

Tri-Party Agreement Quarterly Milestone Review



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

November 27, 2001

Agenda

Office of River Protection Tri-Party Agreement Quarterly Milestone Review

November 27, 2001

712 Swift Blvd., EPA Conference Room

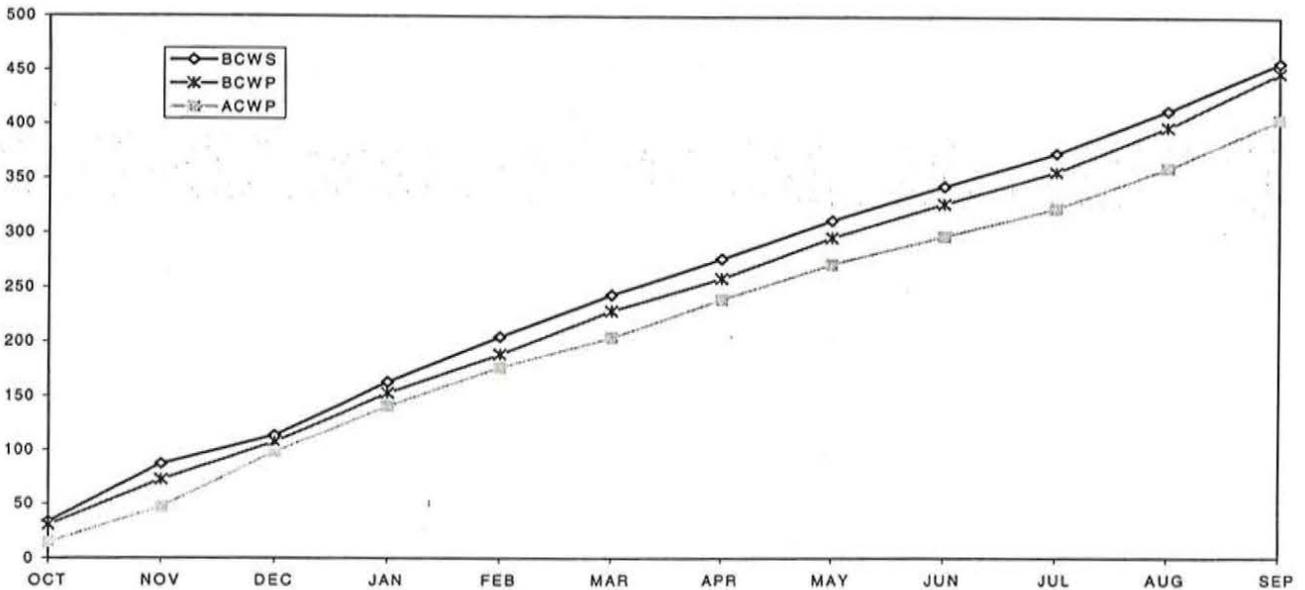
9:00 a.m. – 12:00 p.m.

Topic	Leads	Time
• FY 2001 ORP Tri-Party Agreement Cost & Schedule Performance and TPA Milestone Statistics	Jim Rasmussen/Mary Beth Burandt/Suzanne Dahl/Melinda Brown	9:00
• ORP Critical Path Related to Sections 4.1 and 11.8	Jim Rasmussen/Mary Beth Burandt/Peter Furlong	9:10
• M-23, Tank Integrity and Monitoring	Dana Bryson/Mary Beth Burandt/Melinda Brown	9:20
• Interim Stabilization (Consent Decree)	Dana Bryson/Andy Stevens/Kevin Dewitt	9:30
• M-44-00, Tank Waste Characterization	Delmar Noyes/Wen-Shou Liou/Debra Singleton	9:45
• M-45-11, Complete 244-AR Vault Interim Status Actions	Delmar Noyes/Harold Stafford/Melinda Brown	10:00
• X-32, DST Integrity Assessment Program	Delmar Noyes/Vic Callahan/Melinda Brown	10:10
• M-46-00, Double-Shell Tank Space Evaluation	Dana Bryson/Joe Cruz/Melinda Brown	10:20
• M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Kay Fick/Joe Cruz/Dick Heggen	10:30
• M-45-00, Single-Shell Tank Closure	Kay Fick/Bob Lober/Dick Heggen	10:40
• M-45-50, 60 Single-Shell Tank Corrective Action	Kay Fick/Rob Yasek/Joe Caggiano	10:55
• M-43-00, Tank Farm Upgrades	Bill Taylor/Bobby Williams/Rabindra Biyani	11:10
• M-62, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bill Taylor/Mark Ramsay/Suzanne Dahl	11:20
• M-92-05, Inclusion of Hanford Site Cs/Sr Treatment and/or Repackaging Parameters in DOE TWRS Phase II Request for Proposals	Bill Taylor/Mark Ramsay/Suzanne Dahl/Melinda Brown	11:35
• M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/ Disposal of ILAW and M-20, Part B Permits	Bill Taylor/Phil LaMont/Suzanne Dahl	11:40
• Review of new commitments and actions	Jim Rasmussen/Mary Beth Burandt/Suzanne Dahl/Melinda Brown	11:55

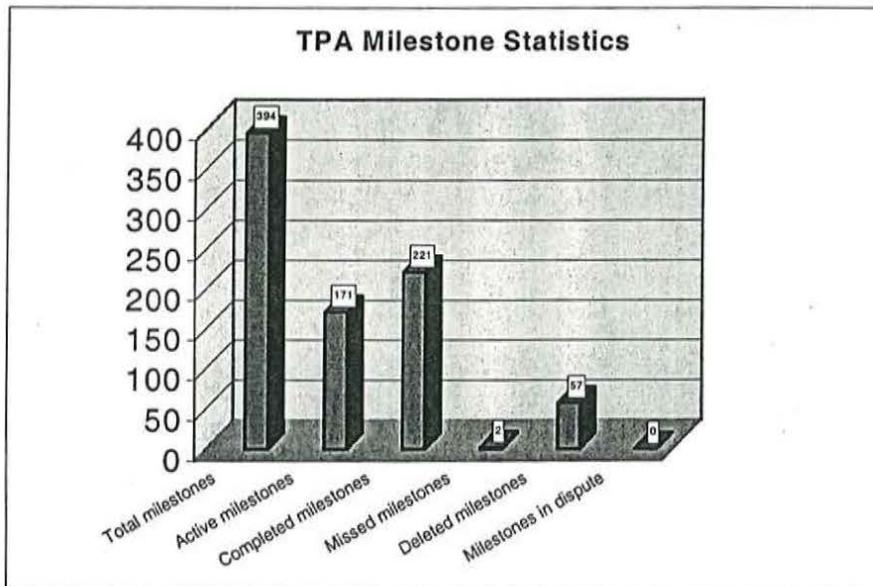
RIVER PROTECTION PROJECT FY 2001 PERFORMANCE MEASUREMENTS - ALL FUND TYPES

(Including All Direct Funded Activities)

Cumulative to Date Status (Dollars in Millions)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
BCWS	33.8	87.3	113.7	163.2	204.7	243.3	276.6	312.0	343.6	374.2	413.8	458.4
BCWP	30.7	72.6	107.6	153.1	188.6	228.8	258.7	296.0	327.2	356.9	398.2	449.2
ACWP	14.8	47.5	98.4	140.7	176.7	204.2	239.3	271.8	297.3	323.1	360.3	405.6
SV	(3.1)	(14.7)	(6.1)	(10.1)	(16.1)	(14.5)	(17.9)	(16.0)	(16.4)	(17.3)	(15.6)	(9.2)
CV	15.9	25.1	9.2	12.4	11.9	24.6	19.4	24.4	29.9	33.8	37.9	43.6
SV%	(9.20%)	(16.80%)	(5.30%)	(6.20%)	(7.90%)	(6.00%)	(6.40%)	(5.10%)	(4.80%)	(4.60%)	(3.78%)	(2.0%)
CV%	51.90%	34.50%	8.50%	8.10%	6.30%	10.80%	7.50%	8.20%	9.10%	9.50%	9.52%	9.7%



Footnotes to milestone statistics: *DOE abandoned the primary path per letter dated June 18, 1998. M-60-00 milestones were automatically deleted from the Tri-Party Agreement, and M-61-00 milestones were activated under the alternate path (Ecology and EPA stated their disagreement with this footnote at the July 28, 1998 IAMIT meeting).

** TPA change request M-45-98-03 was approved on March 13, 2001. The statistics table has been updated to reflect the addition of 11 interim milestones (6 are complete). Nine target milestones were also added per this change request.

*** Added M-23 milestones.

TPA Milestone Statistics (Including target milestones)

<i>Includes Target</i>	Milestone Completion Date	Total MSs as of 11/13/01	MSs Completed as of 11/13/01	MSs Deleted after 10/1/98	MSs In Dispute as of 11/13/01	Active MSs as of 11/13/01	MSs Missed as of 11/13/01
	Interim Stabilization, Consent Decree	46	22	0	0	23	1
	M-20-00, Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	3	1	1	0	2	0
	M-23-25, Tank Integrity and Monitoring ***	12	1	0	0	11	0
	M-40-00, Mitigate/Resolve Tank Safety issues for High Priority Watchlist Tanks	19	19	1	0	0	0
<i>delete</i>	M-41-00, Complete Single Shell Tank Interim Stabilization	20	20	10	0	0	0
	M-43-00, Complete Tank Farm Upgrades	34	31	0	0	3	0
	M-44-00, Double and single Shell Tank Characterization	34	31	0	0	3	0
	M-45-00**, Complete Closure of all SST Farms	107	33	28	0	74	0
	M-46-00, Double Shell Tank Space Evaluation	26	15	0	0	11	0
	M-47-00, Complete All Work for Phase 1 Operations	9	0	0	0	9	0
	M-50-00, Complete Pretreatment Processing of Hanford Tank Waste	10	9	6	0	1	0
	M-51-00, Complete Vitrification of Hanford High Level Tank Waste	7	6	4	0	1	0
	M-60-00 (primary path), Complete Pretreatment and Immobilization of Hanford Low Activity Tank Waste	11*	11	0	0	0	0
	M-61-00* (alternate path), Complete Pretreatment and Immobilization of Hanford Low Activity Tank Waste	1	0	3	0	1	0
	M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	25	5	1	0	19	1
<i>HF Dist. Add up</i>	M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	9	4	3	0	5	0
	M-92-05, Inclusion of Hanford Site Cs/Sr treatment and/or repackaging parameters in DOE TWRS Phase II request for proposals	1	0	0	0	1	0
<i>Dub milestones?</i>	X-32-20, DST Integrity Assessment Program	20	13	0	0	7	0
	Total	394	221	57	0	171	2

