

**Tri-Party Agreement  
Quarterly Milestone Review**



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

February 27, 2001

# Agenda

Office of River Protection Tri-Party Agreement Quarterly Milestone Review

February 27, 2001

712 Swift Blvd., Suite 5, EPA Conference Room

9:00 a.m. – 12:00 p.m.

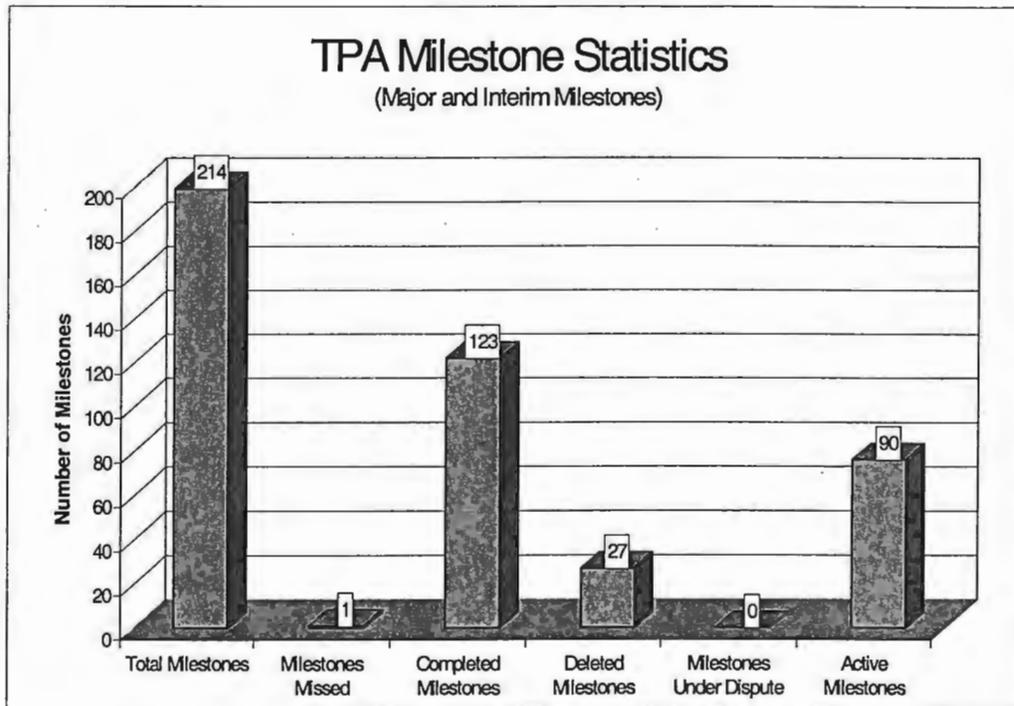
Topic	Leads	Time
FY 2000 ORP Tri-Party Agreement Cost & Schedule Performance	Mary Beth Burandt/Jim Rasmussen/ Suzanne Dahl/Melinda Brown	9:00
• ORP Baseline Schedule	Bill Taylor/Mary Beth Burandt/John Van Beek	9:15
• Interim Stabilization (Consent Decree)	Mark Brown/Deb Williams/Kevin DeWitt	9:30
• M-46-00, Double-Shell Tank Space Evaluation	Mark Brown/Victor Callahan/Melinda Brown	9:45
• DST Integrity Assessment Program	Mark Brown/Victor Callahan/Melinda Brown	9:55
• M-44-00, Tank Waste Characterization	Mark Brown/Wen-Shou Liou/Debra Singleton	10:05
• M-40-00, Safety Issue Resolution	Joe Voice/Dennis Irby/Kevin DeWitt	10:15
• M-45-00, Single-Shell Tank Closure	Steve Wiegman/Bob Lober/Dick Heggen	10:20
• M-45-50, 60 Single-Shell Tank Corrective Action	Steve Wiegman/Rob Yasek/Joe Caggiano	10:40
• M-43-00, Tank Farm Upgrades	Bill Taylor/Bobby Williams/Rabindra Biyani	10:55
• M-47, Tank Waste Treatment, Storage and Disposal Facilities	Joe Cruz/Dick Heggen	11:10
• M-62, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bill Taylor/Suzanne Dahl	11:15
• M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/Disposal of ILAW	Bill Taylor/Phil LaMont/Rabindra Biyani	11:30
• Review of new commitments and actions	Mary Beth Burandt/Jim Rasmussen/ Suzanne Dahl/Melinda Brown	11:50

**MONTHLY PROJECT REPORT  
TOTAL RIVER PROTECTION PROJECT**

**PERFORMANCE MEASUREMENT - FYTD - ALL FUND TYPES**

DOLLARS IN THOUSANDS

1. TITLE: River Protection Project			2. REPORTING PERIOD: TO:			25-Dec-00 22-Jan-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: 20-Feb-01			6. START DATE: 01-Oct-00		7. FINISH DATE: 30-Sep-46			
PBS / TITLE	CURRENT PERIOD					CUMULATIVE FISCAL YEAR TO DATE					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	Cost	
TW01 TANK WASTE CHARACTERIZATION	2,673.2	1,917.9	2,582.8	(755.3)	(664.9)	7,093.1	7,473.9	7,682.7	380.8	(208.8)	25,758.9
TW02 TANK SAFETY ISSUE RESOLUTION	1,811.0	1,963.9	1,122.6	152.9	841.3	6,797.9	6,665.0	4,713.9	(132.9)	1,951.1	20,962.2
TW03 TANK FARM OPERATIONS	13,039.1	11,470.7	10,474.0	(1,568.4)	996.7	44,381.1	40,229.8	37,147.4	(4,151.3)	3,082.4	136,156.7
W-314 - TF Rest'n - LI	2,465.0	1,884.4	5,389.1	(580.6)	(3,504.7)	8,442.8	6,957.0	12,001.2	(1,485.8)	(5,044.2)	42,898.8
TOTAL OPS	15,504.1	13,355.1	15,863.1	(2,149.0)	(2,508.0)	52,823.9	47,186.8	49,148.6	(5,637.1)	(1,961.8)	179,055.5
TW04 RETRIEVAL	5,651.0	4,088.0	2,095.8	(1,563.0)	1,992.2	16,897.3	13,242.2	8,261.3	(3,655.1)	4,980.9	54,808.6
W-211 - Init Tank Ret'vl Sys-LI	366.7	380.2	449.1	13.5	(68.9)	1,648.3	978.3	1,141.3	(670.0)	(163.0)	5,476.0
W-521 - Waste Feed Del Sys	768.4	108.4	127.5	(660.0)	(19.1)	1,545.8	469.8	294.4	(1,076.0)	175.4	9,174.4
TOTAL RETRIEVAL	6,786.1	4,576.6	2,672.4	(2,209.5)	1,904.2	20,091.4	14,690.3	9,697.0	(5,401.1)	4,993.3	69,459.0
TW05 PROCESS WASTE SUPPT	102.6	68.5	(205.5)	(34.1)	274.0	512.2	301.0	424.8	(211.2)	(123.8)	1,071.3
TW08 VITRIF'CN FACILITY INFRASTRUCTU	267.6	311.7	188.4	44.1	123.3	878.8	893.8	485.2	15.0	408.6	4,438.7
W-519 - Phase I Infrast -LI	1,129.7	2,058.6	492.3	928.9	1,566.3	4,108.1	6,063.7	3,352.6	1,955.6	2,711.1	12,129.3
TOTAL VITRIFIC'N FAC INFRASTRUC	1,397.3	2,370.3	680.7	973.0	1,689.6	4,986.9	6,957.5	3,837.8	1,970.6	3,119.7	16,568.0
TW09 IMMOBILIZED WASTE STG & DISP'SI	675.3	610.7	436.2	(64.6)	174.5	2,489.8	2,172.6	1,661.6	(317.2)	511.0	8,256.5
W-464 - IHLW INTERIM STG FAC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,274.7
TOTAL IMMOBIL'ZD WASTE STG & D	675.3	610.7	436.2	(64.6)	174.5	2,489.8	2,172.6	1,661.6	(317.2)	511.0	9,531.2
TW10 RPP MANAGEMENT SUPPORT PRO	7,070.0	7,098.6	4,552.4	28.6	2,546.2	26,077.6	25,663.7	18,224.1	(413.9)	7,439.6	80,640.1
RPP TOTAL EXPENSE/CENRTC WITHOUT TW	31,289.8	27,530.0	21,246.7	(3,759.8)	6,283.3	105,127.8	96,642.0	78,601.0	(8,485.8)	18,041.0	332,093.0
RPP TOTAL LINE ITEM WITHOUT TW06	4,729.8	4,431.6	6,458.0	(298.2)	(2,026.4)	15,745.0	14,468.8	16,789.5	(1,276.2)	(2,320.7)	70,953.2
RPP TOTAL - WITHOUT TW06	36,019.6	31,961.6	27,704.7	(4,058.0)	4,256.9	120,872.8	111,110.8	95,390.5	(9,762.0)	15,720.3	403,046.2
TW06 VITRIF'CN FACILITY PH I	13,508.5	13,448.0	14,532.3	(60.5)	(1,084.3)	42,372.0	41,985.7	45,287.4	(386.3)	(3,301.7)	345,725.9
RPP TOTAL EXPENSE/CENRTC WITH TW06	31,289.8	27,530.0	21,246.7	(3,759.8)	6,283.3	105,127.8	96,642.0	78,601.0	(8,485.8)	18,041.0	332,093.0
RPP TOTAL LINE ITEM WITH TW06	18,238.3	17,879.6	20,990.3	(358.7)	(3,110.7)	58,117.0	56,454.5	62,076.9	(1,662.5)	(5,622.4)	416,679.1
RPP TOTAL - WITH TW06	49,528.1	45,409.6	42,237.0	(4,118.5)	3,172.6	163,244.8	153,096.5	140,677.9	(10,148.3)	12,418.6	748,772.1



