42	0.86	1.03	1.06	1.29	1.14	1.41	51.69	66.41	56.94	72.53	12%
WBS Totals	25.31	-6.07	45.47	111.47	7.56	12.12	31.45	49.10	66.34	106.32	189.42	229.65	364.85	502.59	3.2%

Total Project Commodity Summary

Commodity	Engineering		Vendor		Construction	
	Released	Scheduled	Delivered	Scheduled	Installed	Scheduled
Concrete (yd3)	916	5,930	-	-	496	3,884
Structural Steel (ton)	153	145	57	6	13	1
Piping (LF)	15,567	22,496	886	-	3	526
Conduit (LF)	1,162	3,895	-	-	1,272	1,028
Cable Tray (LF)	0	-	-	-	-	346
Cable (LF)	0	3,347	-	-	0	0
HVAC Duct (lb.)	0	0	-	-	0	0

January 04
Current Period

Funding

Project Funding Cumulative (\$ in millions)

	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04
Act Cost	1,145	1,201	1,268	1,318	1,369	1,427	1,470	0	0	0	0	0
Bud Cost	1,171	1,230	1,286	1,362	1,416	1,459	1,500	1,562	1,624	1,719	1,786	1,849
Act Cost & Commit	1,344	1,411	1,467	1,489	1,572	1,643	1,690	0	0	0	0	0
Bud Cost & Commit	1,236	1,293	1,348	1,437	1,529	1,590	1,654	1,726	1,793	1,891	1,956	2,017
Act Funding	1,625	1,625	1,695	1,759	1,799	1,941	2,063	0	0	0	0	0
Bud Funding	1,708	1,708	1,708	1,881	1,881	1,881	2,053	2,053	2,053	2,226	2,226	2,226

Office of River Protection

Tri-Party Agreement Quarterly Review Meeting February 24, 2004

The logo for the Office of River Protection, featuring the text "Office of River Protection" in a bold, sans-serif font, set against a background that looks like a piece of torn paper or a brushstroke.

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

2nd Quarter of FY 2004

Agenda
 Office of River Protection
 Tri-Party Agreement Quarterly Review Meeting
 February 24, 2004
 712 Swift Blvd, Suite 5 / EPA Conference Room
 9:00 a.m. – 12:00 p.m.

Page	Topic	Leads	Time
	M-35-09D, Assessment of Data Management needs at Hanford	Jeff Bird	9:00
	<ul style="list-style-type: none"> • BNI Cost & Schedule Performance and • M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes/Supplemental Technologies 	John Eschenberg / Suzanne Dahl	9:10
3	<ul style="list-style-type: none"> • TPA Milestone Statistics • FY 2003 ORP TPA Cost & Schedule Performance (CHG) 	Diane Clark / Suzanne Dahl / Jeff Lyon	9:20
22	M-43-00, Tank Farm Upgrades	Cathy Louie / Steve Lijek	9:30
23	M-46-00, Double-Shell Tank Space Evaluation	Cathy Louie / Jeff Lyon	9:40
27	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Cathy Louie / Jim Navarro / Steve Lijek	9:50
29	M-45, -50, -60 Single-Shell Tank Corrective Action	Rob Yasek / Joe Caggiano	10:00
31	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
33	M-23-00, Tank Integrity and Monitoring	John Long / Jeff Lyon	10:20
35	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	10:30
37	M-48-00, DST Integrity Assessment Program	Andy Stevens / Vic Callahan / Brenda Jentzen	10:40
39	M-45-00, Single-Shell Tank Closure	Roger Quintero / Dick Heggen	10:50
	BREAK		11:00
53	In Tank Characterization and Summary	Wen-Shou Liou / Debra Singleton	11:10
	LDR Assessment Status	Woody Russell / Jeff Lyon	11:20
	Review of new commitments and actions	Diane Clark / Jeff Lyon / Suzanne Dahl	11:30

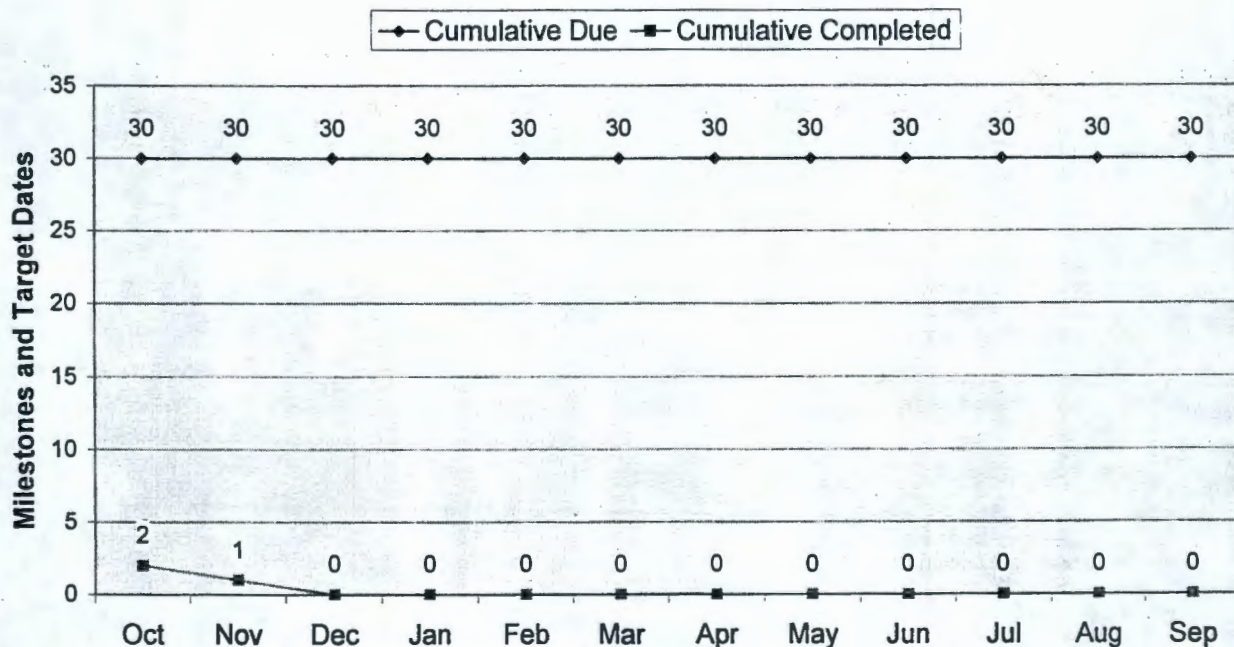
TPA Milestone Statistics

(Including target milestones)