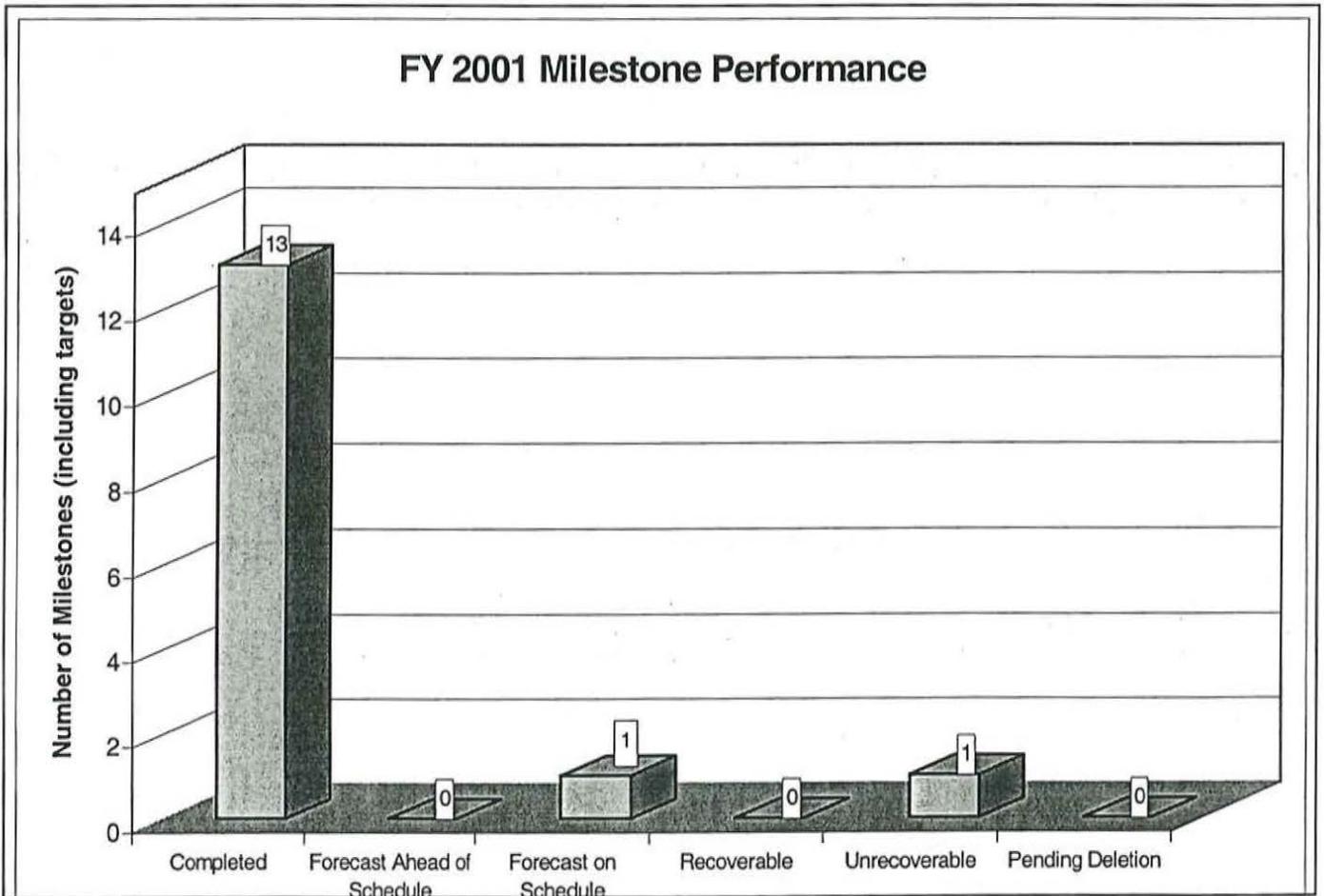
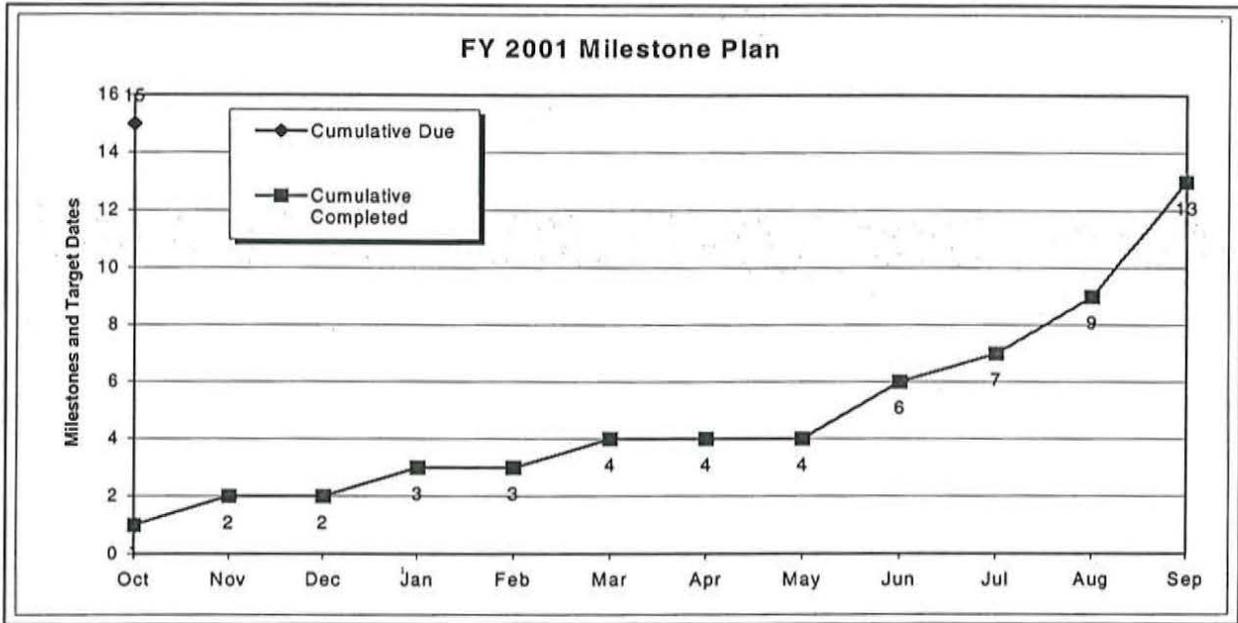
TPA Milestone Statistics

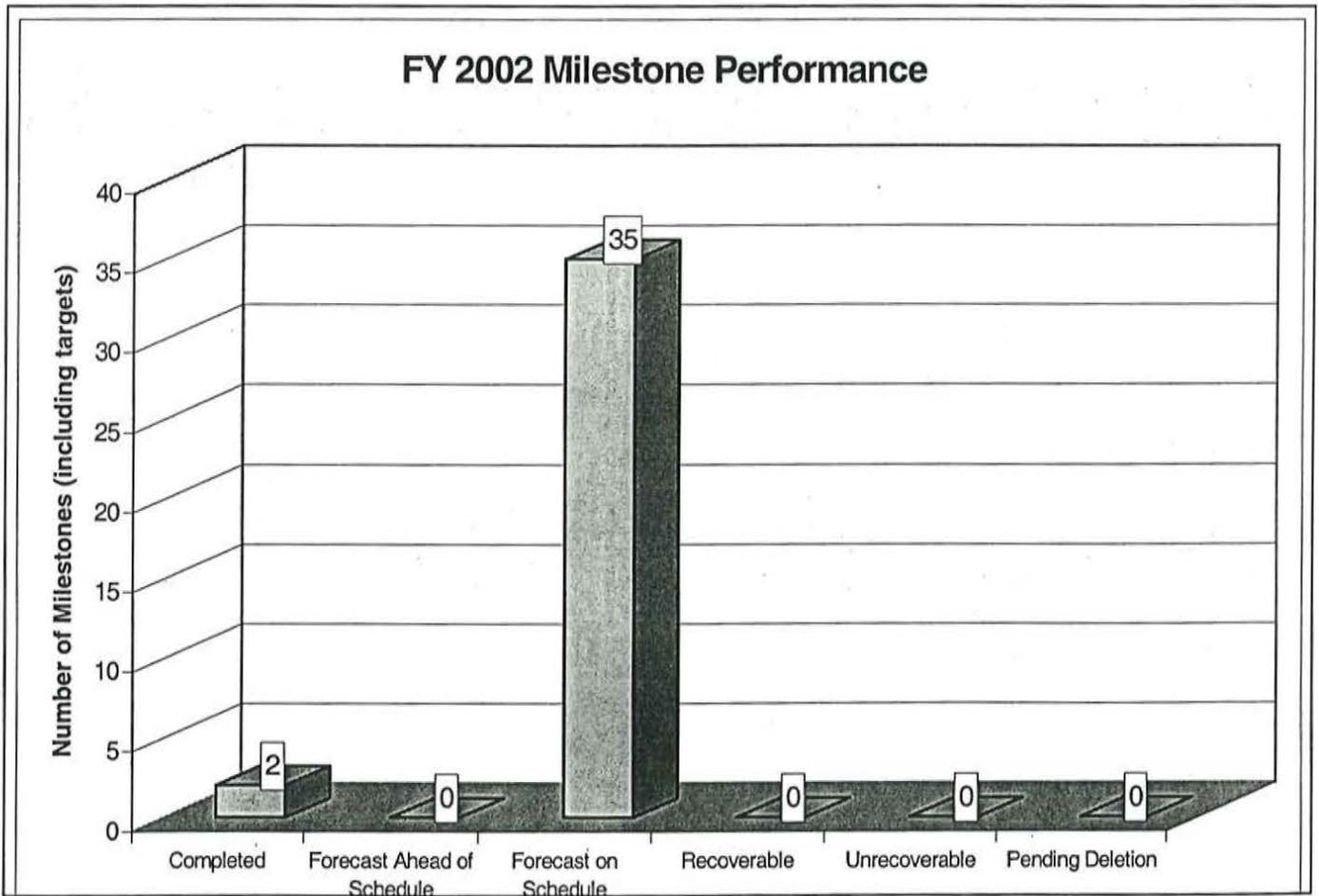
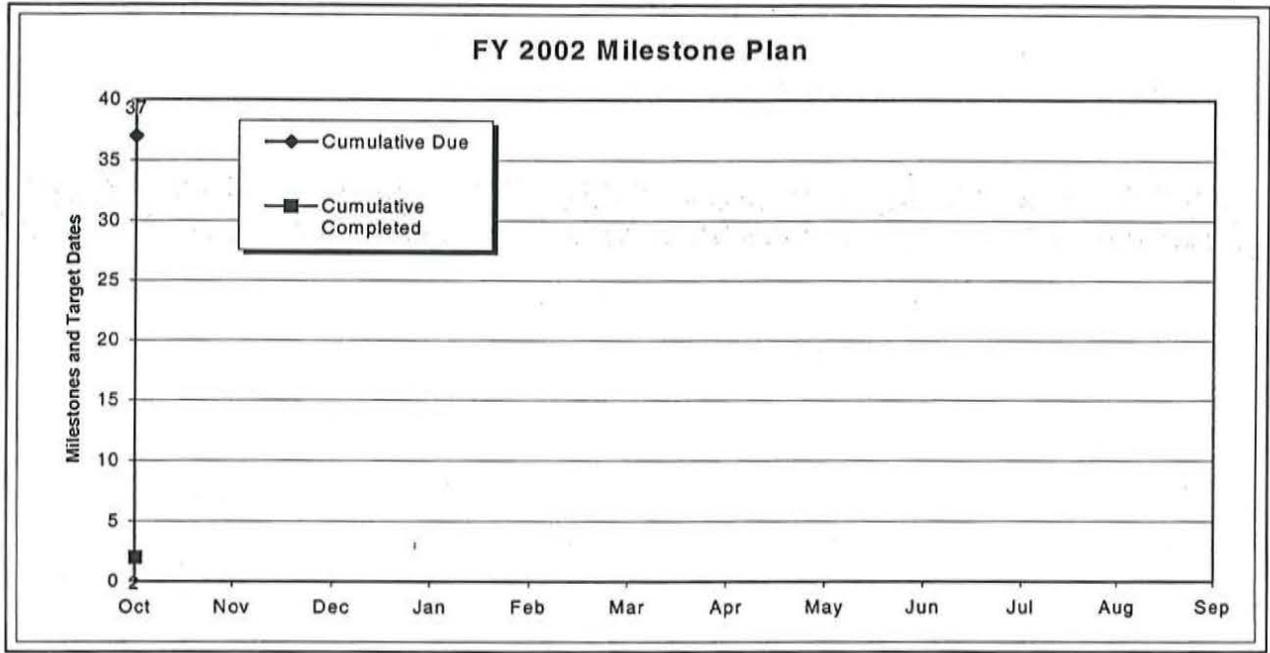
(Including target milestones)