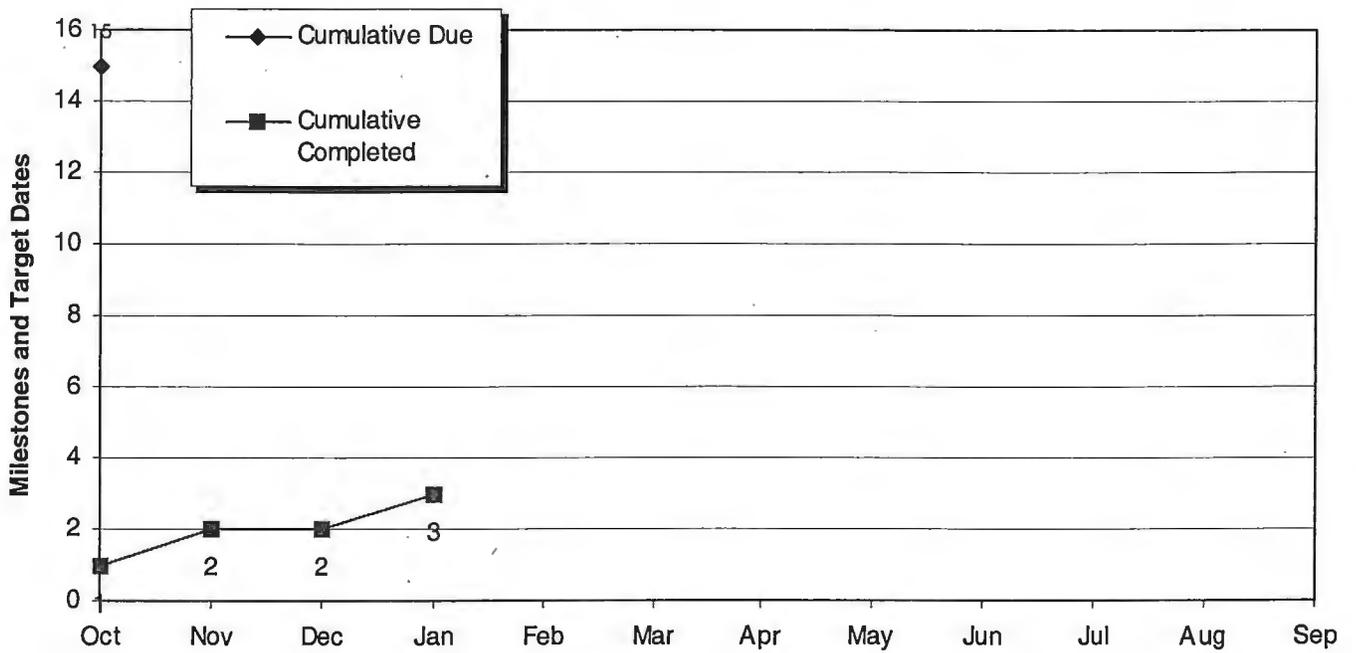
Milestone Completion Date	Total Milestones as of 2/27/01	Milestones Completed as of 2/27/01	Milestones Deleted After 10/1/99	Milestones Under Dispute as of 2/27/01	Milestones Active as of 2/27/01	Milestones Missed as of 2/27/01
M20-00 Submit Pet B Permit Application on Closure/Post Closure Plans for all RCRA/TSD Units	2/28/2004	4	1	1	0	3
M40-00 Migrate/Reache Tank Safety Issues for High Priority Watchlist Tanks	9/30/2001	19	18	1	0	1
M41-00 Complete Single Shell Tank Interim Stabilization	9/30/2000	12	12	7	0	0
M43-00 Complete Tank Farm Upgrades	6/30/2005	20	17	0	0	3
M44-00A Double and Single Shell Tank Characterization	9/30/2002	34	28	0	0	8
M45-00** Complete Closure of all Single Shell Tank Farms	9/30/2004	82	18	11	0	34
M45-00 Double Shell Tank Space Stabilization	9/30/2003	25	15	0	0	11
M50-00 Complete Pre-treatment Processing of High Level Tank Wastes	9/30/2004	3	2	1	0	1
M51-00 Complete Utilization of High Level Tank Waste	12/31/2003	3	2	0	0	1
M50-00 (primary path) Complete Pre-treatment and Immobilization of High Level Tank Waste	12/31/2004	(12)*	8	0	0	(4)*
M51-00* (alternate path) Complete Pre-treatment and Immobilization of High Level Tank Waste	12/31/2003	1	0	3	0	1
M50-00 Interim Storage and Disposal of LAW and Interim Storage of HLW	TED	6	2	2	0	4
M52-00 Complete Pre-treatment Processing and Utilization of Tank Wastes	12/31/2018	13	2	1	0	10
M47-00 Complete All Work for Phase 1 Operations	2/28/2018	9	0	0	0	9
<b>Total</b>		<b>214</b>	<b>123</b>	<b>27</b>	<b>0</b>	<b>90</b>

\*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).

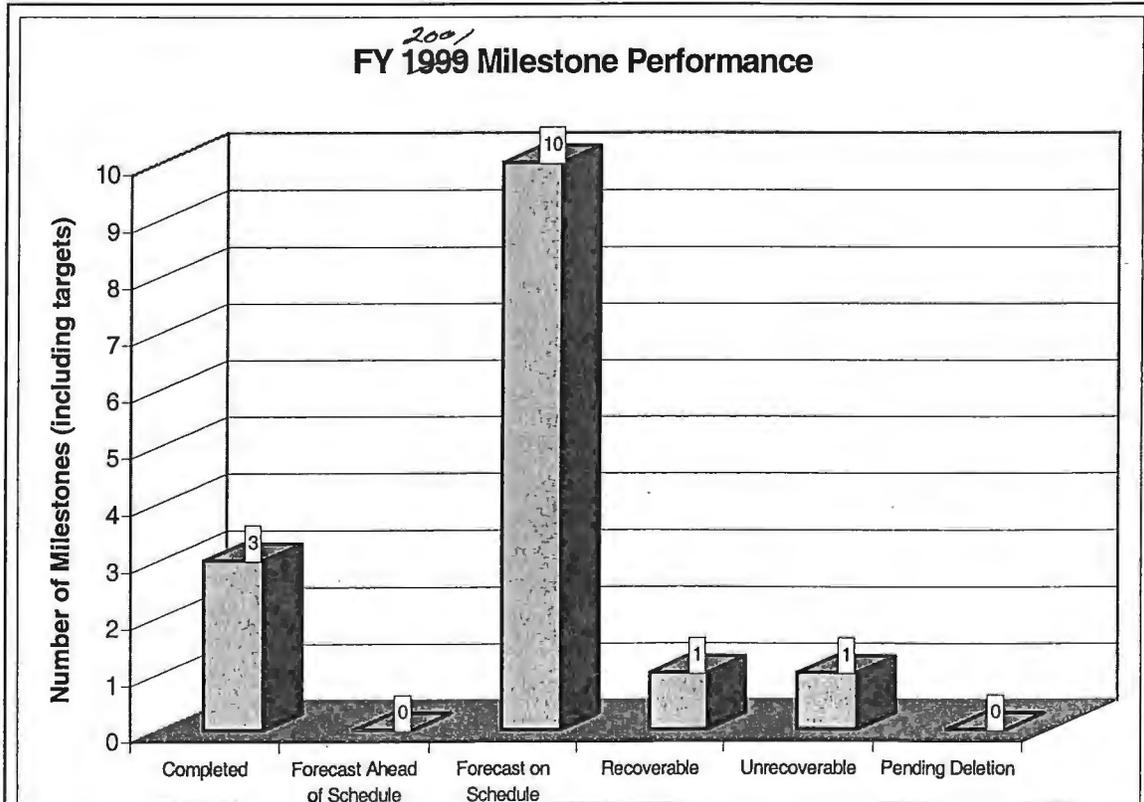
\*\* Does not include proposed groundwater/vadose zone milestones M-45-50 through M-45-60, which were in public comment through May 17, 1999. Includes changes realized by Change Request M-45-00-01A on 1/22/01.

Note: Net gain of 15.