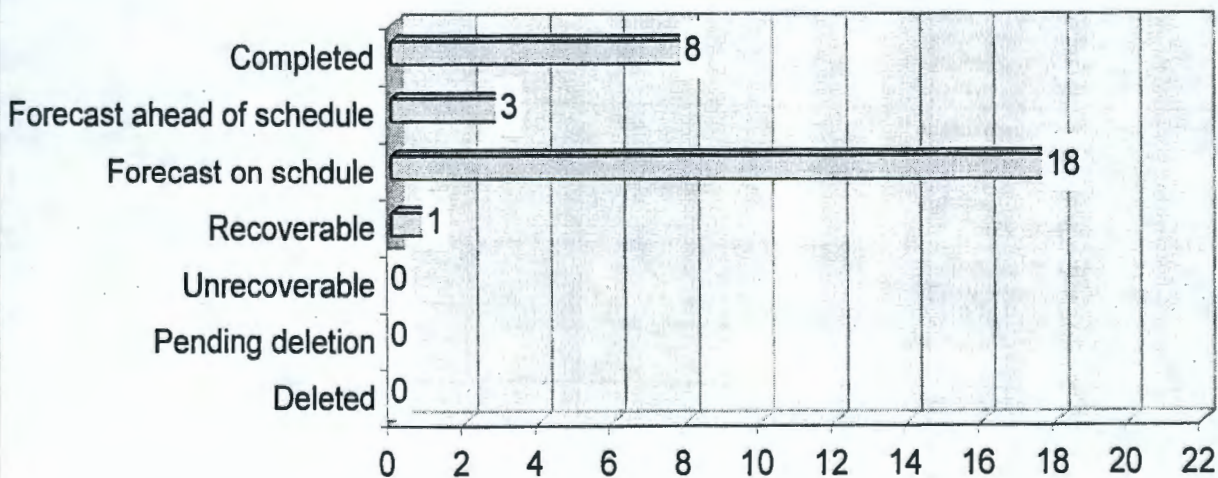
Milestone	Due Date	Total Active as of 12/31/03	Milestone Number	Due Date	Milestone Number	Due Date
M-20-00, Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	2/28/2004 (M-20-00)	0				
M-23-25, Tank Integrity and Monitoring	9/30/2004 (M-23-25)	4	M-23-25F M-23-25	3/31/04 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 12/31/03	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 M-46-03 M-46-00K	11/30/03 7/30/04 9/30/04	M-46-01K M-46-00L M-46-01L M-46-21 M-46-00M M-46-01M	11/30/04 9/30/05 11/30/05 12/31/05 9/30/06 11/30/06
M-47-00, Complete All Work for Phase 1 Operations	2/28/2018 (M-47-00)	8	M-47-05 M-47-01 M-47-05A M-47-02	5/31/04 3/31/06 4/30/06 3/31/09	M-47-04 M-47-03A M-47-06 M-47-00	3/31/09 3/31/09 6/30/10 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 M-62-01H M-62-01I M-62-01J M-62-01K M-62-08 M-62-07B M-62-01L	10/30/03 1/31/04 7/31/04 1/31/05 7/31/05 1/30/05 12/31/07 1/31/06	M-62-01M M-62-03 M-62-09 M-62-10 M-62-11 M-62-00A M-62-00 M-62-12	7/31/06 12/31/06 2/28/09 1/31/11 1/30/06 2/28/18 12/31/28 TBD
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	4	M-90-08 M-90-10	2/28/05 8/31/08	M-90-11 M-90-00	8/31/10 TBD
M-48-00, DST Integrity Program, Submit Results of 4 DSTs not Previously Examined	9/30/2007	5	M-48-12 M-48-13	9/30/04 9/30/05	M-48-14 M-48-15 M-48-00	3/31/06 9/30/07 9/30/07
Interim Stabilization Consent Decree	9/30/2004 (D-001-00)	6	D-001-00-R18 D-001-00-R19 D-001-00-R20	10/31/03 1/31/04 4/30/04	D-001-00-R21 D-001-00 D-001-00-R22	7/31/04 9/30/04 10/31/04
Total Active Milestones:		133				

FY 2004 MILESTONE PLAN



FY 2004 MILESTONE PERFORMANCE



Fiscal Year 2004 Tri-Party Agreement Milestone Status

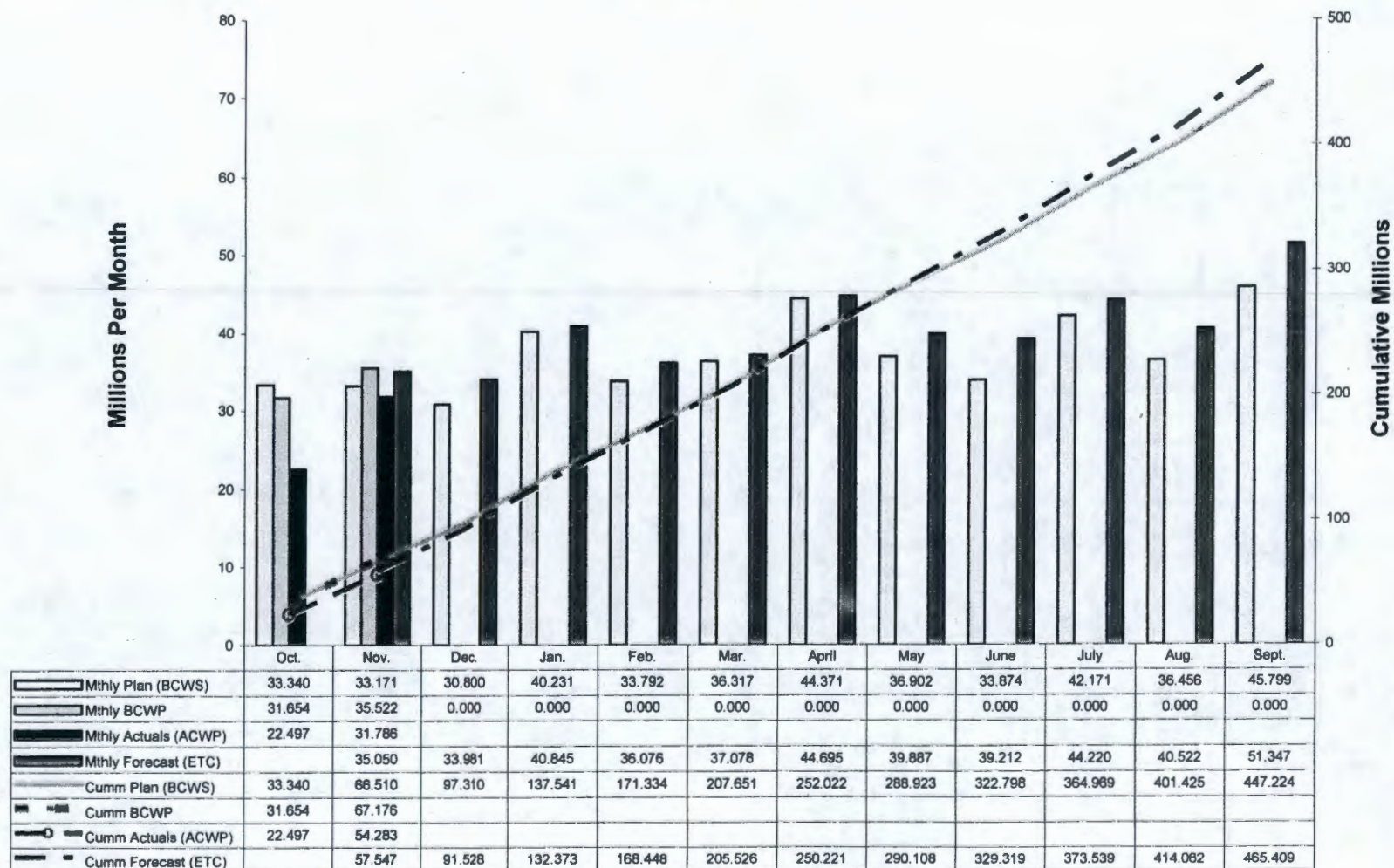
Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
D-001-00-R18	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report.	10/31/2003	10/29/2003						
M-062-07A	Initial erection of LAW Vitrification Facility elevation - 21' structural steel columns, beams, and Q-Deck at elevation +3.	10/31/2003	7/24/2003						
M-045-05L-T01	Complete full-scale C-106 waste retrieval.	11/1/2003	1/31/2001						
D-001-14-T01	Complete pumping of C-103.	12/30/2003	8/21/2003						
D-001-00-R19	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report.	1/31/2004	Completed on 1/31/2004						
M-062-01H	Submit semi-annual Project Compliance Report.	1/31/2004	Completed on 1/31/2004						
M-045-05M-T01	Submit C-106 Waste Retrieval Results Analysis of Residual Waste(s) and (if appropriate) request for exception to the criteria pursuant to Agreement Appendix H.	2/27/2004	On Schedule						
M-045-00C	Complete Renegotiation of Second Phase (i.e., 9/30/2006 through 9/30/2015) SST waste retrieval activities.	2/28/2004	On Schedule						
M-023-25F	Complete installation of LOWs and begin weekly Liquid Observation Monitoring for 4 additional SSTs.	3/31/2004	On Schedule						
M-045-05B	Complete S-102 Initial Retrieval Project Design.	3/31/2004	5/30/2003						
M-045-05C	Complete S-102 Retrieval Construction.	3/31/2004	On Schedule						
M-046-01J	Concurrence of additional tank acquisition. (Ecology Action)	3/31/2004							