Milestone	Due Date	Total Active as of 11/13/01	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)	2	M-20-56	6/30/02	M-20-57	8/31/02
M-23-25, Tank Integrity and Monitoring	9/30/2004 (M-23-25)	11	M-23-22-T01 M-23-23 M-23-25A M-23-24 M-23-25B M-23-25C	2/28/02 3/31/02 3/31/02 6/30/02 9/30/02 3/31/03	M-23-25D M-23-25E M-23-25F M-23-25 M-23-25G	9/30/03 9/30/03 3/31/04 9/30/04 9/30/04
M-43-00, Complete Tank Farm Upgrades	6/30/2005 (M-43-00)	3	M-43-15 M-43-16	3/29/02 6/30/03	M-43-00	6/30/05
M-44-0, Double and Single Shell Tank Characterization	9/30/2002 (M-44-00A)	3	M-44-00A M-44-15F	9/30/02 9/30/02	M-44-16F	9/30/02
M-45-00, Complete Closure of all SST Farms	9/30/2024 (M-45-00)	74	M-45-02 (total of 18 milestones) M-45-03-T03 M-45-03-T04 M-45-55-T01 M-45-12-T01 M-45-06-T05 M-45-05-T16 M-45-55-T02 M-45-05D M-45-03D M-45-55-T03 M-45-11 M-45-00C M-45-55 M-45-05B M-45-05-T17 M-45-03G M-45-06-T06 M-45-03E M-45-03H M-45-03C M-45-05C M-45-05E M-45-06-T07A M-45-05A M-45-03I M-45-00B M-45-05-T05 M-45-06-T07B	9/30/01 & annually thereafter 12/30/01 12/31/01 1/31/02 2/28/02 6/30/02 10/30/02 10/31/02 12/31/02 5/31/03 6/30/03 9/30/03 2/28/04 2/28/04 3/31/04 4/30/04 6/30/04 9/30/04 9/30/04 9/30/04 9/30/05 11/30/05 6/30/06 6/30/06 9/30/06 9/30/06 9/30/06 9/30/07 6/30/08	M-45-05-T06 M-45-05-T07 M-45-06-T07C M-45-05-T08 M-45-00D M-45-05-T09 M-45-06-T03 M-45-06-T07D M-45-05-T10 M-45-05-T11 M-45-06-T04 M-45-06-T07E M-45-05-T12 M-45-05-T13 M-45-06-T07F M-45-05-T14 M-45-05-T15 M-45-06-T07G M-45-05 M-45-06-T07H M-45-06-T07I M-45-06-T07J M-45-06 M-45-00 M-45-03F M-45-06 M-45-05F M-45-60	9/30/08 9/30/09 6/30/10 9/30/10 6/30/11 9/30/11 3/31/12 6/30/12 9/30/12 9/30/13 3/31/14 6/30/14 9/30/14 9/30/15 6/30/16 9/30/16 9/30/17 6/30/18 9/30/18 6/30/20 6/30/22 6/30/24 9/30/24 9/30/24 TBD TBD TBD 6 months following RFI report approval
M-46-00, Double Shell Tank Space Evaluation	11/30/2006 (M-46-01M)	11	M-46-01H M-46-00I M-46-01I M-46-00J M-46-01J M-46-00K	11/30/01 9/30/02 11/30/02 9/30/03 11/30/03 9/30/04	M-46-01K M-46-00L M-46-01L M-46-00M M-46-01M	11/30/04 9/30/05 11/30/05 9/30/06 11/30/06

TPA Milestone Statistics (continued)

Milestone	Due Date	Total Active as of 11/13/01	Milestone Number	Due Date	Milestone Number	Due Date
M-47-00, Complete All Work for Phase 1 Operations	2/28/2018 (M-47-00)	9	M-47-05	5/31/04	M-47-00A	2/28/07
			M-47-03	7/30/04	M-47-04	6/30/07
			M-47-01	3/31/06	M-47-06	6/30/10
			M-47-05A	4/30/06	M-47-00	2/28/18
			M-47-02	3/31/07		
M-50-00, Complete Pretreatment Processing of Hanford Tank Waste	12/31/2028 (M-50-00)	1	M-50-00	9/30/24		
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)	19	M-62-01 (total of 10 milestones)	Semi-annually beginning 7/31/00	M-62-09	12/31/07
			M-62-08	7/31/05	M-62-10	12/31/09
			M-62-03	12/31/06	M-62-11	1/31/14
					M-62-00A	2/28/18
					M-62-00	12/31/28
				M-62-07	TBD	
				M-62-12	TBD	
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	5	M-90-08	7/31/04	M-90-10	1/31/07
			M-90-09-T01	3/30/04	M-90-11	2/01/07
					M-90-00	TBD
M-92-05, Inclusion of Hanford Site Cs/Sr treatment and/or repackaging parameters in DOE TWRS Phase II request for proposals	6/30/2003 (M-92-05)	1	M-92-05	6/30/03		
Interim Stabilization Consent Decree	9/30/2004 (D001-01)	23	D-001-11	12/30/01	D-001-00-R17	7/31/03
			D-001-00-R11	1/31/02	D-001-00-R18	10/31/03
			D-001-04-T01	4/15/02	D-001-11-T01	8/30/03
			D-001-00-R12	4/30/02	D-001-13-T01	9/30/03
			D-001-00-R13	7/31/02	D-001-00V	9/30/03
			D-001-12V	9/30/02	D-001-06-T01	9/30/03
			D-001-00-R14	10/31/02	D-001-00-R19	1/31/04
			D-001-13	11/30/02	D-001-00-R20	4/30/04
			D-001-00-R15	1/31/03	D-001-00-R21	7/31/04
			D-001-08-T01	2/28/03	D-001-01	9/30/04
			D-001-00-R16	4/30/03	D-001-00-R22	10/31/04
			D-001-09-T01	6/30/03		
X-32 - DST Integrity Program, Submit Results of 4 DSTs not Previously Examined	9/30/2007 (X-32-32)	7	X-32-20B-T04	3/31/02	X-32-30	9/30/05
			X-32-27	9/30/02	X-32-31	3/31/06
			X-32-28	9/30/03	X-32-32	9/30/07
			X-32-29	9/30/04		
Total Active Milestones:		171				





Fiscal Year 2001 Tri-Party Agreement Milestone Status

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
M-46-01G	Concurrence of Additional Tank Acquisition	11/30/00	X						
P-45-54	Submit SST WMA Phase 1 RFI/CMS for WMA T and WMA TX-TY	3/31/00	X						
M-62-01	Submit Semi-Annual Compliance Report	1/31/01	X						
M-62-07	Establish Construction "Progress" Milestone Dates	TBD			X				
M-43-14	Start Construction Upgrades for Third Tank Farm	3/31/01	X						
M-26-01K	Submit Annual Hanford Land Disposal Restrictions Report	5/30/01	X						
M-44-13E	Submit Draft WIRD to Ecology for FY2002	6/30/01	X						
M-62-01	Submit Semi-Annual Compliance Report	7/31/01	X						
M-62-06	Start of Construction - Phase I Treatment Complex	7/31/01					X		
M-44-14E	Submit Final WIRD to Ecology	8/31/01	X						
M-40-00	Mitigate/Resolve Tank Safety Issues	9/30/01	X						
M-44-15E	Complete Characterization Deliverables	9/30/01	X						
M-44-16E	Complete Input of Characterization Information into Database	9/30/01	X						
M-46-00H	Double-Shell Tank Space Evaluation	9/30/01	X						
M-45-02	Start Annual Update to Retrieval Sequence Document	9/30/01	X						
TOTAL			13	0	1	0	1	0	0

Fiscal Year 2002 Tri-Party Agreement Milestone Status

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
D-001-00-R10	SUBMIT QUARTERLY REPORT FOR TANK STABILIZATION ACTIVITES	10/31/01	X						
M-23-21	SUBMIT REVISED HAZARDOUS WASTE FACILITY APPLICATION FORM	10/31/01	X						
M-046-01H	CONCURRENCE OF ADDITIONAL TANK ACQUISITION	11/30/01			X				
D-001-11	INITIATE PUMPING OF TANKS U-108, U-107, S-111, AND SX-102	12/30/01			X				
M-045-03-T03	SUBMIT S-112 FUNCTIONS AND REQUIREMENTS DOCUMENT	12/30/01			X				
M-024-00M	GROUNDWATER WELLS, UP TO 50/YEAR	12/30/01			X				
M-045-03-T04	SUBMIT C-104 FUNCTIONS AND REQUIREMENTS DOCUMENT	12/31/01			X				
D-001-00-R11	SUBMIT QUARTERLY REPORT FOR TANK STABILIZATION ACTIVITES	1/31/02			X				
M-062-01D	SUBMIT SEMI-ANNUAL COMPLIANCE REPORT	1/31/02			X				
M-045-55-T01	SUBMIT SST WMA PHASE 1RFI/CMS FOR WMA S-SX	1/31/02			X				
M-23-22-T01	SUBMIT DOCUMENT IDENTIFICATION AND DESCRIPTION OF EXISTING SST IN-TANK S&M PROGRAM	2/28/02			X				
M-045-12-T01	SUBMIT AN OPTIONS REPORT (ACTIONS FOR INCREASE IN DST SPACE)	2/28/02			X				
M-23-23	SUBMIT SST SYSTEM LEAK DETECTION AND MONITORING F&R DOCUMENT	3/31/02			X				
M-23-25A	COMPLETE THE INSTALLATION OF LIQUID OBSERVATION WELLS (LOWs) AND BEGIN LIQUID OBSERVATION	3/31/02			X				
X-032-20B-T04	UPDATE AND SUBMIT TO ECOLOGY THE ULTRASONIC TESTING EQUIPMENT DEV	3/31/02			X				
M-043-15	START CONSTRUCTION FOR UPGRADES IN THE FOURTH TANK FARM	3/31/02			X				
P-48-02D	SUBMIT TO ECOLOGY A REPORT ASSESSING TECHNOLOGY DEVELOPMENT	3/31/02			X				
D-001-04-T01	COMPLETE PUMPING OF U-103, U-105, U-102 AND U-109	4/15/02			X				
D-001-00-R12	SUBMIT QUARTERLY REPORT FOR TANK STABILIZATION ACTIVITES	4/30/02			X				
M-045-00C	*** POSSIBLE DATE IF WE FAIL TO MEET M-062-06 BY 31-Dec-01***	4/30/02			X				
M-026-01L	SUBMIT ANNUAL HANFORD LAND DISPOSAL RESTRICTIONS REPORT	4/30/02			X				

Milestone	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted
				Ahead of Schedule	On Schedule				
M-23-24	SUBMIT SST SYSTEM INTEGRITY ASSESSMENT REPORT	6/30/02			X				
M-045-06-T05	SUBMIT TANK FARM CLOSURE /POST-CLOSURE WORKPLAN UPDATE	6/30/02			X				
M-020-56	SUBMIT CANISTER STORE FACILITY PART B PERMIT	6/30/02			X				
D-001-00-R13	SUBMIT QUARTERLY REPORT FOR TANK STABILIZATION ACTIVITIES	7/31/02			X				
M-062-01E	SUBMIT SEMI-ANNUAL COMPLIANCE REPORT	7/31/02			X				
M-020-57	SUBMIT ILAW FACILITY "CERTIFIED" PART B PERMIT	8/31/02			X				
D-001-12V	PERCENTAGE OF PUMPABLE LIQUID REMAINING IS <18%	9/30/02			X				
M-044-00A	COMPLETE DELIVERY OF INFORMATION REQUIREMENTS FOR WIRD	9/30/02			X				
M-044-15F	COMPLETE CHARACTERIZATION DELIVERABLES	9/30/02			X				
M-044-16F	COMPLETE INPUT OF CHARACTERIZATION INFORMATION INTO DATABASE	9/30/02			X				
M-046-00I	DOUBLE-SHELL TANK SPACE EVALUATION	9/30/02			X				
M-23-25B	COMPLETE THE INSTALLATION OF LIQUID OBSERVATION WELLS (LOWs) AND BEGIN LIQUID OBSERVATION	9/30/02			X				
M-045-02K	SUBMIT ANNUAL UPDATE TO SST RETRIEVAL SEQUENCE DOCUMENT.	9/30/02			X				
P-48-10	SUBMIT RESULTS OF (4) DST'S NOT PREVIOUSLY EXAMINED	9/30/02			X				
X-032-27	ALL RESULTS OF ULTRASONIC TESTING OF THE PRIMARY TANK WALLS 4 DST	9/30/02			X				
M-62-07	ESTABLISH CONSTRUCTION "PROGRESS" MILESTONE DATES	TBD			X				
TOTAL			2	0	35	0	0	0	0