### FY 2001 Milestone Plan



### <sup>2001</sup> FY 1999 Milestone Performance



Milestones – FY 2001 Performance

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	12/31/00				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	4/30/01			X				
M-44-13E	Submit Draft WIRD to Ecology for FY2002	06/30/01			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			3	0	10	1	1	0	0

*MA/BSY*

**Change Request M-45-98-03  
SST Corrective Action  
Groundwater/Vadose Zone**

DOE and Ecology continue working jointly to finalize the Public Comment Response Document. New date for P-45-54 of March 2001 pending approval of this change package.



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# RPP Integrated Critical Path Schedule Management

February 27, 2001

John Van Beek



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## Initial RPP Integrated Schedule

- Detailed WTP and TFC contractor schedules developed first half of CY2000
  - Logic driven, critical path, resource loaded
  - In accordance with RPP Schedule Spec providing schedule requirements for the Contractors
- ORP issued Integrated Schedule on 8/4/00
  - Approved as TFC baseline on 10/4/00
  - Under configuration control

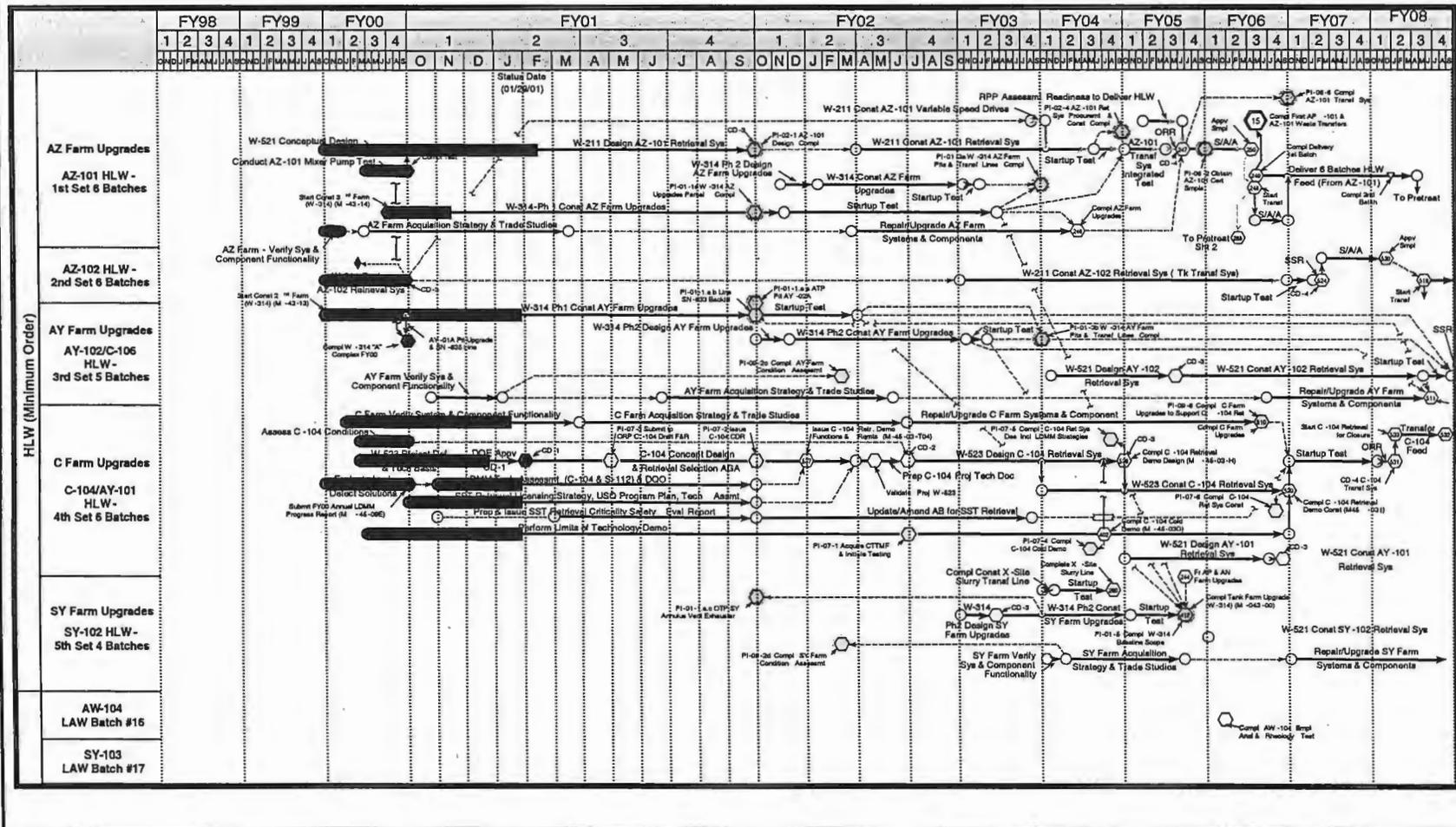


## Schedule Support Tools

- Management Summary Schedule
  - One page summary of RPP
  - Critical path (<60 days float) and near critical paths (<6 months float) identified
- Expanded Management Summary Schedule
  - ~1000 activity summary schedule of RPP focusing on Initial Quantity vitrification
  - Critical path and near critical paths identified
- Milestone Sequence Chart
  - One page listing of RPP major milestones
  - Includes all regulatory milestones
  - Milestones used on all levels of schedules



# Example of Critical Path Schedule





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## RPP Schedule Maintenance

- Schedule can only be revised by Baseline Change Requests approved by Contractors and ORP
- Stated by Contractors for monthly reporting



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## FY2001 Revision of RPP Integrated Schedule

- Revision required to reflect new WTP contract and TFC contract extension
  - TFC revision via 4/01 change request
  - WTC initial design, construction, and commissioning schedule due 4/15/01
  - Initial integration of schedules by 5/15/01
- Final revision of RPP Integrated Schedule by 9/1/01



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## Critical Path Management Team Implementation Proposal

- Establish Ecology, ORP, Contractors team
- Develop mutual understanding of critical path schedule management
- Perform detailed review of current RPP Integrated Schedule
- Oversee development of changes leading to 9/1/01 schedule revision
- After 9/1/01, conduct semi-annual schedule reviews, including identification of necessary changes and critical path re-evaluation

**Interim Stabilization Consent Decree**

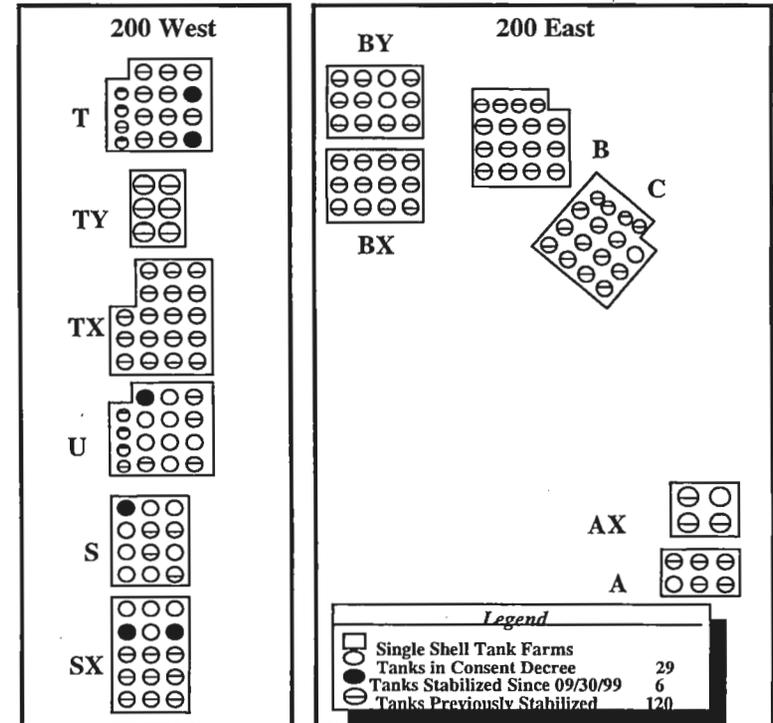
**Issues**

- A safety stand down to resolve lock & tag issues was instituted on January 23, 2001 across all tank farm work requiring lockout/tagout. The safety stand down effectively stopped all interim stabilization field work, causing day-for-day schedule slippage for all activities. No Consent Decree “initiation of pumping” milestones are impacted at this time. The completion of pumping milestone (9/30/03) is not in jeopardy.
- Pump failures for S-102 and SX-101 are most probable due to obstruction in the jet pump piping. Work packages are being processed for leg replacement. Resumption of pumping of S-102 is expected to start by the end of March 2001. S-102 will not meet the **non-enforceable** projected pumping completion date of March 30, 2001, but will meet the completion of pumping milestone of September 30, 2003. *Complete pumping DATES ARE NOT ENFORCEABLE*
- Lesser rate of liquid pumped compared to the earlier estimate, may indicate lesser overall total liquid volume. This has been captured in the yearly revision to the liquid volume projection.

**Major Accomplishments**

**Progress to Date**

- Tanks declared Interim Stabilized: T-104, T-110, S-103, SX-104, SX-106, and U-103. The report for stabilization of S-106 was approved by DOE. Formal notification to Ecology is being prepared.
- Completed the January 31, 2001 for submittal of the quarterly report for tank stabilization activities.
- Pumping ongoing for tanks SX-101, SX-103, SX-105, and U-102.
- Currently 4 tanks, S-109, U-105, U-106, and U-109 have stopped pumping, and are being evaluated for interim stabilization. Tanks U-105 and U-109 are being evaluated under the consent decree criteria of major equipment failure.