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
D-001-00-R20	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report.	4/30/2004	On Schedule						
M-045-05H	Interim completion of Tank C-106 SST waste retrieval and closure demonstration project.	4/30/2004	On Schedule						
M-047-05	Start construction of waste retrieval and mobilization systems for selected initial LAW feed tank.	5/31/2004	10/7/2003						
M-045-03G	Complete C-104 sludge/hard heel, confined sluicing and robotic technologies, waste retrieval cold demonstration.	6/30/2004	8/13/2003						
M-045-06-T20A	Submit SST System Implementation Plan in support of retrieval and closure activities.	6/30/2004	On Schedule						
M-047-03	Start construction of waste retrieval and mobilization.	7/30/2004	12/16/2002						
D-001-00-R21	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report.	7/31/2004	On Schedule						
M-062-01I	Submit semi-annual Project Compliance Report.	7/31/2004	On Schedule						
D-001-00	DOE shall complete interim stabilization of all 29 SSTs.	9/30/2004	Ahead of Schedule						
M-023-25	Complete installation of LOWs for SSTs: AX-103, B-101, T-109, TX-103, TX-104, B-107, B-108, B-109, BY-108, BX-110, TX-116, C-102, C-105, BX-109, TY-105, U-110, A-106, C-112, SX-111, SX-112, S-107, C-103, and TX-105.	9/30/2004	On Schedule						
M-023-25G	Complete installation of LOWs and begin weekly Liquid Observation Monitoring for 4 additional	9/30/2004	On Schedule						

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
	SSTs.								
M-045-02M	Submit annual update of SST Retrieval Sequence Document.	9/30/2004	On Schedule						
M-045-03E	Complete S-112 Saltcake Waste Retrieval Technology Demonstration Construction.	3/31/2004	6/30/2003						
M-045-03H	Complete C-104 Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Demonstration Design.	9/30/2004	Ahead of Schedule						
M-045-06B	Submit certified SST System Closure Plan Modification and S-112 Waste Retrieval and Closure Demonstration Plan.	9/30/2004	On Schedule						
M-045-06C	Submit certified SST System Closure Plan Modification and S-102 Waste Retrieval and Closure Demonstration Plan.	9/30/2004	On Schedule						
M-046-00K	Double-Shell Tank Space Evaluation.	9/30/2004	On Schedule						
M-048-12	Submit results of 4 DSTs not previously examined.	9/30/2004	On Schedule						
M-045-03C	Complete Saltcake Dissolution Retrieval Demonstration.	3/31/2005	On Accelerated Schedule						
M-045-05A	Complete initial waste retrieval S-102.	3/31/2005	On Accelerated Schedule						
M-045-05C	Complete S-102 retrieval construction.	3/31/2005	On Accelerated Schedule						
M-045-05-T17	Submit SSTs S-105, S-106, & S-103 Waste Retrieval and Closure Demonstrations Functions & Requirements document.	4/30/2005	On Schedule						
M-045-55	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, and B-BX-BY and	1/31/2007	On Schedule						

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
	related activities, including groundwater monitoring and impacts assessment using Hanford Site groundwater models, with conclusions and recommendations.								
M-045-13	Interim completion of Tank S-112 SST waste retrieval and closure.	12/31/2005	On Accelerated Schedule						
M-045-15	Interim completion of Tank S-102 SST waste retrieval and closure demonstration.	12/31/2005	On Accelerated Schedule						
M-045-05-T05	Initiate waste retrieval from 5 SSTs.	9/30/2007	On Schedule						
M-045-05-T06	Initiate waste retrieval from 5 SSTs.	9/30/2008	On Schedule						
M-045-05-T07	Initiate waste retrieval from 7 SSTs.	9/30/2009	On Schedule						
M-047-01	Complete construction transfer systems - AP Farm to WTP.	3/31/2006	12/10/2003						
TOTAL		30 (41)	11	0	0	0	0	0	0

CH2M HILL Performance Cost/Schedule FY 2004



CH2M HILL Hanford Group, Inc.
FISCAL YEAR 2004 PERFORMANCE MEASUREMENT - DECEMBER
BY WORK BREAKDOWN STRUCTURE
Dollars in Thousands