M-23, Tank Integrity and Monitoring

I. Near-Term Deliverables:

- M-23-21, Submit Revised Hazardous Waste Facility Permit Application Form
Due: 10/30/01
Status: Complete
- M-23-22-T01, Submit Document Identification and Description of Existing SST In-tank S&M Program
Due: 2/28/02
Status: On schedule
- M-23-23, Submit SST System Leak Detection and Monitoring F&R Document
Due: 3/31/02
Status: On schedule. Meetings with Ecology to discuss document content are on-going.
- M-23-25A, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Liquid Observation
Due: 3/31/02
Status: On schedule. Plans are being finalized to support actual field work. Equipment procurements will start next month.
- M-23-24, Submit SST System Integrity Assessment Report
Due: 6/30/02
Status: On schedule
- M-23-25B, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Liquid Observation
Due: 9/30/02
Status: On schedule
- M-23-25C, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Liquid Observation
Due: 3/31/03
Status: On schedule
- M-23-25D, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Liquid Observation
Due: 9/30/03
Status: On schedule

- M-23-25E, Procure Necessary EQ to Support Additional LOW Monitoring Systems
Due: 9/30/03
Status: On schedule
- M-23-25F, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Weekly Liquid Observation
Due: 3/31/04
Status: On schedule
- M-23-25, Complete the Installation of Liquid Observation Wells (LOWs)
Due: 9/30/04
Status: On schedule
- M-23-25G, Complete the Installation of Liquid Observation Wells (LOWs) and Begin Weekly Liquid Monitoring
Due: 9/30/04
Status: On schedule

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

II. Significant Accomplishments:

- The Part A form 3 was submitted on October 30, 2001.

III. Significant Planned Actions in the Next Six Months:

- Equipment procurements for LOWs will begin in November 2001.

IV. Issues:

- Discussions are on-going with regard to the PE certification for M-23-24.

Interim Stabilization Consent Decree

Near-Term Deliverables:

- Reduce Total Organic Complexant Pumpable Liquids to 5% of Total Volume from SSTs (D-001-10V)
Due: 9/30/01
Status: Complete
- Start Interim Stabilization of 4 SSTs - 241-U-108, 241-U-107, 241-S-111, 241-SX-102 (D-001-11)
Due: 12/30/01
Status: On schedule
- Reduce Total Liquids to 18% of Total Volume from SSTs (D-001-12V)
Due: 9/30/02
Status: On schedule
- Start Interim Stabilization of 5 SSTs - 241-U-111, 241-S-109, 241-S-112, 241-S-101, 241-S-107 (D-001-13)
Due: 11/30/02
Status: On schedule
- Reduce Total Liquids to 2% of Total Volume from SSTs (D-001-00V)
Due: 9/30/03
Status: On schedule
- Complete Interim Stabilization of all 29 SSTs (D-001-00)
Due: 9/30/04
Status: On schedule

Status:

- Pumping is ongoing for tanks SX-101, SX-103, and U-107
- Pumping will resume for tanks BY-105 and BY-106 after the receiver tank (waiting for SN-650 transfer line) is emptied.
- Tanks U-102, U-109, and SX-105 are being evaluated for stabilization criteria.
- 1.30 million gallons have been removed.
- 390 thousand gallons of organic complexant liquid waste have been removed, completing the milestone.

Issues/Recovery:

- Resumption of pumping tanks AX-101 and A-101.

Status: Transfer line SN-247 failed and a different line and route has to be established. This line, SN-650, is scheduled to be in place in mid-November. Tank pumping can begin after the line becomes operational.

- Resumption of pumping tanks BY-105 and BY-106.

Status: Failure of transfer line SN-247 and Project W-314 upgrades affect pumping of BY-105 and BY-106 and pumping can resume only after the SN-650 line becomes available.

Planned Actions:

- Complete the stabilization evaluation for tanks U-102, U-109, and SX-105.
- Re-initiate pumping of BY-105, BY-106, AX-101 and A-101.
- Replace pump and pump leg for tank S-102.
- Initiate pumping of U-108, S-111 and SX-102.

Milestone M-44-00A, Complete delivery of information requirements as identified in the annually submitted Waste Information Requirements Document (WIRD)

I. Deliverables:

- M-44-13E, Submit draft TSB-WIRD to Ecology for FY 2002
 Due: 6/30/01
 Status: Complete
- M-44-14E, Submit final TSB-WIRD for FY 2002 to Ecology
 Due: 8/31/01
 Status: Complete
- M-44-15E, Complete Characterization Deliverables Consistent with TSB-WIRD Developed for FY 2001
 Due: 9/30/01
 Status: Complete
- M-44-16E, Complete Input of Characterization Information for High Level Waste (HLW) Tanks for which Sampling and Analysis was Completed Per the FY 2001 WIRD, into an Electronic Database
 Due: 9/30/01
 Status: Complete
- M-44-15F, Issue Characterization Deliverables Consistent with TSB-WIRD Developed for FY 2002
 Due: 9/30/02
 Status: On schedule
- M-44-16F, Complete Input of Characterization Information for HLW Tanks for which Sampling and Analysis were Completed per TSB-WIRD into an Electronic Database
 Due: 9/30/02
 Status: On schedule

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

This will be Deleted Next Time.

WHAT DOES THIS MEAN? ONLY ISSUE ON TABLE IS WITH DETAIL OF CR WITH TRACKING FOR SPECIFIC MILESTONES

II. Significant Accomplishments:

- A total of 6 core and 11 grab samples are planned for FY 2002.
- A total of 9 TCRs are planned for FY 2002.
- Sampling status as of 11/21/01:

	<u>Samples Scheduled</u>	<u>Samples Completed</u>	<u>MYWP FY 01 Sampling Baseline</u>
Core	1	0	6
Grab	1	0	11

- Completed and submitted to Ecology the FY 2001 4th Quarter FY 2001 TSB-WIRD Status Report on October 23, 2001.

III. Significant Planned Actions in the Next Six Months:

- Issue FY 2002 First Quarter TSB-WIRD Status Report by 01/31/02.
- Issue FY 2002 Second Quarter TSB-WIRD Status Report by 04/30/02.

IV. Issues:

- Discussion of extending M-44 beyond the current completion date of September 30, 2002 is on hold. Ecology stated that they could support this in calendar year 2002.

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

I. Deliverables:

- M-45-11, Complete 244-AR Vault Interim Status Actions
Due: 9/30/03
Status: On schedule

II. Significant Accomplishments:

- Installed the containment tent in 244AR canyon (11/19/01).
- Approved final design of the ventilation skid (10/19/01).
- Completed relocation of two 500 CFM compliant exhausters to the 244AR facility (10/18/01).
- Submitted and obtained State DOH approval for the 244-AR vault canyon NOC (10/11/01).
- Awarded design build contract for the transfer system (09/04/01).
- ORP provided tentative approval to use tank AY-102 for AR vault waste pending final review of compatibility samples (08/27/01).
- Completed 40% design of the transfer system (08/01/01).
- Received containment tents for canyon installation (08/01/01).

III. Significant Planned Actions in the Next Six Months:

- Complete final plasma arc mockup training (11/15/01)
- Complete remaining transfer system design (11/15/01)
- Complete roof repair (11/19/01)
- Modify compliant exhausters and test (12/01/01)
- Core bore walls (12/04/01)
- Undertake and complete misc. isolation activities (12/07/01)
- Complete manufacture of hose in hose (12/10/01)
- Complete AB for 244AR transfer (12/15/01)
- Complete transfer system installation procedures (02/01/02)
- Undertake mockup training on transfer system (02/10/02)
- Receive completed fabricated and tested transfer system and air supply skid (02/15/02)
- Complete installation and operational test of the ventilation system (03/08/01)
- Complete core bore of vault cover blocks (04/12/02)

IV. Issues:

- Maintaining the schedule is dependent on effective prioritization of proper resource allocation. This is being worked on a continual basis within CHG Operations.

X-32-20, DST Integrity Assessment Program

I. Deliverables:

- X-32-20B-T03, Update on Ultrasonic Testing Equipment Development Report
Due: 9/30/01
Status: Complete
- X-32-26, Submit results of 4 DSTs not previously examined
Due: 9/30/01
Status: Complete
- X-32-27, Submit results of 4 DSTs not previously examined
Due: 9/30/02
Status: On schedule
- X-32-28, Submit results of 4 DSTs not previously examined
Due: 9/30/03
Status: On schedule
- X-32-29, Submit results of 4 DSTs not previously examined
Due: 9/30/04
Status: On schedule
- X-32-30, All results of ultrasonic testing of the primary tank walls (4 DSTs)
Due: 9/30/05
Status: On schedule
- X-32-31, Submit written DST Integrity Assessment Report
Due: 3/31/06
Status: On schedule
- X-32-32, Re-examination of 6 DSTs by ultrasonic testing
Due: 9/30/07
Status: On schedule
- X-32-20B-T04, Update and submit to Ecology the ultrasonic testing equipment development report
Due: 3/31/02
Status: On schedule

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

II. Significant Accomplishments:

- Completed all FY 01 milestones, including updates to the Ultrasonic Testing Equipment Development Report, and submitted results of 4 DSTs not previously examined.
- Added caustic to AN-102 in October 2001.
- Proceeding with planned work scope for analyzing high corrosion areas of AY-101 annulus. This work consists of utilizing an outside contractor to provide a device to clean the annulus surface. Completion of cleaning and UT of high corrosion areas, and analyzing for the possibility of "pin-hole" penetrations corresponding to stained areas is scheduled in FY 2002.

III. Significant Planned Actions in the Next Six Months:

- Complete milestones as listed above.
- Add nitrite to AY-102 by the end of November 2001.
- Use of newly procured second UT crawler and modification for a flexible arm on existing crawler for UT of lower knuckle region. Deployment of these crawlers will commence in FY 2002. TSAFT technology is progressing. Expect to test the system sometime later in FY 2002.
- RUDI is in process for modification to provide better capability of tank bottom air slot UT examinations.

IV. Issues:

- **AY-101:**
Level restriction of 80 inches is still in effect.

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

- M-46-00H, Double-Shell Tank Space Evaluation
Due: 9/30/01
Status: Complete
- M-46-01H, Concurrence of Additional Tank Acquisition
Due: 11/30/01
Status: On schedule
- M-46-00I, Double-Shell Tank Space Evaluation
Due: 9/30/02
Status: On schedule
- M-46-01I, Concurrence of Additional Tank Acquisition
Due: 11/30/02
Status: On schedule
- M-46-00J, Double-Shell Tank Space Evaluation
Due: 9/30/03
Status: On schedule
- M-46-01J, Concurrence of Additional Tank Acquisition
Due: 11/30/03
Status: On schedule
- 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

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

II. Significant Accomplishments:

- Completed milestone M-46-00H, Double-Shell Tank Space Evaluation and delivered the document to Ecology.