### Progress to Date (continued)

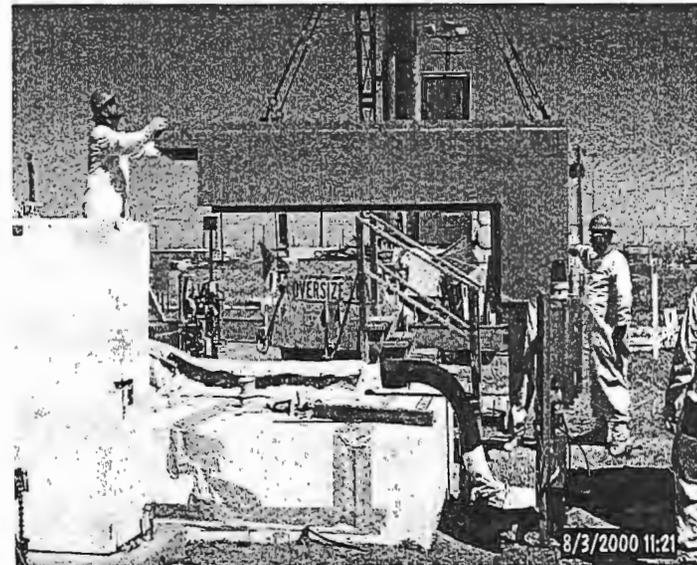
- Integrated testing of a new sundyne pump for A-101 has been completed. The pump was installed in early February 2001, and start-up is expected by mid-March.
- Fabrication is ongoing for the new pump in tank AX-101 for starting in March 2001 following startup of A-101.
- 1.2M gallons of liquid waste (33%) of the projected total pumpable liquid of 3.6M-gallon has been removed.
- 365,000 gallons of organic complexant liquid waste (80%) of the projected total pumpable organic complexant liquid of 453,000 gallons is removed.
- CHG is preparing a detailed plan for bulk removal of separable organics from tank C-103, with an anticipated submittal to DOE by March 15, 2001.

### Planned Activities

- Complete the stabilization evaluation for tanks S-109, U-105, U-106, and U-109 noted above.
- Complete the engineering evaluation and replacement of pump legs as required.
- Re-initiate pumping of A-101 and AX-101.
- Initiate pumping of BY-106 in April 2001 and BY-105 in May 2001.



Hose-in-hose waste transfer lines being installed prior to removal of retrievable waste from a single-shell tank



Preparing for waste transfer

**Milestone M-46-00, Double-Shell Tank Space Evaluation****Status:**

- CHG submitted to ORP a draft report on waste volume case studies 2a, 2b, and 3. Currently under review and comment.

**Issues/Recovery:**

- Based on the latest OWVP:

The draft OWVP report indicates that additional tank space may be required in case studies 2a and 2b. The report will provide ORP with the different alternatives to assess DST space availability, SST retrieval sequence and space saving measures.

**Planned Activities:**

Review draft report.

### **DST Integrity Assessment Program**

**Status:**

- Submitted DST visual and transfer piping examination plan to Ecology on 2/15/01 per agreement during 1/23/01 meeting.
- Awaiting preliminary report of AY-101 tank corrosion/integrity by NACE expert.
- Completed caustic addition to tank AY-102.
- AY-101 annulus ventilation system operable.
- Performed video inspection on AY-101 for a total of 13 annulus risers.
- Accelerating crawler UT exams for AY-101 in two risers.
- Investigating other NDE methods in areas of heavier corrosion of AY-101 annulus.

**Issues/Recovery:**

TBD.

**Planned Activities:**

FY 2001 deliverables:

- July 18, 2001 Deliverables – On schedule.
- September 30, 2001 Deliverables – On schedule.
- Prepare for Oregon Waste Board.

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

**Status**

- Completed one core sample from Tank C-107
- Completed 2.3 grab samples from Tank U-111 and Tank AN-107
- Vapor sampling is behind schedule. However, it is expected that all 6 sampling events planned for this year will be met.
- Sampling Status as of February 15, 2001, is as follows:

	Tank	Sample	MYWP FY 01	
	<u>Scheduled/Completed</u>	<u>Scheduled/Completed</u>	<u>Sampling Baseline</u>	
Core	1/1	3/4	10	
Grab	7/7	8.6/8.6	14	
Vapor	3/1	3/1	6	<i>will finish by end of year</i>

- Completed the FY 2001 First Quarterly Report on 1/12/01, and submitted to Ecology on 1/29/01.
- A workshop to discuss, identify, and prioritize issues that need characterization sampling support for the FY 2002 and subsequent years was held on 1/31/01.

The results of the workshop will become one of the bases upon which to build FY 2002 TSB-WIRD.

- EPA Region 10 has approved a risk-based disposal approval for management of Toxics Substance Control Act (TSCA) polychlorinated biphenyl remediation waste during Campaign 2001-01 of the 242-A evaporator unit. This approval is on a pilot basis, and is limited to

operation of the 242-A evaporator itself. A post-campaign report will be submitted to EPA and Washington State Department of Ecology documenting results of the pilot campaign.

**Issues**

- No issues to report.

**Planned Activities**

- M-44-13E: Submit draft TSB-WIRD to Ecology for FY 2002. Due date 6/30/01.
- M-44-14E: Submit final TSB-WIRD for FY 2002 to Ecology. Due date 8/31/01.
- M-44-15E: Complete characterization deliverables consistent with TSB-WIRD developed for FY 2001. Due date 9/30/01.
- M-44-16E: Complete Input of Characterization Information for HLW Tanks for which Sampling and Analysis was Completed Per the FY 2001 WIRD, into an Electronic Database. Due date 9/30/01.

**Milestone M-40-00, Mitigate/Resolve Tank Safety Issues for High Priority  
Watchlist Tanks**

**Status:**

- Flammable gas safety issue resolved for SY-101.
- SY-101 removed from watch list January 11, 2001.

**Issues/Recovery:**

- None.

**Planned Activities:**

- Continue to develop closure documentation to support completion of M-40-00.

On February 20, 2001, CHG presented to the ORP and the Tanks Advisory Panel M40-00 report reviewers an outline, the introduction and the final two chapters of the report that will make the recommendation to close the Flammable Gas Safety Issue and remove the remaining 24 tanks from the Watch List. This report, when approved, will allow closure of TPA milestone M40-00 (due September 30, 2001). The report and the strategy for packaging the supporting data was well received. CHG expects to complete a DRAFT of the report and transmit it to ORP by March 15, 2001. A review cycle and comment resolution period similar to that used on the Tank SY-101 report is planned. ORP is on schedule to complete this milestone.

Funding for completion of this milestone is included in CHG Contract mod #30 as the line entry titled "RPP Flammable Gas Minimum Safe Operations" (FY2001 @ \$3,328K) shown in the table on page C-22. The scope statements in Section C.3 supporting the closure of M-40-00 are found in paragraphs C.3.(a)(1)(i) General Description and C.3.(a)(1)(iv)(B) Interim Milestones.

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

**Status:**

*Now THROUGH 2006*

- M-45-00-01A Change Approved January 23, 2001

Establishes near-term (2001-2006) risk-based retrieval with curie reduction and volume targets, moving tanks with significant mobile long-lived radionuclides (i.e. Tc99) to an early position in the schedule and defining technology development and test deployment requirements.

M-45-03-T03 (12/30/01) Submit S-112 Saltcake Waste Retrieval Technology Demonstration Functions and Requirements Document.

-- Contracts let and work underway for submittal of TPA F&R to ORP by April 30, 2001. Leak Mitigation functions and requirements workshop held January 8-9, 2001. On Schedule

- Completed Preliminary Engineering for S-112.
- Received LDMM design concepts report for dissolution-based technology.
- Retrieval Performance Evaluation (RPE) in Progress

M-45-03-T04 (12/30/01) Submit C-104 Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Demonstration Functions and Requirements Document

-- Contracts let and work underway for submittal of TPA F&R to ORP by April 30, 2001. On Schedule

- Based on Preliminary Engineering Report completed in September 2000.
- RPE in Progress.

M-45-03G (6/30/04) Complete C-104 Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Cold Demonstration

-- Cold Test Facility Acquisition Strategy document Issued 12/28/00, a week early.