WBS	TITLE	Cumulative Fiscal Year To Date							
		Budgeted Cost		Actual Cost Work Performed	Variance				Budget at Completion (BAC)
		Work Scheduled	Work Performed		Schedule	SV %	Cost	CV %	
5.07	BASE OPERATIONS	<u>36,241.7</u>	<u>37,144.0</u>	<u>37,046.5</u>	<u>902.3</u>	2.5%	<u>97.5</u>	0.3%	<u>162,434.6</u>
5.08	RETRIEVE AND CLOSE - Excluding Projects	18,777.7	19,704.3	13,449.5	926.6	4.9%	6,254.8	31.7%	90,167.7
5.08.03.02	10 DST Retrieval Systems (W-211)	7,701.2	3,525.1	2,766.6	(4,176.1)	-54.2%	758.5	21.5%	18,679.3
5.08.04.01	Tank Farm Restoration of Safe Ops (W-314)	9,999.7	10,368.8	8,824.5	369.1	3.7%	1,544.3	14.9%	33,298.3
5.08.04.02	Upgrade Transfer System (E-525)	2,595.1	2,960.4	1,113.3	365.3	14.1%	1,847.1	62.4%	11,724.2
5.08.06	SST Retrieval East Area	5,183.5	6,624.1	6,506.3	1,440.6	27.8%	117.8	1.8%	25,116.4
5.08.07	SST Retrieval West Area	<u>1,275.3</u>	<u>1,124.2</u>	<u>4,099.4</u>	(151.1)	-11.8%	(2,975.2)	-264.7%	<u>26,347.9</u>
	TOTAL RETRIEVE AND CLOSE	<u>45,532.5</u>	<u>44,306.9</u>	<u>36,759.6</u>	<u>(1,225.6)</u>	-2.7%	<u>7,547.3</u>	17.0%	<u>205,333.8</u>
5.09	TREAT AND DISPOSE WASTE - Excluding Projects	9,447.6	7,950.9	7,510.2	(1,496.7)	-15.8%	440.7	5.5%	53,399.2
5.09.03.04	Initial IHLW Interim Storage Facility (W-464) (PED)	727.5	737.3	719.0	9.8	1.3%	18.3	2.5%	3,163.2
5.09.04.01	Failed Melter Disposal System	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	0.0	0.0%	<u>0.0</u>	0.0%	<u>0.0</u>
	TOTAL TREAT AND DISPOSE WASTE	<u>10,175.1</u>	<u>8,688.2</u>	<u>8,229.2</u>	(1,486.9)	-14.6%	<u>459.0</u>	5.3%	<u>56,562.4</u>
5.10	ANALYTICAL/TECHNICAL SERVICES	<u>5,743.2</u>	<u>5,974.7</u>	<u>5,028.7</u>	<u>231.5</u>	4.0%	<u>946.0</u>	15.8%	<u>24,136.7</u>
RPP TOTAL		<u>97,692.5</u>	<u>96,113.8</u>	<u>87,064.0</u>	<u>(1,578.7)</u>	-1.6%	<u>9,049.8</u>	9.4%	<u>448,467.5</u>

FY 2004 Cumulative Performance – Base Operations						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.07	36,241.7	37,144.0	37,046.5	902.3 2.5%	97.5 0.3%	162,434.6

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date favorable schedule variance (\$0.9M; 2.5%) is within threshold.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance (\$0.1M; 0.3%) is within threshold.

Impact: No impact.

Corrective Action: None required.

FY 2004 Cumulative Performance – Retrieve and Close (Excluding Projects)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08	18,777.7	19,704.3	13,449.5	926.6 4.9%	6,254.8 31.7%	90,167.7

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date favorable schedule variance (\$0.9M; 4.9%) is within threshold, however, there is some closure work that is not being performed as planned, and other work that has earned value in FY 2004 for scope that was planned in FY 2003.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance (\$6.3M; 31.7%) is primarily due to cost for closure work not being incurred as quickly as planned. Some progress has been over reported and will be corrected in January.

Impact: There is no forecasted impact.

Corrective Action: The overstatement of progress will be corrected in January by application of a new process. Baseline Change Requests (BCRs) are in process to incorporate fiscal year 2003 carryover.

FY 2004 Cumulative Performance – Ten DST Retrieval Systems (W-211)

(\$000)

	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.03.02	7,701.2	3,525.1	2,766.6	(4,176.1) -54.2%	758.5 21.5%	18,679.3

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance (-\$4.2M; -54.2%) is primarily because of fiscal year reporting for W-211 which completed FY 2004 work scope ahead of schedule in FY 2003.

Impact: Fiscal year-to-date reporting will continue to show an unfavorable variance until a baseline change request (BCR) is processed to reduce the BCWS completed in FY 2003. However, contract to date reporting shows the correct performance status for this project.

Corrective Action: A BCR is being prepared to adjust FY2003 and FY 2004 scope to address the fiscal-year-to-date reporting issue.

COST VARIANCE

Description and Cause: The fiscal year-to-date cost variance (\$0.8M; 21.5%) is primarily because of favorable contract awards for AZ-101 construction, AN-101/Infrastructure, and AY-102 Title II Design. In addition, AY-102 Title II Design subcontractor spending is at a slower rate than planned.

Impact: The project will continue to show a favorable cost variance. However, the AY-102 Title II Design variance will diminish as work becomes more labor intensive.

Corrective Action: None required.

FY 2004 Cumulative Performance – Project W-314 (Tank Farm Restoration and Safe Operations)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
			(\$000)			
5.08.04.01	9,999.7	10,368.8	8,824.5	369.1 3.7%	1,544.3 14.9%	33,298.3

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date favorable schedule variance (\$0.4M; 3.7%) is within threshold.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance (\$1.5M; 14.9%) is because of efficiencies gained in the double-contained receiver tank (DCRT) construction.

Impact: No impact.

Corrective Action: None required.

FY 2004 Cumulative Performance – Project E-525 (Upgrade Transfer Systems)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.04.02	2,595.1	2,960.4	1,113.3	365.3 14.1%	1,847.1 62.4%	11,724.2

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date favorable schedule variance (\$0.4M; 14.1%) is due to performance being overstated and as a result of the budget being level loaded throughout the fiscal year. Actual performance of this work will be performed later in the fiscal year.

Impact: There is no forecasted impact.

Corrective Action: This activity will self-correct as work progresses.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance (\$1.8M; 62.4%) is due to performance being overstated, the budget being level loaded throughout the fiscal year, and weather delays and a lack of health physics technician (HPT) support.

Impact: There is no forecasted impact.

Corrective Action: The positive cost variance will begin decreasing towards mid-year and continue through the end of the fiscal year, as construction work increases. In addition, construction shifts and overtime will be increased over the next three months to meet windows of opportunities between evaporator campaigns and transfers.

FY 2004 Cumulative Performance – SST Retrieval East Area						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.06	5,183.5	6,624.1	6,506.3	1,440.6 27.8%	117.8 1.8%	25,116.4

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date favorable schedule variance (\$1.4M; 27.8%) is primarily due to performance being recorded in FY 2004 against FY 2003 scheduled work scope for C-201 Retrieval.

Impact: Performance recorded against C-201 Retrieval will have a positive impact on this account through the end of the fiscal year.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance (\$0.1M; 1.8%) is within threshold.

Impact: No impact.

Corrective Action: None required.