III. Significant Planned Actions in the Next Six Months:

- The Tank Farm Contractor Operation and Utilization Plan (TFCO&UP) Revision 3. has been completed. The document is an expanded technical discussion based on Case 2 from the M-46-00H/M-45-02 OWVP/SST retrieval sequence document deliverable. This will be publicly released.

IV. Issues:

- There are no issues at this time.

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-47-05, 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: On schedule. Project activities for 1st waste transfer tank, AP-101, transfer pump replacement planned to start in FY 2002.

- M-47-03, Start construction of waste retrieval and mobilization systems for selected initial high-level waste feed tank

Due: 7/30/04

Status: On schedule. The 1st high-level waste feed tank AZ-101, retrieval system Title II design was completed in September 2001. Bid packages for the AZ-101 transfer pump were issued in September 2001. An independent qualified registered Professional Engineer certified that the AZ-101 retrieval system design complies with the requirements of WAC 173-303-640.

- M-47-01, Complete construction of the transfer system from the 241-AP Tank Farm to the BNFL Facility to support the start of hot commissioning of the Phase I Tank Waste Treatment Complex

Due: 3/31/06

Status: On schedule. Baseline change request (RPP-01-116) for a simplified AP-WTP transfer system has been approved. The change provides 3 transfer lines that can handle any waste stream to the WTP. Design on-going.

- 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: On schedule. Startup and turnover follows installation of the AP-101 transfer pump (refer to M-47-05 status above).

Out year (Post 2006) Milestones:

- M-47-02, Complete startup and turnover activities for required transfer system upgrades to allow transfer of first high-level waste feed to the Pretreatment/Treatment Complex

Due: 3/31/07

Status: On schedule. Startup and turnover follow transfer line construction. Construction is ongoing for new 3" transfer lines from AZ to AP tank farms (SN-634, SN-636, and SN-637).

– AP-WTP transfer system status, refer to M-47-01 above.

- M-47-03A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial high-level waste feed tank
Due: 2/28/07
Status: On schedule. Startup and turnover follow construction and installation of AZ-101 mixer pump (refer to M-47-03 status above).
 - AZ-101 mixer pump final test report was completed in September 2001.
 - The preliminary test report of HLW solids particle properties was issued in September 2001. The final laboratory report is scheduled for November 2001.
 - Waste feed delivery transfer system analysis is scheduled for update in December 2001.

- 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
Due: 6/30/07
Status: On schedule, refer to M-47-01 status above.

- 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.

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

II. Significant Accomplishments:

- Completed Title II design for AZ-101 retrieval system.
- Received Integrity Assessment Report from an independent qualified registered professional engineer certifying that the AZ-101 retrieval system design complies with requirements of WAC 173-303-640.
- Issued bid packages for the AZ-101 transfer pump.
- Sampling Analysis Plan for 216-A-29 Ditch (Snow's Canyon) approved. Samples taken.

III. Significant Planned Actions in the Next Six Months:

- Complete Title II design for AN-101 retrieval system
- Complete AP-WTP transfer piping Title II design
- Award construction contract for AZ-101 retrieval system

- Award contract for fabrication of AZ-101 retrieval system transfer pump
- Award contract for fabrication of AN-101 retrieval system mixer pumps
- Issue sample analysis report on Ditch 216-A-29 (Snow's Canyon)
- Issue Waste Particle Properties Analysis Report
- Update waste feed delivery transfer analysis

Near-term Actions Needed by DOE or Ecology:

- DOE – Critical Decision 3 for AZ-101 retrieval system (January 2002).

IV. Issues:

- Based on preliminary testing of waste tank contents, the current project transfer system design pressure may not be adequate for worst-case HLW transfers. Additional analysis of waste properties is ongoing and is expected to reduce the bounding transfer pressure. If the results exceed current project design pressures, options for resolution include alternate transfer strategies or adding booster pump capabilities. Preliminary waste property data was issued in September 2001 and is scheduled to be finalized in November 2001. Waste transfer system design pressure re-calculations are scheduled to be issued in December 2001.

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

I. Near-Term Deliverables:

- **M-45-00B**, "Complete Near-Term SST Waste Retrieval Activities"

Due: 9/30/2006

Status: On schedule with respective supporting milestones as noted below.

- **M-45-02**, "Submit Annual Updates to SST Retrieval Sequence Document"

Due: 9/30/01 (and annually thereafter)

Status: Complete. The SST Sequence document was integrated with the DST Space Evaluation document and submitted as one document to meet both TPA milestones (M-45-02F and M-46-01H). The documents use the same modeling basis and include the same kind of information presented in prior deliverables. The final report entitled, "Single-Shell Tank Retrieval Sequence and Double-Shell Tank Space Evaluation," RPP-8554, was transmitted to DOE-ORP on 9/20/01, ahead of schedule. Work is underway to update background information on SST saltwell pumping, SST risk status, tank transfers, waste generators, evaporator campaigns, and best-basis inventory revisions for the FY 2002 annual update that is due 9/30/02.

- **M-45-03-T03**, "Submit S-112 Saltcake Waste Retrieval Technology Demonstration Functions and Requirements (F&R) Document"

Due: 12/30/01

Status: On schedule. The S-112 F&R document has been completed and is being routed for final signatures. The S-112 F&R document will be submitted to DOE-ORP by 11/08/01.

- **M-45-03-T04**, "Submit C-104 Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Demonstration Functions and Requirements Document"

Due: 12/31/01

Status: On schedule. Draft dispositions of Ecology review comments have been prepared, reviewed by DOE-ORP, and were incorporated into the C-104 F&R document. The C-104 F&R document is being approved for public release via CHG document control and will be transmitted to DOE-ORP in November.

- **M-45-03D**, "Complete S-112 Saltcake Waste Retrieval Technology Demonstration Design" (all physical systems including LDMM provisions)

Due: 5/31/03

Status: On schedule. Proof-of-concept testing of saltcake dissolution design in tank U-107 has been delayed by roughly one month due to problems achieving pumping rates during saltwell pumping operations. This delay is not expected to impact the S-112 design milestone. Problems have been isolated to a plug in a flexible jumper. Line flushes have been ineffective in removing the plug, so a new flexible jumper is being fabricated. Current schedule is to initiate saltcake dissolution tests by 11/30/01 with completion of testing expected by 1/31/02 in conjunction with interim stabilization saltwell pumping operations.

In-tank saltcake dissolution equipment has been installed in U-107. In-tank components of the laser topographical mapping system (TMS) have been installed in U-107. Baseline liquid observation well (LOW) and ex-tank dry well logging have been completed. Final operating procedures will be issued by 11/27/01.

Pre-conceptual engineering is complete and the package to obtain authorization to proceed with conceptual engineering has been prepared for transmittal to DOE-ORP.

Sampling of S-112 waste has been completed. Samples have been prepared and are awaiting analysis. Both the S-112 Saltcake Dissolution and RPE Data Quality Objectives will be applied to the sample analyses. Contracts are being placed with Fluor Hanford Analytical Services for sample analyses.

- **M-45-00C**, "Complete Renegotiation of Second Phase SST Waste Retrieval Activities" (September 30, 2006 through September 30, 2015)

Due: 2/28/2004 (Negotiations will consider need for additional compliant tank space. If WTP construction is not initiated by 12/31/2001, as defined by M-62-06, the due date for the M-45-00C milestone will automatically be adjusted to 4/30/2002). This issue is being addressed in the recovery plan.

Status: On schedule. The completed M-45-12 tank space options report is an integral component to supporting negotiations. Renegotiations are also supported by RPP-8554, "Single-Shell Tank Retrieval Sequence and Double-Shell Tank Space Evaluation," prepared under M-45-02. CHG Retrieval & Disposal Program and Storage & Closure Program are identifying members of the renegotiation team.

- **M-45-03G**, "Complete C-104 Sludge/Hard Heel, Confined Sluicing and Robotic technologies, Waste Retrieval Cold Demonstration"

Due: 6/30/2004

Status: On schedule. Contract awarded for design, fabrication, and testing of a Mobile Retrieval System adapting commercially available equipment for Hanford Site use. Preliminary cold testing of the MRS is planned in the June 2002 time frame.

- **M-45-03E**, "Complete S-112 Saltcake Waste Retrieval Technology Demonstration Construction (all physical systems including LDMM provisions)"

Due: 9/30/2004

Status: On schedule. Start date for construction is being negotiated.

- **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: 9/30/2004

Status: On schedule. The Conceptual Design Report has been completed. The preliminary design (CD-1) package was submitted to DOE-ORP for review and approval. Project baseline documents have been issued including Level 2 Specification, revised PDC, QAPP, HAZOP, PEP, RMP, and Acquisition Plan. Completed video inspections and radiological surveys of C-104 heel and pump pits.

- **M-45-03C**, "Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Tank S-112 (all physical systems including LDMM provisions)"
Due: 9/30/2005
Status: On schedule. Initial testing of saltcake dissolution equipment planned in tank U-107 in conjunction with interim stabilization activities. The final test report will be issued by 4/30/02. See description under M-45-03D for status of U-107 work.
- **M-45-05E**, "Complete Second Tank Initial Retrieval Project Design (all physical systems including LDMM provisions)"
Due: 6/30/2006
Status: On schedule
- **M-45-05A**, "Complete Initial Waste Retrieval from SST S-102"
Due: 9/30/2006
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: 9/30/2006
Status: On schedule
- **M-45-05-T16**, "Submit S-102 Initial Waste Retrieval Functions and Requirements (F&R) Document"
Due: 10/30/02
Status: On schedule. A contract to Holmes & Narver was awarded for F&R document preparation. Holmes & Narver has initiated work on the S-102 F&R document.
- **M-45-05B**, "Complete S-102 Initial Retrieval Project Design (all physical systems including LDMM provisions)"
Due: 3/31/04
Status: On schedule. The Preliminary Engineering Report (PER), Project Definition Criteria, and LDMM Design Concept Report were completed. Approval of Mission Need (CD-0) is complete. Initiated engineering studies to resolve issues and uncertainties identified in the PER including development of draft S-102 TPA F&R document. DOE-ORP approved the S-102 CD-0 package on 11/02/01. Conceptual Engineering and Design Statement of Work has been prepared and the design effort is scheduled for initiation this month. Cold testing of the AEAT Power Fluidics System was initiated in August and will continue into FY 2002. Cold testing of the Russian Pulsating Mixing and Pumping System was initiated on 10/6/01 and is still underway. The final test report is due by 12/31/01.

- **M-45-05C**, "Complete S-102 Initial Waste Retrieval Project Construction (all physical systems including LDMM provisions)"
Due: 11/30/2005
Status: On schedule
- **M-45-05D**, "Establish Completion Date for the Second Tank, Initial Waste Retrieval"
Due: 12/31/02
Status: On schedule. Selection will be based on information in report RPP-8554, "Single-Shell Tank Retrieval Sequence and Double-Shell Tank Space Evaluation," prepared under M-45-02. This activity is also related to completing renegotiation of second phase SST waste retrieval activities under M-45-00C.
- **M-45-05F**, "Complete Second Tank Initial Waste Retrieval Project Construction (all physical systems including LDMM provisions)"
Due: TBE (identification of specific tank and M-45-05F milestone due date to be established no later than 12/31/02).
Status: On schedule. Milestone due date will be based on information in report RPP-8554, "Single-Shell Tank Retrieval Sequence and Double-Shell Tank Space Evaluation," prepared under M-45-02 and will be supported by HTWOS model simulations. This activity is related to establishing a completion date for the second tank initial waste retrieval under M-45-05D.
- **M-45-05-T17**, "Submit Second Tank Initial Waste Retrieval Functions and Requirements (F&R) Document"
Due: 4/30/2004
Status: On schedule. Selection will be based on information in report RPP-8554, "Single-Shell Tank Retrieval Sequence and Double-Shell Tank Space Evaluation," prepared under M-45-02. This activity is also related to completing renegotiation of second phase SST waste retrieval activities under M-45-00C.
- **M-45-06-T05**, "Submit Tank Farm Closure/Post-Closure Work Plan Update"
Due: 6/30/02
Status: On schedule. The draft SST Closure Work Plan was submitted to DOE-ORP for review and approval. Final Closure Work Plan to be submitted to DOE-ORP by March 21, 2002.
- **M-45-06-T06**, "Submit Tank Farm Closure/Post Closure Work Plan Update"
Due: 6/30/2004
Status: On schedule
- **M-45-06-T07**, "Submit Tank Farm Closure/Post Closure Work Plan Update"
Due: 6/30/2006 (and every two years thereafter)
Status: On schedule

- **M-45-12-T01**, "Tank Space Options Report"

Due: 2/28/02

Status: Completed. RPP-7702, "Tank Space Options Report," was issued in April 2001.