M-45-03H (9/30/04) Complete C-104 Sludge/Hard Heel, Confined Sluicing and Robotic Technologies, Waste Retrieval Demonstration Design

- In-process of resolving engineering uncertainties from FY 2000 Preliminary Engineering Report
- Performing studies and assessments of field conditions to support initiation of Conceptual Design
- Preparing CD-1 Data Package

**M-45-05-T16 (10/30/02) Submit S-102 Initial Waste Retrieval Functions and Requirements Document**

- Work has initiated on defining retrieval systems requirements and F&R document development
- Work initiation on the RPE has been authorized with a kickoff meeting on 11/14/00
- Procurement process initiated to secure A&E services for LDMM concepts
- Workshop scheduled for November 16th and 17th to define proof of concept test objectives supported by TFA

**M-45-06-T05 (6/30/02) Submit Tank Farm Closure/Post-Closure Work plan Update**

- Work initiated on defining document update scope and content
- Initial meeting held with Ecology on October 25th to obtain concurrence and input on update scope

**M-45-12-T01(2/28/02) Submit An Options Report Documenting DOE Assessment Of Actions That Could Be Taken To Increase Available Tank Space for SST Waste Retrieval**

-- Workshops held November 2000 and January 2001 (Included Ecology). Ahead of Schedule for delivery, Spring 2001.

- Completed workshop to develop options (November 30, 2000)
- Held workshop to review approach with Ecology and Hanford Advisory Board (January 12, 2001).
- Peer review of options report in progress by contractor for early delivery.

**Issues/Recovery:**

Re-negotiated TPA Milestone M-45-00A and 00B provide that SST will not be pumped until DST space is available. Based on the Director's Determination, Phase I capacity under TPA Milestone M-62-00A will only create sufficient DST space through 2018 to retrieve approximate 15 SSTs and treat approximate 5 SSTs. The Director's determination also postponed a decision on Phase II design and construction until approximately 2014.

On November 29, 2000, DOE transmitted an Operational Waste Volume Projection to Ecology under TPA Milestone M-46-01G identifying the need to construct 87 new DSTs by 2018 to met the M-45-05 SST retrieval milestone. On November 30, 2000, Ecology rejected construction of new DSTs and requested additional studies. ORP is currently responding to this request.

**Planned/ Activities:**

- Schedule for F&R efforts to be provided to Ecology by February 28<sup>th</sup> outlining planned Ecology involvement activities for this product.
- Option report assessing activities to increase compliant tank space to ORP 3/31/01.

## M-45-50, 60 – Single Shell Tank Corrective Action (Groundwater/Vadose)

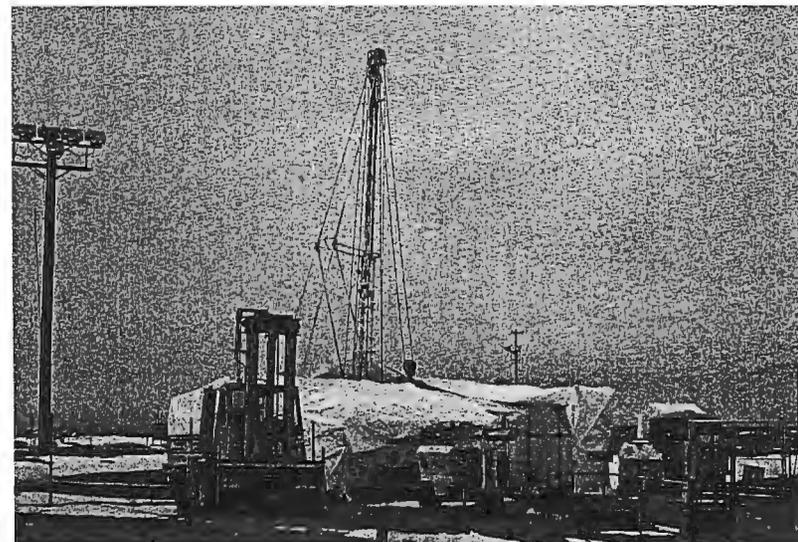
### Major Accomplishments

#### Progress to Date

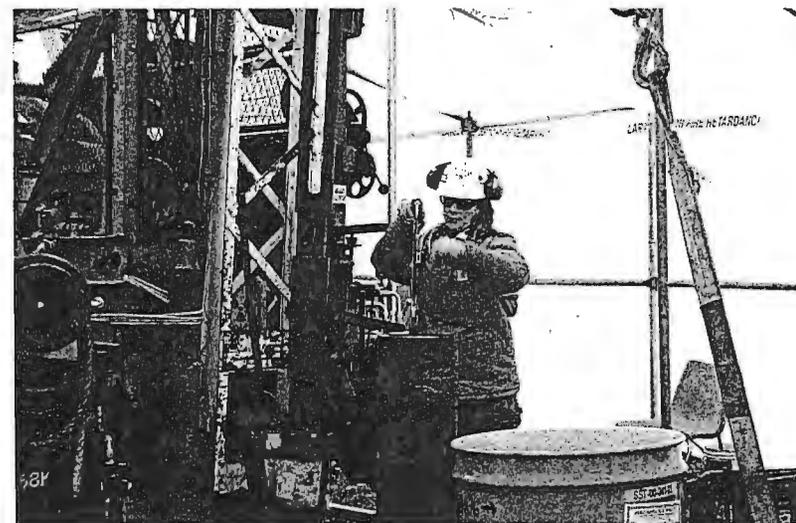
- M-45-54: Submit to Ecology for review and approval as an Agreement primary document a site- specific SST WMA Phase I RFI/CMS Work Plan addenda for WMA T-TX-TY (due Dec. 00).
- The DQO for the T-TX-TY work plan has been completed. The work plan is currently undergoing DOE review, and comments from the review will be incorporated into the work plan addendum for submittal to Ecology in March 2001, as discussed and agreed to by both DOE and Ecology.
- Interim Measures:  
Engineering design of up-gradient surface water run-on control measures for U farm has been completed.

#### Planned Activities

- M-45-53: Submit to Ecology for review and approval as an Agreement primary document a site specific SST WMA Phase I RFI/CMS Work Plan addenda for WMA B-BX-BY.
- The borehole at BX-102 was drilled at a depth of approximately 260 feet below ground surface (BGS), as specified by the work plan. Decommissioning of the BX-102 borehole is underway and expected to be complete by 2/23/01. Upon demobilization at BX-102, characterization will commence at B-110 for the second characterization borehole at WMA B-BX-BY, in accordance with agreed changes to the work plan.
- ORP is coordinating internally and with RL to complete calendar year 2000 installation of new RCRA compliant wells around the tank farms. Negotiation continue for installation of calendar year 2001 RCRA monitoring wells around SSTs.



BX-102 Drilling



Evaluation of Borehole Depth

**Issues**

- TPA milestone change M-45-98-03 has not received final approval. DOE is currently awaiting final change approval before changes in the proposed milestone dates are incorporated. Ecology staff indicated they were supportive of the changes and would incorporate changes to the proposed milestone dates. Proposed changes were:
  - Modify the date that the T, TX-TY Work Plan Addendum would be due to Ecology to March 2001 from December 2000.
  - Modify the date that the S-SX Field Investigation Report (FIR) would be due to Ecology to January 2002 from April 2001.
  - Modify the date that the B-BY-BY Field Investigation Report would be due to Ecology to October 2002 from May 2002.
- The reason for the modification in dates is to better align work plan and report development with planned field activities. Adoption of these due dates would not affect the due date for M-45-55, Phase I RFI Report (Due 2/04), and would allow improved work plan and report development.

## Ecology comments:

- Both U and AX farm releases have impacted groundwater. These farms must be placed in assessment. TPA milestones and budget must be provided to add them to M-45.
- There is no mention made of the draft change request submitted that drastically reduced the number of wells to be completed in 2001, nor is any mention made of the plan to split funding between 2001 and 2002 for wells identified as 2001 wells during the 9/25/00 M-24 workshop. Ecology does not support the split funding or diminishment in number of wells. Describe ORP measures to identify additional funds for wells.

### Milestone M-43-00, Tank Farm Upgrades

#### Status:

Interim milestone update

TYPE	TITLE	DUE DATE
TPA	M43-12, Start Construction in 1 <sup>st</sup> farm	6/30/99* AN Farm
TPA	M43-13, Start Construction in 2 <sup>nd</sup> farm	6/30/00** AY Farm
TPA	M43-14, Start Construction in 3 <sup>rd</sup> farm	3/30/01*** AZ Farm
TPA	M43-15, Start Construction in 4 <sup>th</sup> farm	3/29/02 AW Farm
TPA	M43-16, Start Construction in 5 <sup>th</sup> farm	6/30/03 AP Farm
TPA	M43-00, Complete Tank Farm Upgrades	6/30/05

\*Completed ahead of schedule on 3/2/98

\*\*Completed ahead of schedule on 10/27/99

\*\*\*Completed ahead of schedule on 6/09/00

#### Status of Project W-314

- Completed Design Package for Valve Pit Upgrades in AW Farm.
- Completed Design Package for the 200E Waste Transfer System (WTS) and awarded the Fixed Price contract for dirt work (clearing / grubbing / berm) involved in laying the double wall pipe.
- Completed Design Package on the AN to WTS portion of the waste transfer system.
- Continuing with Design Package on AN Phase II currently at 60%
- Completed coating, insulating and fiberglass wrapping of transfer lines SN-631 and SN-632, and drain line DR-100 (except in tie-in locations).
- Completed all open pit activities including coating and re-installed cover blocks on AY-02A pit.
- Pulled cover blocks and initiated open pit activities in AZ-01A pit.
- Completed Polyurea mockup testing and training at the Hammer facility. Polyurea coating will be utilized on the AZ-01A and AZ-02A pit upgrades.