FY 2004 Cumulative Performance – SST Retrieval West Area						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.08.07	1,275.3	1,124.2	4,099.4	(151.1) -11.8%	(2,975.2) -264.7%	26,347.9

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance (-\$0.2M; -11.8%) is because of a lack of available resources.

Impact: No forecasted impact, the schedule will be recovered.

Corrective Action: Additional construction contracts are being placed to acquire the necessary resources to perform the scheduled work.

COST VARIANCE

Description and Cause: The fiscal year-to-date unfavorable cost variance (-\$3.0M; -264.7%) is due to project S-112 where expected efficiencies have not been realized and B, T and U-200 series Retrieval projects where work has been started ahead of schedule and performance was not recognized.

Impact: There is no forecasted impact to the 200 series Retrieval projects. Additional efficiencies will be pursued to reduce the S-Farm negative cost variance.

Corrective Action: The B, T, and U-200 series Retrieval projects performance will be corrected in January 2004.

FY 2004 Cumulative Performance – Treat & Dispose Waste (Excluding Projects)						
	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09	9,447.6	7,950.9	7,510.2	(1,496.7) -15.8%	440.7 5.5%	53,399.2

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date unfavorable schedule variance (-\$1.5M; -5.8%) results from permitting-related delays on TRU CH Packaging. The Part B strategy was rescoped from a simplistic Research, Development, and Demonstration permit to an extensive Final Part B permit. In addition, DOE approvals on environmental impact permitting (NEPA) and the Part B are delayed while resolving litigation issues. Also, there was a delay in the supplemental technology selection which resulted in a behind schedule condition for the long lead procurement purchases.

Impact: There is a current negative float in the TRU CH Packaging schedule of approximately five months, to match with current tank retrieval/closure baseline planning (10/28/04 startup).

Corrective Action: Recovery plans are in progress for TRU CH Packaging to reduce the Part B permitting schedule, primarily by eliminating the Part B Revision 1 step. Readiness review acceleration is also being evaluated and baseline replanning is being investigated. Failure of these options to recover the schedule will necessitate preparation of a BCR. Purchasing for supplemental technology is anticipated to begin in February or March.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance (\$0.4M; 5.5%) is within threshold.

Impact: There is no forecasted impact.

Corrective Action: None required.

FY 2004 Cumulative Performance – Initial IHLW Storage facility (W-464) (PED)
(\$000)

	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.09.03.04	727.5	737.3	719.0	0.0 1.3%	0.0 2.5%	3,163.2

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date favorable schedule variance (\$0.0M; 1.3%) is within threshold.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance (\$0.0M; 2.5%) is within threshold.

Impact: No impact.

Corrective Action: None required.

FY 2004 Cumulative Performance – Analytical/Technical Services

(\$000)

	<u>BCWS</u>	<u>BCWP</u>	<u>ACWP</u>	<u>SV</u>	<u>CV</u>	<u>BAC</u>
5.10	5,743.2	5,974.7	5,028.7	231.5 4.0%	946.0 15.8%	24,136.7

SCHEDULE VARIANCE

Description and Cause: The fiscal year-to-date favorable schedule variance (\$0.2M; 4.0%) is within threshold.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The fiscal year-to-date favorable cost variance (\$0.9M; 15.8%) is primarily due to Desktop/Steam/Laundry/Medical/Dosimetry/Shared Services which are being centrally costed and not being charged to this account. The remaining variance is due to minimal DSA implementation requirements to date; unfilled vacancies; contract costing delays; and a lag in materials/Bonneville Power Administration electricity costs.

Impact: There is no forecasted impact.

Corrective Action: A BCR is in process to transfer the BCWS for Desktop/Steam/Laundry/ Medical/Dosimetry/Shared Services over to the centralized accounts. The remaining variance is expected to self-correct prior to fiscal year-end.

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 02E and Pit 06A upgrades and turnover to Operations
- W-314, Phase 2 SY Farm, Completed SY 02D Pit upgrades and turnover to Operations
- W-314, 244-S DCRT Bypass, Completed tie-ins and acceptance testing.
- E-525, Completed excavation for three clean out boxes (COB)
- E-525, Completed modification of one COB
- E-525, Initiated modification work for clean out Box-AN-7
- E-525, Awarded construction contract for the AZ-151 by-pass
- E-525, Awarded AZ-301 condensate piping fabrication contract

III. Significant Planned Actions in the Next Six Months:

- W-314, Phase 2 AW Farm, Complete electrical, instr. & HVAC construction
- W-314, Phase 2 SY Farm, Complete pit upgrades, electrical and instr. Construction
- W-314, A-A Valve pit bypass, initiate construction
- E-525, Initiate AZ-151 By-pass excavation
- E-525, Initiate 204-AR transfer line modifications
- E-525, Initiate SY transfer line upgrade excavation
- E-525, Initiate AW clean out box excavations for nine COBs
- E-525, Complete AN clean out box modifications

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

- Closure of "Request for a Variance from Secondary Containment Standards for 10 Double-Shell Tank System Dangerous Waste Transfer Lines."
- Ecology letter dated December 4, 2003, requested additional information from ORP and CH2M HILL.
- ORP response was sent in letter 04-TOD-007, dated January 29, 2004, Schepens to Wilson.

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: 03/31/04
Status: Ecology Action. Review and concurrence deferred per Tri-Party Agreement Change Request M46-03-02
- **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

DST space improvement scope has been assigned to a project manager. Baseline changes are being developed to track implementation of space optimization recommendations and tank space management efforts.

(1) Increase the DST fill height

Status: The Report of Expert Panel Workshop for Hanford Site Double-Shell Tank Waste Level Increase (RPP-19438) has been issued. Activities for fill height increase in the AP tank farm are beginning, including ultrasonic testing of the DSTs, raising instrument probes and replacing tank riser extensions. AP tank farm (AP-104) is planned for the first tank fill height increase.

(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: Facility modifications are being planned or are underway to support routine operations at higher SpGs including:

- Reactivate the airlift circulators in AW-102
- Install a densitometer in AW-102
- Test the 242-AW Evaporator densitometer
- Test the 242-AW Evaporator slurry sampler
- Reactivate the AP farm slurry level measurement system
- Evaluate the need for transfer line heat trace/ activate if necessary

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

Status: Plans for combining WTP waste feed from tanks AP-101 and AY-102 are being developed. Additional process controls are also being developed to allow more efficient use of restricted tank head space that contains previously sampled WTP feed.

II. Significant Accomplishments:

Activities needed to implement DST space initiatives have been planned and drafted into a logically linked schedule. CH2M HILL is scheduled to present baseline changes for this project in February 2004.

- A draft Expert Panel Recommendations report has been issued for CH2M HILL review.

III. Significant Planned Actions in the Next Six Months:

- Evaporator campaigns as shown in the attached table.

- Establish process/controls for use of restricted WTP feed tank head space.

IV. Issues:

- None to report.