A briefing was presented on 5/14/01 at the weekly SST retrieval interface meeting between Ecology, DOE-ORP, and CHG. A copy of the document was informally provided to Ecology on May 22, 2001. Formal delivery of the report will be consistent with the TPA milestone date.

Out-year (Post 2006) milestones:

- M-45-00, "Complete Closure of all SST Farms" by 9/30/2024
- M-45-03F, "Complete Full-Scale Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Demonstration a SST C-104" by TBD (to be established during M-45-00C negotiations).
- M-45-05, "Retrieve Waste from All Remaining SSTs" by 9/30/2018
- M-45-05-T05, "Initiate Tank Retrieval from 5 Additional SSTs" by 9/30/2007
- M-45-05-T06, "Initiate Tank Retrieval from 5 Additional SSTs" by 9/30/2008
- M-45-05-T07, "Initiate Tank Retrieval from 7 Additional SSTs" by 9/30/2009
- M-45-05-T08, "Initiate Tank Retrieval from 8 Additional SSTs" by 9/30/2010
- M-45-00D, "Complete Renegotiation of the Remainder of the SST Waste Retrieval and Closure Program" by 6/30/2011
- M-45-05-T09, "Initiate Tank Retrieval from 10 Additional SSTs" by 9/30/2011
- M-45-05-T10, "Initiate Tank Retrieval from 12 Additional SSTs" by 9/30/2012
- M-45-05-T11, "Initiate Tank Retrieval from 14 Additional SSTs" by 9/30/2013
- M-45-05-T12, "Initiate Tank Retrieval from 17 Additional SSTs" by 9/30/2014
- M-45-05-T13, "Initiate Tank Retrieval from 20 Additional SSTs" by 9/30/2015
- M-45-05-T14, "Initiate Tank Retrieval from 20 Additional SSTs" by 9/30/2016
- M-45-05-T15, "Initiate Tank Retrieval from 20 Additional SSTs" by 9/30/2017
- M-45-06, "Complete Closure of all SST Farms in Accordance with Approved Closure/Post Closure Plans" by 9/30/2024
- M-45-06-T03, "Initiate Closure Actions on an Operable Unit or Tank Farm Basis" by 3/31/2012
- M-45-06-T04, "Complete Closure Actions on one Operable Unit or Tank Farm" by 3/31/2014

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

II. Significant Accomplishments:

- Completed RPP-8554, "Single-Shell Tank Retrieval Sequence and Double-Shell Tank Space Evaluation," and submitted the report to Ecology.
- Completed Retrieval Performance Evaluation for S-112 (HNF-7644).
- Completed S-112 Preliminary Project Execution Plan (RPP-8791).
- Completed S-112 Level 2 Specification (RPP-7598).
- Completed Revision 1 of S-112 Preliminary Engineering Report (RPP-7534).
- DOE-ORP approved the S-102 CD-0 package on 11/02/01.
- Completed Conceptual Design Report for C-104 Mobile Retrieval System.
- Issued project baseline documents for C-104 (e.g., Level 2 Specification, PDC, QAPP, HAZOP, PEP, RMP, Acquisition Plan).
- Submitted CD-1 package to DOE-ORP for C-104 Preliminary Baseline Range.
- Awarded contract to design, fabricate, and test the C-104 Mobile Retrieval System adapting commercially available equipment.
- Completed preliminary performance evaluations of 6 ex-tank leak detection technologies (partitioning interwell tracer test [PITT], electrical resistivity tomography [ERT], high resolution resistivity [HRR], electromagnetic inductance [EMI], cross-borehole radar [XBR], cross-borehole seismic [XBS]) in support of LDMM requirements for retrieval system designs. Draft test reports undergoing review in support of technology down selection and further testing during FY 2002. Statements of Work prepared for PNNL and Vista Engineering support to FY 2002 efforts focused on qualification testing of down selected leak detection technologies with respect to a 95% probability of detection and 5% probability of false alarm in accordance with EPA or other suitable protocols.
- Tanks Focus Area (EM-50) sponsored bench-scale testing of in situ formation of apatite for sequestering technetium and uranium in Hanford soils completed by Sandia National Laboratories. Testing results demonstrated ability to fix technetium and uranium even under highly oxidizing conditions.

III. Significant Planned Actions in the Next Six Months:

- Continue work on the FY 2002 update of RPP-8554, "Single-Shell Tank Retrieval Sequence and Double-Shell Tank Space Evaluation."
- Complete proof-of-concept testing of the AEAT Power Fluidics System in support of S-102 retrieval.

- Complete proof-of-concept testing of the Russian Pulsating Mixing and Pumping System in support of S-102 retrieval.
- Initiate Conceptual Design and Engineering for S-102 initial retrieval project.
- Submit the S-112 Saltcake Waste Retrieval Technology Demonstration F&R's to DOE-ORP.
- Complete the proof-of-concept testing of the S-112 saltcake dissolution system and TMS in conjunction with U-107 interim stabilization saltwell pumping operations and incorporate lessons learned into S-112 saltcake retrieval system design.
- Complete CD-0, "Approval of Mission Need," for the S-112 saltcake retrieval technology demonstration.
- Complete CD-1 for the S-112 saltcake retrieval technology demonstration.
- Complete the C-104 Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Demonstration F&R's and submit to DOE-ORP.
- Obtain approval to initiate C-104 Preliminary Design (CD-1).
- Initiate Preliminary Design for C-104 retrieval system.
- Complete Preliminary Design Report for C-104 retrieval system.
- Submit and obtain approval for C-104 Approval of Performance Baseline (CD-2).
- Initiate final design for C-104 retrieval system.
- Complete technology down selection and initiate follow-on testing of ex-tank leak detection technologies.
- Issue a "DOE laboratory-wide" call for proposals through the Tanks Focus Area (EM-50) to identify other leak mitigation technologies for possible bench- and field-scale demonstrations.

IV. Issues:

- At this time, DOE and its contractors are not performing sufficient work to assure, with reasonable certainty, that milestones for long-term waste retrieval and tank farm closure can be met. Milestones for negotiation of "second phase" retrievals, remaining tank retrievals, and tank farm closure will provide the means for updating the M-45 series milestones. Completion of the milestones as currently scheduled are subject to the following uncertainties:
 1. Funding uncertainties caused by the annual federal budgeting process.
 2. Technical uncertainties resulting from the ability to retrieve waste from SSTs in a manner to both meet the retrieval performance goals as well as the retrieval rates necessary to meet out-year commitments. Additional technical uncertainties include available DST tank space for receipt of SST wastes and processing capabilities of the Waste Treatment Plant.
 3. Regulatory uncertainties resulting from the final closure requirements and ultimate land use planning affect the ability to assess whether closure milestones can be achieved.

4. Safety-related uncertainties are inherent in any plan that significantly accelerates retrieval and transfer rates beyond what has been accomplished in the past.
5. Permitting uncertainties resulting from much of the planned activities being "first of a kind" retrieval and closure actions.

The actual occurrence of any of these uncertainties could cause schedule slippage for activities post-2006 and the need to submit a change request under provisions of Section 12.0 of the Action Plan. These uncertainties are also the reason that M-45-00C and M-45-00D were built into the recent updates to the M-45 series milestones.

A plan to address DST tank space issues will need to be developed within the next 3 years. The recently issued Tank Space Options Report is a critical first step in developing this plan.

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

I. Near-Term Deliverables:

- M-45-55-T01, Submit to Ecology for review and comment as an Agreement secondary document a Field Investigation Report (FIR) pursuant to the site-specific SST WMA Phase I RFI/CMS Work Plan addenda for WMA S/SX

Due: 1/31/02

Status: Forecast on schedule. The DOE review of this document is underway and is scheduled to be completed on November 21, 2001.

- M-45-55-T02, Submit to Ecology for review and comment as an Agreement secondary document a Field Investigation Report pursuant to the site-specific SST WMA Phase I RFI/CMS Work Plan addenda for WMA B, BX, and BY

Due: 10/31/02

Status: Work started; forecast on schedule.

- 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: 6/2003

Status: Work not started; forecast on schedule.

- 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, and B-BX-BY and related activities, including groundwater monitoring and impacts assessment using Hanford Site groundwater models, with conclusions and recommendations

Due: 2/2004

Status: Work not started; forecast on schedule.

- M-45-60, Submit to Ecology for review and approval as an Agreement primary document DOE's RFI/CMS Work Plan for SST WMAs

Due: 6 months following RFI report approval

Status: Work not started; forecast on schedule.

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

II. Significant Accomplishments:

- Work was completed on WMAs T, TX, -TY, and S-SX on September 6, 2001.
- Six RCRA wells funded by ORP during CY 2001 were completed.

III. Significant Planned Actions in the Next Six Months:

- Cone penetrometer work is planned to start in the first quarter of FY 2002.
- Field characterization work at WMAs T/TX/TY is planned to start in the first half of FY 2002.

IV. Issues:

- Direction was given to the Tank Farm Contractor to conduct a study to determine the feasibility of pumping groundwater from the 299-W23-19 well in WMA S-SX for remediation of Tc-99. A 72-hour pump test started in mid-November 2001. The results from this pump test will be reviewed with Ecology in late November to determine the path forward for remediation of Tc-99.

Milestone M-43-00, Tank Farm Upgrades

I. Near-Term Deliverables:

- M-43-14, Start Construction in 3rd farm
Due: 3/30/01
Status: Complete
- M-43-15, Start Construction in 4th farm
Due: 3/29/02
Status: On schedule
- M-43-16, Start Construction in 5th farm
Due: 6/30/03
Status: On schedule (AP farm)
- M-43-00, Complete Tank Farm Upgrades
Due: 6/30/05
Status: On schedule, pending definition of completion.

Note: Although Project W-314 is reporting a \$2.3M schedule variance, sufficient float exists within the milestone due dates. The TPA milestones listed above are on schedule to be completed by the due date.

Delete **Work schedule/Baseline management** – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

II. Significant Accomplishments:

- Assembled MPS system (PLC's, HMI stations) in the 1100 building on Jadwin. Currently performing testing on all components using simulation carts to replicate signals and faults in the field. Components being tested will be unplugged and installed in the field. (CHG is currently performing a cost reduction analysis that will recommend canceling the MPS system).
- Completed the SY annulus ventilation OTP.
- Completed the ATP's on AZ-01A pit and AZ-02A pit upgrades.
- Completed AW-B open pit construction, installed new cover blocks and installed leak detection.
- Completed backfill on transfer lines SN-631, SN-632 and drain line DR-100.
- Thompson Mechanical has set the three transfer lines from the road at the AP farm to the new AZ pit; currently welding the pipe sections together.