- Continued fabrication of double wall pipe for WTS line.

**Issues/Recovery:**

- Establish Working Group (including Ecology representatives) to develop/improve milestone completion language for M-43-00.
- CHG imposed additional QA requirements for the procurement of WTS piping has impacted the baseline project schedule. CHG is preparing a BCR that will define cost and schedule variances resulting from the new requirements. DOE expects a proposed schedule and cost recovery plan to be submitted consistent with agreements reached by the Joint Integrated Working Group Meeting. The BCR is still under review by CHG.

**Planned Activities:**

- Finalize the MPS Construction, Procurement, and E&I contracts with FFS.
- Issue Request for Proposal (RFP) for 200 East WTS construction contract to install pipe and new AZ pit.
- Procure PLC equipment for MPS.
- Receive the SY annulus ventilation equipment.
- Complete installation of AY-02A drain seal and valve handle installation.
- Core drill AZ-01A pit walls for new nozzle penetration, and revise construction specification and JCS work package for Polyurea application.
- Complete procurement of the Pit Viper (backhoe with arm manipulator for remote pit work).
- Complete preparations for cover block removal in support of AZ-02A pit upgrades.

**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**

**Status:**

- 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 by 3/31/06 – DOE is on schedule to complete as required.
- 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 by 3/31/07 – DOE is on schedule to complete as required.
- M-47-03, Start construction of waste retrieval and mobilization systems for selected initial high-level waste feed tank by 7/30/04 – DOE is on schedule to complete as required.
- M-47-03A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial high-level waste feed tank by 2/28/07 - DOE is on schedule to complete as required.
- 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 by 6/30/07 – DOE is on schedule to complete as required.
- 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) by 5/31/04 – DOE is on schedule to complete as required.
- 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) by 4/30/06. – DOE is on schedule to complete as required.
- 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 by 6/30/10. Negotiations are not yet underway.

**Issues/Recovery:**

None.

**Planned Activities:**

Continue working through M-47 milestones by due date.

Note: Projects W-521, W-314 and W-211 all have a role in the retrieval, mobilization and transfer of waste from AP and AZ/AY tank farms to the WTP. All three projects are on schedule (construction is scheduled to begin or end by the appropriate TPA dates) to support the M-47-01, M-47-03, and M-47-05.

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

### **Status:**

- **M-62-00, Complete pretreatment processing and vitrification of Hanford High Level (HLW) and Low Activity (LAW) Tank Wastes**

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 that Hanford’s High Level Radioactive Waste is vitrified by 12/31/28.

- **M-62-00A, Complete pretreatment, processing and Vitrification of Hanford HLW and LAW Phase I Tank Wastes**

As committed to in the First Amendment of the Consent Decree, paragraph XIV.A, 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-62-01, Submit Semi-Annual Compliance Report**

Subject report was submitted on time but not to the satisfaction of Ecology. On October 12, 2000, DOE submitted an update to the initial report and a response to the eleven items of purported non-compliance defined in the September 18, 2000 letter to Harry Boston from Mike Wilson. ORP is awaiting closure of the eleven issues prepared by Ecology. We received verbal approval accepting the October report on January 10, 2001. Ecology also stated that if the January report was similar to the October report, they did not foresee any issues. An updated report was delivered to Ecology on January 29, 2001, however Ecology’s assistance is requested to help us understand your expectations for future deliverables. It should be noted that DOE has documented the telephone conversation between our staff and John Grantham relative to his verbal approval accepting the October report. A copy of that e:mail documenting the conversation can be provided to Ecology for their official records.

- **M-62-02, Submittal of Hanford Tank Waste Alternatives Report**

This activity was completed on schedule on March 1, 2000.

- **M-62-03, Submit DOE petition for RCRA de-listing of vitrified HLW**

BNFL submitted the final IHLW de-listing approach on April 18, 2000. DOE has transferred this responsibility to CH2M Hill Hanford Group (CHG) who has included it in their scope of work during the transition period. The document will be transferred to the Waste Treatment Plant Contractor, Bechtel

Washington during their transition period by April 30, 2001. This activity is on schedule to be completed by 12/31/06.

- **M-62-04T, Readiness to Proceed – Support to Phase I Treatment**

This activity was completed on schedule on April 24, 2000.

- **M-62-06, Start of Construction – Phase I Treatment Complex**

The date of July 31, 2001 is in jeopardy because of the change in contracting approach. Estimates range from April 2002 to December 2002. DOE will seek adjustment for the milestone completion date through the TPA change control process. It is anticipated that Bechtel-Washington will confirm construction schedules on April 15, 2001 when they submit revisions to their baseline. This event is consistent with the intent of the TPA as documented in the definition annotated in the M-62-05 milestone description. DOE intends to submit a draft change package to incorporate the construction schedule language from milestone M-62-05 into milestones M-62-06 and M-62-07. As clearly indicated in the last two Quarterly Project Review meetings, DOE has stated that the start of construction milestone is in jeopardy, meaning exposure to or imminence of loss because the date was negotiated into the TPA when DOE intended to perform the work under a privatization approach and with a funding level of \$606 million dollars in FY 2001. Neither of these basic premises occurred, thus the milestone is in jeopardy.

- **M-62-07, Construction Progress Milestones (2) – Phase I Treatment Complex**

This milestone is tied to M-62-05 that was deleted by the Consent Decree revision. DOE intends to submit a draft change package for construction progress milestones, milestone definition and commitment dates that align these activities to the Bechtel-Washington baseline schedule. A technical, cost and schedule baseline is a contract deliverable scheduled for submittal on April 15, 2001.

- **M-62-08, Submittal of Hanford Tank Waste Phase II Treatment Alternatives Report**

This milestone is 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 is scheduled for July 31, 2005.

- **M-62-09, Start (Hot) Commissioning**

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**

This milestone is not specifically referenced in the RFP because the concept of “Commercial Operation” was eliminated by the termination of a “commercial” enterprise. DOE, as the new owner of the WTP, will attain and sustain throughput of the pretreatment and LAW vitrification by December 31, 2009 and attain and sustain throughput of HLW by December 31, 2011. These dates, as described in the contract are for completion of Hot Operations, not Commercial Operation. The proposed completion of Hot Operations date for HLW (12-31-11) is inconsistent with this milestone (12-31-09) and will be adjusted through the TPA change control process. Adjustment through the change control process means that DOE will initiate a formal change control form and submit to Ecology for their consideration in accordance with Section 12 of the agreement. Ecology can either accept or reject based on their review of the justification of the change. In this case, the justification is stated in the status above.

- **M-62-11, Submittal of Hanford Tank Waste Treatment Phase II Plan**

This milestone is on schedule for completion in 2012.

- **M-62-12, Issuance of DOE Authorization to Proceed – Phase II Treatment**

**This milestone will be negotiated in the 2012 timeframe.**

### **Issues/Recovery:**

1. **Resolution of Concerns Regarding Milestone M-62-01**

Although DOE received verbal approval of the prior M-62-01 milestone submittal, there is no formal documentation closing out Ecology’s acceptance of that deliverable. The January 29 , 2001 report was developed and submitted, based on the verbal feedback received.

**Status:** ORP staff has been in contact with Mr. John Grantham of your staff. Upon receipt of this report, please contact us so that we may meet to insure that your expectations for this report are being met.

2. **Revise and definitize TPA Language Concerning Milestones M-62-06, M-62-07, M-62-10 and M-62-11**

Agree on TPA language for the required changes to milestones M-62-06, M-62-07, M-62-10 and M-62-11 based on the programmatic change from a privatized approach to the government-owned, contractor-operated (GOCO) approach. These changes will be developed to align schedules and

associated work directives to the ORP baseline schedule, which is based upon critical path project management. A change package will be developed by DOE and submitted to Ecology per agreement Section 12.

**Status:** Discussions are ongoing.

**3. Compressed RPP-WTP Environmental Permitting Schedule Required to Meet Proposed Start of Construction Date**

The RPP-WTP is on an exceedingly ambitious schedule to acquire the requisite environmental permits needed to meet the 2002 Start of Construction date proposed in the current schedule. Acquisitions of these permits are predicated on the Project achieving a sufficient level of design necessary to allow for the development of these documents. It is anticipated, given the minimal amount of time needed to advance the RPP-WTP design to the level required to write the permits, that the schedule to develop and review these permits will be extremely compressed, and will require extraordinary efforts by both Project and regulatory personnel in order to prepare, review, and approve these documents by the proposed Start of Construction date. It should be noted that the Waste Treatment Plant permit will be issued as a final status permit and that a compliance schedule will be established to deliver design packages for approval by Ecology after the permit is issued.

**Status:** Discussions are ongoing between ORP and Ecology staff members to coordinate and streamline the permitting process to the extent practicable.

**Planned Activities:**

Formal ES&H Interface meetings with Ecology and Health are scheduled to resume February 2001.

DOE's purchase of the pilot melter in Columbia, Maryland is expected to occur on April 25, 2001.

Continuation of pilot melter research and technology will resume as soon as Bechtel Washington awards a contract to GTS-Duratek.