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

	Nov-02	Jan-03	Feb-03	Jul-03	Aug-03	Feb-04	Mar-04	Apr-04	May-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	2004-04				
Staging Tk	AP-107	AP-108	AP-107	AP-108	SY-101	AP-105	AP-104	AP-107	AP-105	AP-107	AP-108	AN-106	AP-101
Campaign Boil-off Upper Planned Limit- kGallons	387.1	268.4	241.4	497.0	120.9	360*	518*	477*	Tbd	Tbd	Tbd	Tbd	Tbd
Campaign Boil-off Actual kGallons	384.2	281.7	243.1	464.6	136.1								
Target WVR% (Post-Flush)	38%	25%	25%	40%	20%	38%*	48%*	47%*	Tbd	Tbd	Tbd	Tbd	Tbd
Actual WVR% (Post-Flush)	38.0%	26.0%	25.0%	39.0%	22.5%								
Specific Gravity				1.46	tbd								

Data Sources:

Evaporator Schedule from: Historical records, IMES, and HTWOS model
 Campaign Upper Limits: Boil down tests
 Actual WVR and SpG: Campaign and laboratory reports

*Campaign Upper Planned Limit boil off gallons, pending 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: Complete. Official notification provided in letter ORP to Ecology 03-TPD-123, dated December 10, 2003.
- **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: 3/31/09
Status: Ahead of schedule.
 - W-314 completed construction of new transfer lines from AZ to AP tank farms (SN-634, SN-636, and SN-637).
 - W-211 completed AP to WTP transfer system construction
 - W-211 completed AP-02A and AP-02D 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: 3/31/09
Status: Ahead of schedule.
 - AP-101 transfer pump installation is scheduled for Spring 2004.
 - Transfer piping is addressed in M-47-02.
 - Startup and turnover follow AP-101 transfer pump installation, as shown in M-47-05A and M-47-01.
- **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. Official notification provided in letter ORP to Ecology 03-TPD-114, dated November 17, 2003.
- **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. 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: 3/31/09
Status: Ahead of schedule.
 - AZ-101 Retrieval system upgrades are nearing completion (w/ exception of transfer pump installation)
 - AY-102 Title II design is ongoing.
- **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:

- Received ORP approval of CD-3 for AZ-102, AY-102 and AY-101 retrieval Systems
- Issued the Integrity Assessment Report from the IQRPE covering construction of the AP Transfer System.
- W-211, AZ-101 Retrieval system: worked punch list items and As-Built documentation.
- W-211, AZ-102 Retrieval system:
 - Completed the design review. Issued the Title II design package.
 - Issued RFP for the retrieval construction contract.
 - Awarded contract for field verification of riser and pit dimensions.
 - Awarded fabrication contracts for thermocouple probes, riser extensions and miscellaneous electrical equipment.
- W-211, AY-102, continued Title II design

III. Significant Planned Actions in the Next Six Months:

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

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

None

V. Issues:

Nothing to report.

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

I. Near-Term Deliverables:

- **M-45-55-T03**, Submit to Ecology for review and comment as an Agreement secondary document a Field Investigation Report pursuant to the site-specific SST WMA Phase I RFI/CMS Work Plan addenda for WMA T, TX, and TY
Due: 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. Ecology comments are anticipated to be complete in March 2004.
- The revised C Farm Risk Assessment was completed and forwarded to Ecology for review.
- A new Vadose Zone characterization borehole was started near C-105.
- Study is continuing to determine the cause of corrosion of two groundwater monitoring wells at WMA A-Ax.

- A "Sampling and Analysis Plan" was sent to Ecology to provide a means by which drilling wastes may obtain a "contained-in" designation; approval of the plan is anticipated by February 12, 2004.

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.
- Complete Vadose Zone field work in C Farm.
- Complete numerical analysis of neutron and spectral gamma logging data from dry wells near C-106.
- Initiate geophysical logging in laterals beneath 241-A and 241-SX tank farms

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 design of the Integrated Disposal Facility (IDF) - January 2004
- Continued IDF field sampling activities to support the pre-operational monitoring plan - January 2004
- Completed IDF RCRA Part B Permit Application, Rev 0, review with Ecology- January 2004
- Continued IDF hazards identification and accident analyses for incorporation into the Tank Farm Documented Safety Analysis (DSA) - January 2004
- Continued ILAW transportation optimization study - January 2004
- Continued review of the Canister Storage Building (CSB) Project W-464 detailed design for the Multi-Canister Overpack Handling Machine modification, cask transport, and construction specifications - January 2004

- Initiated review of the Project W-464 Construction Management Plan, Construction Risk Management Plan and other required project documentation - January 2004
- Continued Shipping Facility Level 1 Specification development - January 2004

III. Significant Planned Actions in the Next Six Months:

- Complete detailed design of the IDF critical and non-critical systems – February 2004
- Complete IDF operation support documents (i.e. Inspection Plan, CATs) – August 2004
- Submit RCRA Part B Permit Application, Revision 1, for the IDF to Ecology - February 2004
- Hold a meeting with Ecology to lay out a path forward for preparation of a RCRA Part B permitting plan for the Canister Storage Building - March 2004
- Complete ILAW Transportation Optimization study - March 2004
- Issue HLW Shipping Facility Level 1 Specification - March 2004
- Award IDF site clearing and utilities contract - March 2004
- Complete W-464 Detailed Design - June 2004
- Ecology issues a RCRA Part B Permit for IDF to DOE - August 2004
- Draft Tank Farm DSA modification to incorporate IDF - September 2004
- Prepare draft 2005 Performance Assessment for HQ review - September 2004

IV. Issues

- The delay in the Record of Decision for the Solid Waste Environmental Impact Statement has impacted the start of the IDF site clearing scheduled for 2004. A work-around approach has been developed based on a projected ROD issue date of March 15, 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.
- Work packages and ECNs being prepared to replace the TX-116 LOW and install new LOWs in T-101, SX-112, TX-103, and TX-104.

- SX-112 LOW installation is complete; installation of T-101, TX103, and TX-104 LOW's are scheduled for completion by February 20, 2004.
- Installation of the TX-116 replacement LOW will occur following completion of the M-23-25 LOW installations.