III. Significant Planned Actions in the Next Six Months:

- Issue test report on Master Pump Shutdown system components
- Complete AW-A open pit work
- Complete ATP on AW-B pit
- Complete AN Phase 2 definitive design

Near-term Actions Needed by DOE or Ecology:

- Ecology stated that they would be able to support negotiations on M-43-00 in 2002.

IV. Issues:

- There are no issues at this time.

M-62, Complete Pretreatment Processing and Vitrification of Tank Wastes

I. Near-Term Deliverables:

- M-62-01, Submit Semi-Annual Compliance Report
Due: Semi-annually beginning July 31, 2000
Status: DOE submitted the Semi-Annual Compliance Report to Ecology on July 31, 2001. DOE and Ecology have briefly discussed submittal of the next report with respect to submittal of the recovery plan.
- M-62-06, Start of Construction – Phase I Treatment Complex
Due: 7/31/01
Status: Missed. A recovery plan addressing the technical issues was submitted to Ecology on October 1, 2001. Ecology and DOE have continued to meet. Ecology submitted comments on the recovery plan on November 16, 2001. Comments are being addressed by DOE.
- M-62-07, Construction Progress Milestones (2) – Phase I Treatment Complex
Due: TBD
Status: A recovery plan addressing the technical issues was submitted to Ecology on October 1, 2001. Ecology and DOE have continued to meet. Ecology submitted comments on the recovery plan on November 16, 2001. Comments are being addressed by DOE.
- M-62-08, Submittal of Hanford Tank Waste Phase II Treatment Alternatives Report
Due: 7/31/05
Status: On schedule
The Strategic Planning Group within the ORP Office of the Assistant Manager for Integration and Control has initiated long range planning for the remainder of the Hanford waste immobilization. Efforts include proposed R&D needs, tank waste inventory projections and plant sizing options. Initial submittal of the report is scheduled for July 31, 2005.
- M-62-03, Submit DOE petition for RCRA de-listing of vitrified HLW
Due: 12/31/06
Status: The LDR and delisting DQO are under review. The DQO is scheduled to be completed at the end of calendar year 2001, with research and technology work to follow. This activity is on schedule to be completed by 12/31/06. Permitting of the CSB will have to proceed until the delisting petition is accepted.

Out year (Post 2006) milestones:

- M-62-09, Start (Hot) Commissioning
Due: 12/31/07
Status: Hot Commissioning of the Phase I Treatment Complex is on schedule. This milestone is a contract requirement for the Waste Treatment Plant; reference Section F, paragraph F.1 (b) milestone M-4. The contractor is incentivised to meet or beat the start of Hot Commissioning by December 31, 2007.

- M-62-10, Start Commercial Operations – Phase I Treatment Complex
Due: 12/31/09
Status: DOE and its contractors are not doing sufficient work to ensure with reasonable certainty that this milestone will be attained as currently defined in the TPA. The concept of “Commercial Operation” has been removed from the new contract approach. This was addressed in the recovery plan submitted October 1, 2001. Ecology provided comments on the recovery plan on November 16, 2001. Discussions are on-going.

- M-62-11, Submittal of Hanford Tank Waste Treatment Phase II Plan
Due: 1/31/14
Status: ● On schedule.

- M-62-00A, Complete pretreatment, processing and vitrification of Hanford Phase I HLW and Low Activity Waste (LAW)
Due: 2/28/18
Status: On schedule
As committed to in the BNI contract, stated in the change package, DOE is on a schedule to complete the first 10% of waste processing measured by mass and 25% of waste processing measured by radioactivity by 2/28/18.

- M-62-00, Complete pretreatment processing and vitrification of Hanford high level and low activity tank waste
Due: 12/31/28
Status: On schedule
ORP remains committed to this activity. The completion date for this milestone will be evaluated on a continual basis as we progress with this program. Committed means that DOE intends to “bring about” or perform all work to ensure that Hanford’s high-level radioactive waste is vitrified by 12/31/28.

- M-62-12, Issuance of DOE Authorization to Proceed – Phase II Treatment
Due: TBD
Status: This milestone will be negotiated in the 2014 timeframe.

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

II. Significant Accomplishments:

- Obtained Critical Decision from DOE HQ to authorize commencement of Limited Construction Authorization Request (LCAR) work.
- Commenced limited construction and mobilization.
- Began site preparation and surveying.
- Completed preliminary general arrangement drawings (PT).
- Completed process and operational research models (PT).
- DOE completed its review of the DWPA submitted by BNI.
- DOE is reviewing draft PSD/Toxic NOC documents submitted by BNI.
- Completed electrical system descriptions for the HLW facility.
- Completed material requisitions for 13.8KV switchgear equipment, anchor bolts, fabricated steel, and structural steel.

III. Significant Planned Actions in the Next Six Months:

- Continuation of pilot melter research and technology will resume now that Bechtel Washington has awarded the contract to Duratek.
- DOE will continue reviewing new contract deliverables over the next 6 months. Deliverable review plans have been transmitted to Bechtel Washington for their use in preparing those deliverables.
- Design will continue for all the WTP facilities.
- Several BNI subcontracts will be awarded for procurement of materials and construction.
- Limited construction will commence with installation of construction support facilities and processing facility base mats.

IV. Issues:

- There are no issues at this time.

one issue - still design issues that will affect size of tanks etc. Permit App will not reflect this resolution of this.

M-92-05, Inclusion of Hanford Site Cs/Sr treatment and/or repackaging parameters in DOE TWRS Phase II request for proposals

I. Near-Term Deliverables:

- M-92-05, Inclusion of Hanford Site Cs/Sr treatment and/or repackaging parameters in DOE TWRS Phase II request for proposals

Due: 6/30/03

Status: According to M-62-11 and M-62-12 milestones, DOE will not be seeking Phase II requests for proposals until the 2014 time frame. However, in the current BNI Contract C.7, Facility Specification, the following requirement is stipulated:

"The Contractor shall design the WTP to ensure that the plant is designed and built with features to provide increased operational capacities, as follows:

- (4) Pretreatment can connect to a potential new facility designed to receive and treat the Hanford Cs and Sr capsules prior to incorporation into the HLW feed for immobilization in the HLW Vitrification Facility."

Note: This issue was addressed in the recovery plan submitted to Ecology on October 1, 2001. Discussions between DOE and Ecology are on-going.

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

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-90-08, Initiate ILAW Disposal Facility Construction.
Due: 7/31/04
Status: See Section IV, Issues.
- M-90-09-T01, Complete ILAW Facility Detailed Design.
Due: 3/30/04
Status: See Section IV, Issues.
- M-20-56, Submit Canister Storage Facility Part B Dangerous Waste Permit Application to Ecology.
Due: 6/30/02
Status: On schedule. RCRA Part B Permit draft documents for projects W-464 and W-520 are undergoing internal review by CHG; however, design information is not at 80%.
- M-20-57, Submit ILAW Disposal Facility Certified Part B Permit Application to Ecology
Due: 8/31/02
Status: On schedule. RCRA Part B Permit draft documents for projects W-464 and W-520 are undergoing internal review by CHG; however, design information is not at 80%.

Out year (Post 2006) milestones:

- M-90-10, Initiate Placement of ILAW Waste Canisters in ILAW Disposal Facility
Due: 1/31/07
Status: See Section IV, Issues.
- M-90-11, Complete Canister Storage Facility Construction
Due: 2/01/07
Status: See Section IV, Issues.

Work schedule/Baseline management – The correlation between individual TPA milestones and the RPP baseline will be addressed upon completion of the fully integrated RPP baseline.

II. Significant Accomplishments:

- The final 2001 Immobilized Low-Activity Waste (LAW) Disposal Facility Performance Assessment was issued on August 24, 2001. A copy was formally transmitted to Ecology on October 15, 2001. DOE-HQ approved the performance assessment and extended the disposal authorization statement on November 1, 2001.
- The final ILAW disposal site Borehole #2 sample report was completed and formally transmitted to DOE-ORP on September 20, 2001.
- CHG is revising the draft Melter Disposal Alternatives Generation and Analysis study and Decision Plan to reflect input from the contractor Decision Board. Utilization of the grout vaults has been added to the alternatives. A meeting with Ecology and EPA was held on November 5, 2001 to explore the possibility of an alternative to the double lined leachate collection system in the melter disposal trench.
- The advanced conceptual design studies on crane optimization and support facility requirements for the Immobilized Low-Activity Waste (ILAW) disposal facility Project W-520 were completed on October 31, 2001. Copies were distributed to Ecology.
- The W-520 Notice of Intent with a SEPA checklist was sent to Ecology on October 24, 2001.

III. Significant Planned Actions in the Next Six Months:

- Issue contractor recommendations to DOE-ORP for melter disposal decisions - November 2001.
- Issue ILAW and IHLW Program Plan updates - November 2001.
- Issue recommendation to drop the shielded canister transporter (SCT) and to modify the existing multi-canister overpack-handling machine as the basis for design for Project W-464 - November 2001.
- Issue draft Part B permit applications for Project W-464 IHLW Interim Storage Facility and for Project W-520 ILAW Disposal Facility to DOE-ORP for review – December 2001.
- Issue comprehensive study of ILAW retrieval considerations, including reasons why ILAW might be retrieved, ILAW package degradation rates, technologies, and costs – March 31, 2002.

V. Issues:

- A recovery plan addressing the technical issues was submitted to Ecology on October 1, 2001. Ecology and DOE have continued to meet. Ecology submitted comments on the recovery plan on November 16, 2001. Comments are being addressed by DOE.
- Ecology requested to see a schedule with 80% design, a final status unit and two years to permitting. DOE could meet 80% on critical systems. Discussions are on-going.

Backup Information: Cost and Schedule Variance Analysis

**MONTHLY PROJECT REPORT
TOTAL RIVER PROTECTION PROJECT
ALL DIRECT FUNDS (CHG & RL/PNNL)
PERFORMANCE MEASUREMENT - FYTD - ALL FUND TYPES**