Following the award of the Waste Treatment Plant design, build and commission contract to Bechtel Washington on December 11, 2000, ORP has started the transition of all engineering and other project data from CH2MHill Hanford Group to Bechtel Washington. The CHG transition plan calls for completion of the transition by February 28, 2001. The Bechtel-Washington team is expected to receive authorization to proceed advancing the RPP-WTP design April 1, 2001.

**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 IHLW, ILAW, and Disposal of ILAW, and M-20-00, Submit Part B Permit Applications**

**Status:**

- M-90-00, Complete Acquisition of New Facilities.....

Final Determination Date: As noted below.

Current ORP Date: Under review – see Issues/Recovery section.

- M-90-08, Initiate ILAW Disposal Facility Construction.

Final Determination Date: 7/31/04

Current ORP Date: 4/1/05 (Under review – see Issues/Recovery).

- M-90-09-T01, Complete ILAW Facility Detailed Design.

Final Determination Date: 3/30/04

Current ORP Date: 3/31/05 (Under review – see Issues/Recovery).

ILAW Disposal Facility Conceptual Design was initiated in December 2000.

- M-90-10, Initiate Placement of ILAW Waste Canisters in ILAW Disposal Facility

Final Determination Date: 1/31/07

Current ORP Date: 2/7/08 (Under review – see Issues/Recovery).

- M-90-11, Complete Canister Storage Facility Construction

Final Determination Date: 2/01/07

Current ORP Date: 6/5/08 (Under review – see Issues/Recovery).

Design requirements document for preliminary design is under review by DOE-ORP.

- M-20-56, Submit Canister Storage Facility Part B Dangerous Waste Permit Application to Ecology.

Final Determination Date: 6/30/02

Current ORP Date: 5/30/02

Preparation of Part B has been initiated.

- M-20-57, Submit ILAW Disposal Facility Certified Part B Permit Application to Ecology

Final Determination Date: 8/31/02

Current ORP Date: 8/31/02

Preparation of Part B has been initiated.

**Issues/Recovery:**

- Inconsistency between Final Determination dates and ORP planning dates for completion of M-90 milestones as noted above in the Status Section.

On October 6, 2000, ORP requested the Tank Farm Contractor (TFC) to evaluate the impacts of rescheduling work to meet the Final Determination dates. The December 7, 2000, response described significant cost and schedule impacts and risks that would result from revising plans to meet the current M-90 milestone Final Determination dates. Consequently, ORP recommends no change to its baseline at this time. Instead, ORP recommends revision or confirmation of the M-90 (and M-20) Immobilized Product Storage and Disposal milestone dates after evaluation of the waste treatment schedule to be submitted by the Waste Treatment Contractor (WTC) by April 15, 2001. This evaluation process and any necessary rebaselining should be completed by September 1, 2001 with the expectation that a TPA Change Request revising the dates for the M-90 and M-20 milestones would be processed by October 30, 2001.

**Planned Activities:**

- ILAW remote-handled waste trench conceptual design (Project W-520) – completion scheduled for May 2001.
- Issue draft 2001 ILAW Disposal System Performance Assessment to HQ for review - March 2001. Document provided to ORP and Ecology for review in December 2000.
- Initiate LAW and HLW melter disposal alternative generation and analyses – started January 2001. Completion scheduled for April 2001.
- Initiate drilling of borehole #2 in reference ILAW disposal site - March 2001. Final report scheduled for September 2001.
- Transmit W-520 NOI to Ecology – March 2001.

- Initiate IHLW Interim Storage Facility Preliminary Design (Project W-464) - July 2001. Completion scheduled for September 2002.

### SCHEDULE PERFORMANCE (\$M)

	BCWP	BCWS	VARIANCE
<b>RPP TOTAL</b>	<b>\$153.1</b>	<b>\$163.2</b>	<b>(\$10.1)</b>

#### SCHEDULE VARIANCE

The \$10.1 million (-6.2 percent) unfavorable schedule variance is attributed to the following factors:

#### **TW01 TANK WASTE CHARACTERIZATION**

**Description and Cause:** The favorable schedule variance (\$0.4M; 5.4%) is due to being ahead of schedule in Core and Grab sampling. The FYTD actual completion status is 4 Cores, 7.4 Grabs, and 1 Vapor against the FYTD plan of 0 Cores, 4.2 Grabs and 1 Vapor.

**Impact:** There is no impact.

**Corrective Action:** None required.

#### **TW02 TANK SAFETY ISSUE RESOLUTION**

**Description and Cause:** The unfavorable schedule variance (-\$.1M; -2.0%) is within the reporting threshold; therefore, no explanation is required at this time.

**Impact:** There is no impact.

**Corrective Action:** None required.

#### **TW03 TANK FARM OPERATIONS**

**Description and Cause:** The unfavorable schedule variance (-\$5.6M; -10.7%) is due to the following:

- The schedule for the AN-102 Caustic Addition has been adversely impacted due to the unknown condition of the transfer pump, which had not been operated for approximately 16 years. Pending the resolution of that condition, process control, work package planning, procurement and procedure writing have been proceeding at reduced levels. In order to recover, the design of the caustic delivery system is being simplified which will reduce training durations and the shop fabrication of parts will be expedited. The current working schedule shows that with these adjustments, the caustic solution addition for AN-102 will occur prior to the end of the fiscal year, meeting the Performance Indicator (PI).
- The schedule for waste transfers was front-end loaded while the transfers will be done throughout the fiscal year.

- Delays in the initiation of projects and lack of field resources for Double Shell Tanks (DST) Compliance Upgrades are impacting schedules. Expectations are that projects will be completed on schedule.
- Procurement and construction in Project W-314, Tank Farm Restoration and Safe Ops, have not begun as scheduled pending receipt of critical decision 3 (CD-3). Approval to award Waste Tank Safety (WTS) pipe procurement and WTS site preparation was granted in late December. BCR RPP-01-026 and a Class 3 BCR have been submitted.
- Delays in completing AW-101 Ultrasonic Testing (UT) are due to equipment failure. Multiple pit entries in A-350 were required due to field configuration not matching the drawings. A-350 UT is on hold waiting for a lock and tag to be hung. Work will be rescheduled as soon as lock and tag and resources can be lined up. Work on AW-105 UT is proceeding ahead of schedule.
- Project W-420, Stack Monitoring Upgrade, baseline does not reflect implementation of the Office of River Protection (ORP) path forward.

**Impact:** There is no impact.

**Corrective Action:** BCR RPP-01-026 and a Class 3 BCR have been submitted for approval.

#### **TW04 RETRIEVAL**

**Description and Cause:** The unfavorable schedule variance (-\$5.4M; -26.9%) is due to the following:

- ORP has approved the deferral of the scope to Perform Fluidics Technology Assessment. A BCR has been submitted.
- AZ-102 Rheology testing in Feed/Process Development was deferred to April 2. The lab is presently working on higher priority work (caustic addition) but is preparing the test plans and procedures. The work will be completed by the scheduled due date.
- The Cold Pump Test Facility work was level loaded in the schedule while actual activities will occur in the 3<sup>rd</sup> and 4<sup>th</sup> quarters of fiscal year 2001.
- Project W-211, Initial Tank Retrieval System (ITRS), experienced a stop work for welding procedure quality. The issue has been resolved. Contingency and Health Physic Technician (HPT) BCWS will be deleted with a BCR. The schedule variance is anticipated to be zero by April.
- Project W-521, Waste Feed Delivery System (WFD), has client delays and scope deferral as a result of system design issues. No PI's are at risk. AP upgrade design has been delayed and AW caustic design has been deferred to out years at the request of the client.
- In Phase I DST Retrieval Ops, Long Length Contaminated Equipment (LLCE) work and two construction trailers have not started as scheduled. Some scope in this cost account has been identified for possible deferral in BCR RPP-10-054.
- Work on the tank farm evaluations, AZ and AN Farm studies, and AY and AW Farm walk downs are behind schedule. The tank farm evaluations will not be

performed this fiscal year due to a replanning of the work. The AW/AY negative variance will self correct upon approval of BCR RPP-01-052. The AZ and AN Farm studies will not be written this year and are included in the same BCR.

- Full authorization of Conceptual Design activities is behind schedule because of delays in obtaining approval of Mission Need (Critical Decision Zero (CD-0) from ORP. Preliminary Conceptual Design activities were initiated in January at Holmes and Narver, and CD-0 is expected by the end of February. No impact to the completion of Project W-523 Conceptual Design is expected.
- Vadose Zone activity “Assess Integrity of Tank Farm Laterals” is deferred per management direction; day to day slide pending further management direction. “Resource Conservation and Recovery Act of 1976 (RCRA) Groundwater Well Install” work is also on hold pending negotiations between DOE and Ecology on how many and which wells are to be drilled.

**Impact:** There is no impact.

**Corrective Action:** BCRs have been submitted for Fluidics Technology Assessment performance, LLCE (BCR RPP-01-054), and AZ/AN Farm Studies/AY and AW walk downs (BCR RPP-01-052).

#### **TW05 PROCESS WASTE SUPPORT**

**Description and Cause:** The unfavorable schedule variance (-\$.2; -41.2%) is due to delayed startup of contract requirement analysis and the action tracking system.