III. Significant Planned Actions in the Next Six Months:

- Install LOWs for M-23-25F and begin monitoring.
- Install replacement LOW in TX-116

IV. Issues:

- During replacement of the LOW in TX-116, the LOW was damaged. That LOW will be removed and a replacement installed following completion of M-23-25 LOW installations in late February 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: Ahead of schedule; U-108 only tank remaining to be pumped; currently shut down due to failed proximity switch, compressor malfunction, and partially plugged transfer line; repairs underway; anticipate restart in March/April with completion of pumping by May/June; 3-months ahead of Consent Decree 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: Seven tanks documented as being interim stabilized (AX-101, BY-105, C-103, SX-101, SX-103, U-107, U-111). One tank available to be pumped (U-108). Two tanks transitioned to accelerated retrieval in lieu of interim stabilization in accordance with the Third Amendment to the Consent Decree signed by a District Court Judge on 9/9/03 (S-102, S-112). Six tanks completed pumping and are in evaluation to document completion of pumping and satisfaction of interim stabilization criteria have been met (A-101, BY-106, S-101, S-107, S-111, SX-102).
- Completed Draft "Interim Stabilization Activity Report for the First Quarter of FY 2004" (Consent Decree Milestone D-001-00-R19) and transmitted to ORP on 12/22/03; final report transmitted to ORP on 1/23/04; transmittal of final report due from ORP to Ecology by 1/31/04.
- Placed A-101 in evaluation on 11/10/03 to document completion of pumping and satisfaction of interim stabilization criteria.
- Placed S-111 in evaluation on 12/15/03 to document completion of pumping and satisfaction of interim stabilization criteria.
- Placed S-101 in evaluation on 12/29/03 to document completion of pumping and satisfaction of interim stabilization criteria.
- Completed the SST Interim Stabilization Evaluation Form for AX-101; letter transmitting the final report to ORP issued on 1/19/04.
- Completed the SST Interim Stabilization Evaluation Form for U-107; letter transmitting the final report to ORP issued on 1/19/04.
- Approximately 13.0 Kgal of pumpable liquids transferred to the double-shell tank (DST) system during the first quarter of FY 2004.
- Approximately 3035.0 Kgal of pumpable liquids have been removed from SSTs and transferred to DSTs since pumping began in June 1998 through the end of the first quarter of FY 2004 (excluding S-102 and S-112).

- As of 1/31/04, U-108 is the only tank remaining to be pumped; the estimated percentage of pumpable liquid remaining in U-108 is roughly 500 to 2,000 gallons. The remaining pumpable liquid volume is to be transferred to the DST system by 9/30/04 under Consent Decree Milestone D-001-00. It is anticipated that interim stabilization saltwell pumping will be completed in the May/June 2004 time frame; 3-months ahead of the Consent Decree schedule.

III. Significant Planned Actions in the Next 6 Months:

- Complete the Interim Stabilization Evaluation Forms for tanks A-101, BY-106, S-101, S-107, S-111, and SX-102 documenting completion of pumping and satisfaction of interim stabilization criteria.
- Complete equipment repairs and transfer line flushes at U-108; remove remaining pumpable liquids from U-108. Prepare SST Interim Stabilization Evaluation Forms to document completion of pumping and satisfaction of interim stabilization criteria.
- Complete Consent Decree Milestone D-001-00 roughly three months ahead of schedule.
- Issue draft Second Quarter FY 2004 Interim Stabilization Activity Report to ORP by 3/30/03; final report due from ORP to Ecology by 4/30/04 (Consent Decree Milestone D-001-00-R20).

IV. Issues:

- 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. The Interim Stabilization Evaluation Form for U-107 has been issued. SX-102 and S-111 have been interim stabilized and are in evaluation to document completion of pumping and satisfaction of interim stabilization criteria. U-108 continues to pump. Remaining pumpable liquids must be removed by 9/30/04, or sooner, as required under Consent Decree Milestone D-001-00. Based on current pumping system performance, it is anticipated that pumping will be completed in the May/June 2004 time frame.
- 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.

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 September 3, 2003. 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 SY-103 ultrasonic testing (UT) field examination. Data analysis of UT scans in progress. Vertical weld rescans completed. Completed NDE Level III review of UT data.

- SY-101 UT is in progress.
- SY-102 UT scheduled in May 2004
- Due to scheduling changes, AP-104 supplemental UT examination of the upper haunch in the vapor space has been put on hold. DSTIP will now perform the same supplemental UT on the upper haunch of SY-101 utilizing the other 24 inch riser. Supplemental UT is being performed to support CH2M HILL initiatives in raising DST waste level heights. UT scan of the upper haunch was a recommendation from an expert panel review.
- UT work on AP-104 is still scheduled as part of the 4 DSTs approved for FY 2004 under M-48-12.
- Visual inspections of AP-101 through AP-106 tentatively scheduled during the period of April through June 2004.

III. Significant Planned Actions in the Next Six Months:

- Issue draft results of UT examination of 241-SY-103
- Complete the SY-101 and start the supplemental UT examination of the upper haunch.
- Start the SY-102 UT examinations
- Start the AP-104 UT examination.
- Complete video inspections of AP-101 through AP-106.

IV. Issues:

- Spalling and cracking of the air slots in 241-AZ-102. CH2M HILL acquired the services of a recognized technical expert in concrete and provided a briefing to ORP. It was the expert's opinion that the cracking and spalling discovered in the air slots was due to a construction artifact during the pouring and forming of the insulating concrete. It was his opinion that the cracking and spalling did not appear to be a significant threat to the structural integrity of the primary tank itself. PNNL is being tasked to simulate a seismic event under the accident analysis scenario with updated material properties of the insulating concrete, and to analyze its effect on tank integrity.

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 two 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-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 target schedule. Retrieval still in progress, expect to complete in January 2004.
- **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:

- Performed acid addition batch four, trucks one through six in October 2003.
- Performed acid addition batch five, trucks one through six in October 2003.
- Replaced the mixer eductor with a second sluicer in November 2003.
- Completed third sluicing operation on December 6, 2003.
- Retrieved approximately 12,000 gallons and an estimated 700,000 curies on December 6, 2003.
- Completed acid addition batch six, trucks one through six on December 14, 2003.
- Initiated Flygt pump disposal on December 18, 2003.
- Commenced fourth sluicing operation on December 22, 2003.

Significant Planned Activities in the Next Six Months:

- Complete waste retrieval results.
- 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.
- Update WMAC risk assessment with C-106 post-retrieval analysis.

Issues:

- Approval of closure plan and LDR treatability variance.

- SST System Closure Plan, Revision 1 certification was submitted to Ecology on December 9, 2003, ORP letter 03-TPD-124.
- 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 accelerated schedule, ECD February 2004
- **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 accelerated schedule, ECD January 2004
- **M-45-13**, "Interim Completion of Tank S-112 Waste Retrieval and Closure Demonstration Project"
Due: 12/31/05
Status: On accelerated schedule.
- **M-45-13-T01**, "Final Completion of Tank S-112 SST Retrieval and Closure Demonstration Project"
Due: 12/30/06
Status: On accelerated schedule.

Significant Accomplishments:

- Completed modifications to change transfer route from SY-101 to SY-102.
- Ongoing retrieval. As of December 31, 2003, roughly 50% of waste volume has been retrieved.

Significant Planned Activities in Next Six Months:

- Complete retrieval of S-112

- Conduct post retrieval sampling of 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.
- Retrieval was halted on November 25, 2003 to address Conduct of Operations issues.

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 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 accelerated schedule
- **M-45-05A**, "Complete Initial Waste Retrieval from SST S-102"
Due: 3/31/05
Status: On accelerated schedule.
- **M-45-15**, "Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project"
Due: 12/31/05
Status: On accelerated schedule.
- **M-45-15-T01**, "Final Completion of Tank S-102 SST Retrieval and Closure Demonstration Project"
Due: 12/31/06
Status: On accelerated schedule.