DOLLARS IN THOUSANDS

1. TITLE: River Protection Project		2. REPORTING PERIOD: TO: 27-Aug-01 30-Sep-01		3. HQ NUMBER:											
4. PARTICIPANT NAME AND ADDRESS: CH2M HILL Hanford Group P. O. Box 1500 Richland, Washington 99352-1505		5. COST PLAN DATE: 01-Nov-01		6. START DATE: 01-Oct-00											
				7. FINISH DATE: 30-Sep-46											
PBS / TITLE	REPORTING PERIOD					CUMULATIVE FISCAL YEAR TO DATE							ESTIMATE AT COMPLETION (EAC)	BUDGET AT COMPLETION (BAC)	
	Budgeted Cost		Actual Cost	Variance		Budgeted Cost		Actual Cost	Variance						
	Work Scheduled	Work Performed	Work Performed	Schedule	Cost	Work Scheduled	Work Performed	Work Performed	Schedule	Schedule %	Cost	Cost %			
TW01	TANK WASTE CHARACTERIZATION	1,909.0	4,024.6	3,927.0	2,115.6	97.6	26,095.9	26,539.3	25,164.3	443.4	1.70%	1,375.0	5.18%	25,066.0	26,095.9
TW02	TANK SAFETY ISSUE RESOLUTION	2,962.5	3,099.7	3,135.2	137.2	(35.5)	20,391.0	19,887.7	16,358.9	(503.3)	-2.47%	3,528.8	17.74%	19,002.0	20,391.0
TW03	TANK FARM OPERATIONS	19,645.4	19,301.5	12,330.9	(343.9)	6,970.6	133,640.5	130,511.0	124,849.3	(3,129.5)	-2.34%	5,661.7	4.34%	127,347.0	133,640.5
	W-314 - TF Rest'n - LI	2,441.8	4,738.8	6,399.6	2,297.0	(1,660.8)	36,765.0	34,048.3	39,828.2	(2,716.7)	-7.39%	(5,779.9)	-16.98%	39,793.0	36,765.0
	TOTAL OPS	22,087.2	24,040.3	18,730.5	1,953.1	5,309.8	170,405.5	164,559.3	164,677.5	(5,846.2)	-3.43%	(118.2)	-0.07%	167,140.0	170,405.5
TW04	RETRIEVAL	3,274.8	5,919.6	4,348.2	2,644.8	1,571.4	52,596.9	51,034.9	35,964.8	(1,562.0)	-2.97%	15,070.1	29.53%	44,603.0	52,596.9
	W-211 - Init Tank Ret'vl Sys-LI	(1,196.4)	(1,181.9)	909.6	14.5	(2,091.5)	7,775.1	6,633.8	7,818.5	(1,141.3)	-14.68%	(1,184.7)	-17.86%	5,402.0	7,775.1
	W-521 - Waste Feed Del Sys	(537.7)	(522.2)	(262.4)	15.5	(259.8)	0.0	0.0	0.0	0.0	0.00%	0.0	0.00%	2,595.0	0.0
	W-151 - 101-AZ Compl'n	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(52.0)	0.0	0.00%	52.0	0.00%	0.0	0.0
	TOTAL RETRIEVAL	1,540.7	4,215.5	4,995.4	2,674.8	(779.9)	60,372.0	57,668.7	43,731.3	(2,703.3)	-4.48%	13,937.4	24.17%	52,600.0	60,372.0
TW05	PROCESS WASTE SUPPT	232.9	486.2	859.3	233.3	(393.1)	1,225.7	2,474.0	1,878.1	1,248.3	101.84%	595.9	24.09%	599.0	1,225.7
TW08	PRIV'ZN INFRASTRUCTURE	306.2	346.0	167.1	39.8	178.9	3,238.4	3,364.4	1,983.9	126.0	3.89%	1,380.5	41.03%	2,514.0	3,238.4
	W-519 - Priv'zn Infrast -LI	1,714.9	190.3	(0.2)	(1,524.6)	190.5	12,129.3	12,571.8	9,623.1	442.5	3.65%	2,948.7	23.45%	10,048.0	12,129.3
	TOTAL PRIV'ZN INFRASTR	2,021.1	536.3	166.9	(1,484.8)	369.4	15,367.7	15,936.2	11,607.0	568.5	3.70%	4,329.2	27.17%	12,562.0	15,367.7
TW09	IMMOBILIZED TW STG & DISP'SL	723.6	744.1	840.9	20.5	(96.8)	8,356.4	8,327.2	6,713.3	(29.2)	-0.35%	1,613.9	19.38%	7,276.0	8,356.4
	W-464 - IHLW INTERIM STG FAC	485.6	322.0	658.5	(163.6)	(336.5)	1,274.7	1,122.3	1,099.2	(152.4)	0.00%	23.1	0.00%	1,275.0	1,274.7
	TOTAL IMMOBIL'ZD WASTE STG & D	1,209.2	1,066.1	1,499.4	(143.1)	(433.3)	9,631.1	9,449.5	7,812.5	(181.6)	-1.89%	1,637.0	17.32%	8,551.0	9,631.1
TW10	RPP MANAGEMENT SUPPORT PROJ	12,568.4	12,596.3	12,555.8	27.9	40.5	89,222.3	87,961.2	73,963.9	(1,261.1)	-1.41%	13,997.3	15.91%	76,882.0	89,222.3
	RPP TOTAL EXPENSE/CENRTC WITHOUT TW06	41,622.8	46,498.0	38,164.4	4,875.2	8,333.6	334,767.1	330,099.7	286,876.5	(4,667.4)	-1.39%	43,223.2	13.09%	303,289.0	334,767.1
	RPP TOTAL LINE ITEM WITHOUT TW06	2,908.2	3,547.0	7,705.1	638.8	(4,158.1)	57,944.1	54,376.2	58,317.0	(3,567.9)	-6.16%	(3,940.8)	-7.25%	59,113.0	57,944.1
	RPP TOTAL - WITHOUT TW06	44,531.0	50,045.0	45,869.5	5,514.0	4,175.5	392,711.2	384,475.9	345,193.5	(8,235.3)	-2.10%	39,282.4	10.22%	362,402.0	392,711.2
TW06	PRIVAT'ZN PHASE I - EXP	0.0	0.0	0.0	0.0	0.0	12,725.8	12,725.8	13,948.2	0.0	0.00%	(1,222.4)	-9.61%	12,725.8	12,725.8
	PRIVAT'ZN PHASE I - LI	(17.3)	(15.2)	(557.0)	2.1	541.8	52,926.6	52,013.7	46,482.2	(912.9)	-1.72%	5,531.5	10.63%	50,933.1	52,926.6
	TOTAL PRIVAT'ZN PH I	(17.3)	(15.2)	(557.0)	2.1	541.8	65,652.4	64,739.5	60,430.4	(912.9)	-1.39%	4,309.1	6.66%	63,658.9	65,652.4
	RPP TOTAL EXPENSE/CENRTC WITH TW06	41,622.8	46,498.0	38,164.4	4,875.2	8,333.6	347,492.9	342,825.5	300,824.7	(4,667.4)	-1.34%	42,000.8	12.25%	316,014.8	347,492.9
	RPP TOTAL LINE ITEM WITH TW06	2,890.9	3,531.8	7,148.1	640.9	(3,616.3)	110,870.7	106,389.9	104,799.2	(4,480.8)	-4.04%	1,590.7	1.50%	110,046.1	110,870.7
	RPP TOTAL - WITH TW06	44,513.7	50,029.8	45,312.5	5,516.1	4,717.3	458,363.6	449,215.4	405,623.9	(9,148.2)	-2.00%	43,591.5	9.70%	426,060.9	458,363.6

Yellow shading denotes percentages outside of the thresholds of SV -7.5% and CV -5.0%.

SCHEDULE PERFORMANCE (\$M)

	Budgeted Cost of Work Performed (BCWP)	Budgeted Cost of Work Scheduled (BCWS)	Variance
RPP CHG Total	\$423.0	\$433.4	-\$10.4

SCHEDULE VARIANCE

The unfavorable schedule variance (-\$10.4M; -2.4%) is attributed to the factors described in the following sections:

TW01 TANK WASTE CHARACTERIZATION

Description and Cause: The favorable schedule variance (\$0.4M; 1.7%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW02 TANK SAFETY ISSUE RESOLUTION

Description and Cause: The unfavorable schedule variance (-\$0.5M; -3.3%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW03 TANK FARM OPERATIONS

Description and Cause: The unfavorable schedule variance (-\$5.8M; -3.5%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW04 RETRIEVAL

Description and Cause: The unfavorable schedule variance (-\$2.7M; -4.6%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW05 PROCESS WASTE SUPPORT

Description and Cause: The unfavorable schedule variance (-\$0.004M; -0.4%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW06 PRIVATIZATION PHASE I

Description and Cause: The unfavorable schedule variance (-\$0.9M; -1.6%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW08 PRIVATIZATION INFRASTRUCTURE

Description and Cause: The favorable schedule variance (\$0.6M; 3.7%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW09 IMMOBILIZED TANK WASTE STORAGE AND DISPOSAL

Description and Cause: The unfavorable schedule variance (-\$0.2M; -2.0%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW10 RPP MANAGEMENT SUPPORT PROJECT

Description and Cause: The unfavorable schedule variance (-\$1.3M; -1.5%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

COST PERFORMANCE (\$M)

	Budgeted Cost of Work Performed (BCWP)	Actual Cost of Work Performed (ACWP)	Variance
RPP CHG Total	\$423.0	\$386.3	\$36.7

COST VARIANCE

The favorable cost variance (\$36.7; 8.7%) is attributed to the factors described in the following sections:

TW01 TANK WASTE CHARACTERIZATION

Description and Cause: The favorable cost variance (\$1.2M; 4.7%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW02 TANK SAFETY ISSUE RESOLUTION

Description and Cause: The favorable cost variance (\$1.5M; 9.9%) is a result of efficiencies achieved in the Tank 241-SY-101 Level Rise Unreviewed Safety Question, the removal and isolation of the Standard Hydrogen Monitoring System, and Business Management. Additional efficiencies have been gained in the Retained Gas Sampler hot cell cleanout because the 222-S Laboratory is self-performing the work.

Impact: Efficiencies achieved by the Project Baseline Summary (PBS) resulted in an underrun at fiscal year-end.

Corrective Action: A funds change request has been prepared to transfer funds to management reserve.

TW03 TANK FARM OPERATIONS

Description and Cause: The unfavorable cost variance (-\$0.3M; -0.2%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW04 RETRIEVAL

Description and Cause: The favorable cost variance (\$13.1M; 23.3%) is a result of costs being less than planned in the following areas: reliability, availability, and maintainability analysis of the operations and maintenance concept; trade studies; Tier 2 Review of Nuclear Safety and Licensing submittals; condition assessments for the AP and AW Tank Farms; laboratory testing on rheological and dissolution properties for waste from Tanks 241-AP-101 and 241-AY-102; and Project W-521, "Waste Feed Delivery Systems."

In addition, cost efficiencies have been realized in the Retrieval Projects Definition administrative accounts, Project W-523, "Tank C-104 Waste Retrieval System," Conceptual Design Report, preparation and maintenance of the Authorization Basis, Vadose Zone activities, Cold Test Training and Mockup Facility project management, and the SST Retrieval System Demonstration because conceptual design activities are being performed by one vendor instead of two as planned.

Impact: Efficiencies achieved by the PBS resulted in an underrun at fiscal year-end.

Corrective Action: Funds change requests have been prepared to transfer funds to management reserve.

TW05 PROCESS WASTE SUPPORT

Description and Cause: The favorable cost variance (\$0.6M; 48.8%) is a result of minimal resources being required on Interface Management activities during the transition from the previous Waste Treatment Plant (WTP) contractor, BNFL, to the new WTP contractor.

Impact: Efficiencies achieved by the PBS resulted in an underrun at fiscal year-end.

Corrective Action: A funds change request has been prepared to transfer funds to management reserve.

TW06 PRIVATIZATION PHASE I

Description and Cause: The favorable cost variance (\$2.0M; 3.6%) is within the reporting threshold.

Impact: No impact.

Corrective Action: None required.

TW08 PRIVATIZATION INFRASTRUCTURE

Description and Cause: The favorable cost variance (\$4.5M; 28.3%) is a result of efficiencies achieved in construction contracts, construction management, and project management.

Impact: Efficiencies achieved by the PBS resulted in an underrun at fiscal year-end.

Corrective Action: A funds change request has been prepared to transfer funds to management reserve.

TW09 IMMOBILIZED TANK WASTE STORAGE AND DISPOSAL

Description and Cause: The favorable cost variance (\$1.6M; 17.7%) is a result of the CDR for Project W-520, "Immobilize Low-Activity Waste Disposal Facility," being performed for less cost due to efficiencies resulting from the use of previous studies and a prior draft CDR. Other efficiencies resulted in reduced costs for the Preliminary Safety Evaluation, Project Management, Project Definition and Design/Construction. In addition, *Resource Conservation and Recovery Act of 1976* (RCRA) permitting services are costing less than planned because internal staff is performing the work instead of contractors.

Impact: Efficiencies achieved by the PBS will result in an underrun at fiscal year-end.

Corrective Action: Funds change requests have been prepared to transfer funds to management reserve.

TW10 RPP MANAGEMENT SUPPORT PROJECT

Description and Cause: The favorable cost variance (\$12.5M; 15.3%) is a result of site service costs being less than planned due to favorable performance.

Impact: Efficiencies achieved by the PBS resulted in an underrun at fiscal year-end.

Corrective Action: Funds change requests have been prepared to transfer funds to management reserve.