**Impact:** There is no impact.

**Corrective Action:** Reprogramming is in process.

#### **TW06 VITRIFICATION FACILITY PHASE I**

**Description and Cause:** The unfavorable schedule variance (-\$.4M; -0.9%) is within the reporting threshold; therefore, no explanation is required at this time.

**Impact:** There is no impact.

**Corrective Action:** None required.

#### **TW08 VITRIFICATION FACILITY INFRASTRUCTURE**

**Description and Cause:** The favorable schedule variance (\$2.0M; 39.5%) is due to the W-519, Phase I Infrastructure Project, continuing ahead of schedule.

**Impact:** There is no impact.

**Corrective Action:** None required.

## **TW09 IMMOBILIZED WASTE STORAGE AND DISPOSAL**

**Description and Cause:** The unfavorable schedule variance (-\$.3; -12.7%) is due to the following:

- Project W-520, Immobilized Low-Activity Waste (ILAW) Disposal Facility, Conceptual Design, has had a delay in placement of contracts until technical criteria was completed. Contractor has started work and has provided a schedule to complete on time.
- Immobilized High Level Waste (IHLW) Systems Definition is waiting for the development of the requirements for IHLW Engineering Studies. Work will be completed on schedule.
- Project W-464, IHLW Interim Storage Facility, had late placement of contracts for W-464 RCRA permits. The contract is now in place and completion is expected on schedule.

**Impact:** There is no impact.

**Corrective Action:** None required.

## **TW10 RPP MANAGEMENT SUPPORT PROJECT**

**Description and Cause:** The unfavorable schedule variance (-\$.4; -1.6%) is within the reporting threshold; therefore, no explanation is required at this time.

**Impact:** There is no impact.

**Corrective Action:** None required.

### COST PERFORMANCE (\$M)

	<b>BCWP</b>	<b>ACWP</b>	<b>VARIANCE</b>
<b>RPP TOTAL</b>	<b>\$153.1</b>	<b>\$140.7</b>	<b>\$12.4</b>

#### COST VARIANCE

The \$12.4 million (8.1 percent) favorable cost variance is attributed to the following factors:

#### **TW01 TANK WASTE CHARACTERIZATION**

**Description and Cause:** The unfavorable cost variance (-\$.2M; -2.8%) is due to:

- Temporary overruns in Grab Sampling labor and the cost of material and fabricated components from the Fabrication Shop.
- A large billing from the Labs for Vapor Sample analysis is causing remaining Vapor analyses to be at risk of not being completed this fiscal year until billing and analytical requirements issues can be resolved.

**Impact:** There is no impact.

**Corrective Action:** Meetings have been scheduled for February between Fluor Hanford (FH) and CHG to discuss and resolve the issues.

#### **TW02 TANK SAFETY ISSUE RESOLUTION**

**Description and Cause:** The favorable cost variance (\$2.0M; 29.3%) is due to:

- Standard Hydrogen Monitoring System (SHMS) maintenance, Retained Gas Sampler (RGS) hot cell cleanout and waste based Flammable Gas (FG) evaluations are currently costing less than planned.
- SY-101 Level Rise Unreviewed Safety Questions (USQ) cost less to close than planned in the baseline.
- Business management is using fewer resources than planned and is realizing efficiencies.
- Some tasks in Authorization Basis (AB) are starting later than planned.
- The RL budget was level loaded and is not in line with the costs received. The variance should diminish as year progresses.

**Impact:** There is no impact.

**Corrective Action:** A BCR is in process to reallocate funding in FG.

### **TW03 TANK FARM OPERATIONS**

**Description and Cause:** The unfavorable cost variance (-\$2.0M; -4.2%) is due to:

- Training, operations management, and supplies are costing more than planned in (DST) Project Management. There are 10 more Full Time Equivalents (FTEs) charging to these accounts than were planned
- More resources are being used than planned to complete the Preventative Maintenance (PMs) and Corrective Maintenance (CMs) in Ancillary Facilities. This cost account is forecast to overrun if resource levels are maintained at the same level.
- A contract written to DynCorp for support to the Single Shell Tank (SST) Farm Complexes was overcharged by approximately \$1.5M. DynCorp has closed this contract and is now in the process of backing out all non-SST charges. A new contract was issued with additional controls on who may authorize charges.
- Project W-314, Tank Farm Restoration and Safe Ops, presently has work being performed that is not reflected in the FY 2001 baseline. BCR, RPP-01-026, currently in review, aligns the baseline to the working schedule for FY 2001.

**Impact:** The DST Project Management and Ancillary Facilities accounts are in jeopardy of overrunning.

**Corrective Action:** Obtain approval of BCR RPP-01-026 and identify possible funding sources to supplement DST Project Management and Ancillary Facilities.

### **TW04 RETRIEVAL**

**Description and Cause:** The favorable cost variance (\$5.0M; 34.0%) is due to:

- Balancing level-of-effort work with resources than were planned in Phase I DST Retrieval Ops.
- The DST Retrieval Project Definition administrative account which has not been utilized this fiscal year, a significant under run for revision of the DST Specifications, and an under run for the Cold Pump Test Facility. Costs for the specifications are expected to increase significantly during the next 90 days per the work plan schedule. The Cold Pump Test Facility schedule was front-loaded, but the major activities are not scheduled to begin until the 3<sup>rd</sup> and 4<sup>th</sup> quarter.
- Operations & Maintenance (O&M) Concept, the trade studies and Tier 2 Review of Nuclear Safety & Licensing submittals are currently under running. Work on the O&M concept is on hold pending redefinition of the scope for that deliverable. Some of the trade studies are on hold and new ones have not been initiated due to loss of engineering staff (both employees and staff augmentation). Full funding will be required this fiscal year. Submittals from Nuclear Safety & Licensing are in preparation. Review of the documents will take place later in the fiscal year, and will require an intensive effort.
- Resource requirements being back-loaded while scheduled resources are level loaded in SST Safety Basis, SST Retrieval System Demonstration, Technology Acquisitions and Vadose Zone activities. The positive cost variance will begin to

diminish as resource requirements increase during the design phases of C-104, S-112, U-107, and S102, as work associated with design and procurements for the Retrieval Projects progresses, and Leak Detection Monitoring and Mitigation (LDMM) work proceeds.

- W-521, WFD Systems, Project Management and Engineering activities are being performed more efficiently than planned.
- W-211, ITRS, has had misreported progress on both the AZ-101 design last year and the AN-101 design this year resulting in a negative cost variance.

**Impact:** There is no impact to yearend forecast.

**Corrective Action:** None required.

## **TW05 PROCESS WASTE SUPPORT**

**Description and Cause:** The unfavorable cost variance (-\$.1M; -41.1%) is due to costs being charged to Process Waste Support against FY00 Pacific Northwest National Lab (PNNL) carryover dollars that are not in the baseline.

**Impact:** There is no impact.

**Corrective Action:** A BCR will be written to bring the carryover dollars into the baseline.

## **TW06 VITRIFICATION FACILITY PHASE I**

**Description and Cause:** The unfavorable cost variance (-\$3.3M; -7.9%) is due to:

- Not receiving actual costs and re-accruals against FY 2000 contract work.
- Funds being allocated for RL national lab work scope but this scope has not been included in the baseline budget. Comparison of funds to actuals for the national lab work scope negates the cost variance.

**Impact:** There is no impact.

**Corrective Action:** None required.

## **TW08 VITRIFICATION FACILITY INFRASTRUCTURE**

**Description and Cause:** The favorable cost variance (\$3.1M; 44.8%) is due to:

- The cost to perform the scheduled work is less than budgeted for the fixed price construction contracts.
- Construction management and project management costs are also less than anticipated.

**Impact:** There is no impact.

**Corrective Action:** None required.

## **TW09 IMMOBILIZED WASTE STORAGE AND DISPOSAL**

**Description and Cause:** The favorable cost variance (\$.5M; 23.5%) is due to:

- ILAW Program ramping up Data Collection activities.
- In IHLW Interim Storage Facility, Project W-464, the Project Management, Configuration Management Plan, and RCRA Permitting services are costing less than anticipated.
- Costs are less than anticipated in Project W-520 due to use of concepts from other jobs.

**Impact:** There is no impact.

**Corrective Action:** None required.

## **TW10 RPP MANAGEMENT SUPPORT PROJECT**

**Description and Cause:** The favorable cost variance (\$7.4M; 29.0%) is due to:

- HEHF medical allocations are one month behind. In February, the methodology for distribution of costs will be modified retroactive to October 1, 2000.
- RPP Systems Engineering and Engineering Management identified work scope efficiencies.
- Vacant positions and staffing efficiencies in Construction Project Management, RPP Numatec Executive Office, Human Resources, General Counsel, Strategic Communication, Financial Control & Integration and Master Planning.
- Cost estimating labor and contract dollars for validation of estimates and independent review have not been used as budgeted.
- Site Wide and Shared Services FH costs for the last week in January are not included in the actuals. The costs that were received are running less than planned.

**Impact:** There is no impact.

**Corrective Action:** None required.