Significant Accomplishments:

- Continued preparation of installation Engineering Change Notices and work packages.
- Incorporated Lessons Learned into S-102 equipment installation work.
- Completed work package planning for POR05 removal from 244-AR for use as S-102 exhaust system.

Significant Planned Activities in Next Six Months:

- Relocate POR05 from 244-AR to S-102 for use as exhaust system.
- Complete S-102 Waste Retrieval System installation and begin retrieving waste.
- Submit WMA/Framework Closure Plan for S-102 to Ecology

Issues:

- Lack of installation field crew resources jeopardizing completion of construction by March 31, 2004, to meet TPA milestone M-45-05C. Potential impacts to Interim Stabilization Consent Decree if TPA milestone M-45-05C is missed (per third amendment to the Consent Decree).

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:

- Presented Alternate Retrieval Technology for proposed Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestone modification.
- Drafted Statement of Work for final design services.

Significant Planned Activities in Next Six Months:

- Evaluate Level 2 Specification and F&R document
- Initiate C-104 Final Design

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:

- 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

Non-TPA Milestone Tanks (forecast completion dates per IMES as of 1-31-04)**C-200s**

- Submit F&R Document to Ecology (for approval)
Complete: 12/23/03
- Submit Closure Plan to Ecology (for review)
Due: 2/10/04
- Complete Retrieval System Design
Due: 2/12/04
- Complete Retrieval System Construction
Due: 3/10/04
- Complete Retrieval Operations
Due: 3/19/04
- Complete Interim Closure
Due: 5/13/05

Significant Accomplishments:

- Completed field installation of the Vacuum System and associated equipment hookup to C-203.
- Completed the C-200 waste retrieval system acceptance testing.
- Completed operational testing of portable exhaustor POR03.
- Commenced with the operational testing of the Vacuum Retrieval System and associated waste transfer structures and components.

Significant Planned Activities in the Next Six Months:

- Complete operational testing.
- Commence and complete retrieval operations for C-201, C-202, C-203, and C-204.

Issues:

- The ability to drain process fluids to C-203 during retrieval operations requires resolution with Ecology.

C-103

- Submit F&R Document to Ecology (for review)
Due: 2/18/04
- Submit Closure Plan to Ecology (for review)
Due: 5/20/04
- Complete Retrieval System Design
Due: 5/18/04
- Complete Retrieval System Construction
Due: 5/25/04
- Complete Retrieval Operations
Due: 12/23/04
- Complete Interim Closure
Due: 7/26/05

Significant Accomplishments:

- Approved Statement of Work for final design services in November 2003.
- Prepared Level 2 Specification, the Functions & Requirements document, and Plant Forces Work Review in November 2003.
- Approved Level 2 Specification in November 2003.
- Drafted Statement of Work for construction and fabrication services in December 2003.

Significant Planned Activities in the Next 6 Months:

- Complete pre-equipment removal activities
- Complete final design
- Complete retrieval system procurement
- Initiate retrieval system installation, startup, and readiness

Issues:

- None

C-105

- Submit F&R Document to Ecology (for review)
Due: 2/9/04
- Submit Closure Plan to Ecology (for review)
Due: 10/20/04
- Complete Retrieval System Design
Due: 3/15/04
- Complete Retrieval System Construction
Due: 5/17/04
- Complete Retrieval Operations
Due: 2/21/05
- Complete Interim Closure
Due: 11/30/05

Significant Accomplishments:

- Approved Statement of Work for final design services in November 2003.
- Prepared Level 2 Specification, the Functions & Requirements document, and Plant Forces Work Review in November 2003.
- Approved Level 2 Specification in November 2003.
- Drafted Statement of Work for construction and fabrication services in December 2003.

Significant Planned Activities in the Next 6 Months:

- Complete pre-equipment removal activities
- Complete final design
- Complete retrieval system procurement
- Initiate retrieval system installation, startup, and readiness

Issues:

None

U-200s

- Submit F&R Document to Ecology (for review)
Due: 2/24/04
- Submit Closure Plan to Ecology (for review)
Due: 5/1/04
- Complete Retrieval System Design
Due: 7/22/04
- Complete Retrieval System Construction
Due: 7/7/04
- Complete Retrieval Operations
Due: 9/23/04
- Complete Interim Closure I
Due: 10/25/05

Significant Accomplishments:

- Continued with the design and engineering for the U-200 series tanks retrieval system
- Issued the Request for Proposal to supply the articulated mast.

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-200s

- Submit F&R Document to Ecology (for review)
Due: 3/18/04
- Submit Closure Plan to Ecology (for review)
Due: 8/19/04
- Complete Retrieval System Design
Due: 9/14/04
- Complete Retrieval System Construction

Due: 9/9/04

- Complete Retrieval Operations
Due: 12/31/04
- Complete Interim Closure
Due: 2/16/06

Significant Accomplishments:

- Initiated early planning activities to commence design and engineering activities
- Mobilized Industrial Design (IDC) design leads to the Hanford Site
- Issued the Request for Proposal to supply the Vacuum Retrieval System and place contract.

Significant Planned Work in the Next 6 Months:

- Complete design and engineering activities

Issues:

- None

T-200s

- Submit F&R Document to Ecology (for review)
Due: 2/17/04
- Submit Closure Plan to Ecology (for review)
Due: 12/10/04
- Complete Retrieval System Design
Due: 11/9/04
- Complete Retrieval System Construction
Due: 10/28/04
- Complete Retrieval Operations
Due: 4/15/05
- Complete Interim Closure
Due: 5/19/06

Significant Accomplishments:

Significant Planned Work in the Next 6 Months:

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 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

In Tank Characterization and Summary

As of February 5, 2004

I. Significant Accomplishments:

- Sampling Activities:

Program	Tank Sampled			
	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) SY-102 (G) C- 202 (G) C- 201(G)	C-106(G) SY-102(G)		
Evaporator Operations	AN-101 (G) AW-102 (G)	AP-107 (G)		
Supplemental Technology	S -112 (G)			

- Completed 32 of the 32 BBI updates planned for the 1st Quarter of FY 2004.
- Completed Tank 241-C-106 Component Closure DQO, Rev. 1 in February 2004.

The following DQOs are under final review:

- Tank 241-S-102 and S-112 Component Closure Action DQO, Rev. 0.
- Tank 241-C-200 Series Component Closure Action DQO, Rev. 1.
- Tank 241-U-200 Series Component Closure Action DQO, Rev. 0 is under internal Review.

The following internal DQO's were completed in December 2003:

- Evaporator DQO, Rev. 3.
- Compatibility DQO, Rev. 7.
- Corrosion Ammonia Study, Rev. 0.

II. Planned Action Within the Next Six Months:

- 27 BBI updates are planned for 2nd Quarter of FY04.
- Initiate sampling of Ammonia concentration in the headspace of each DST in March 2004.

III. Issues:

- None