

Office of River Protection

Monthly
~~Quarterly~~ Tri-Party Agreement
Milestone Review Meeting
March 24, 2009



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

February 2009

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Agenda

Office of River Protection
 Tri-Party Agreement
 Manager Milestone Review Meeting
 2440 Stevens Center, Conference Room 1600
 March 24, 2009
 9:00 a.m. – 11:30 a.m.

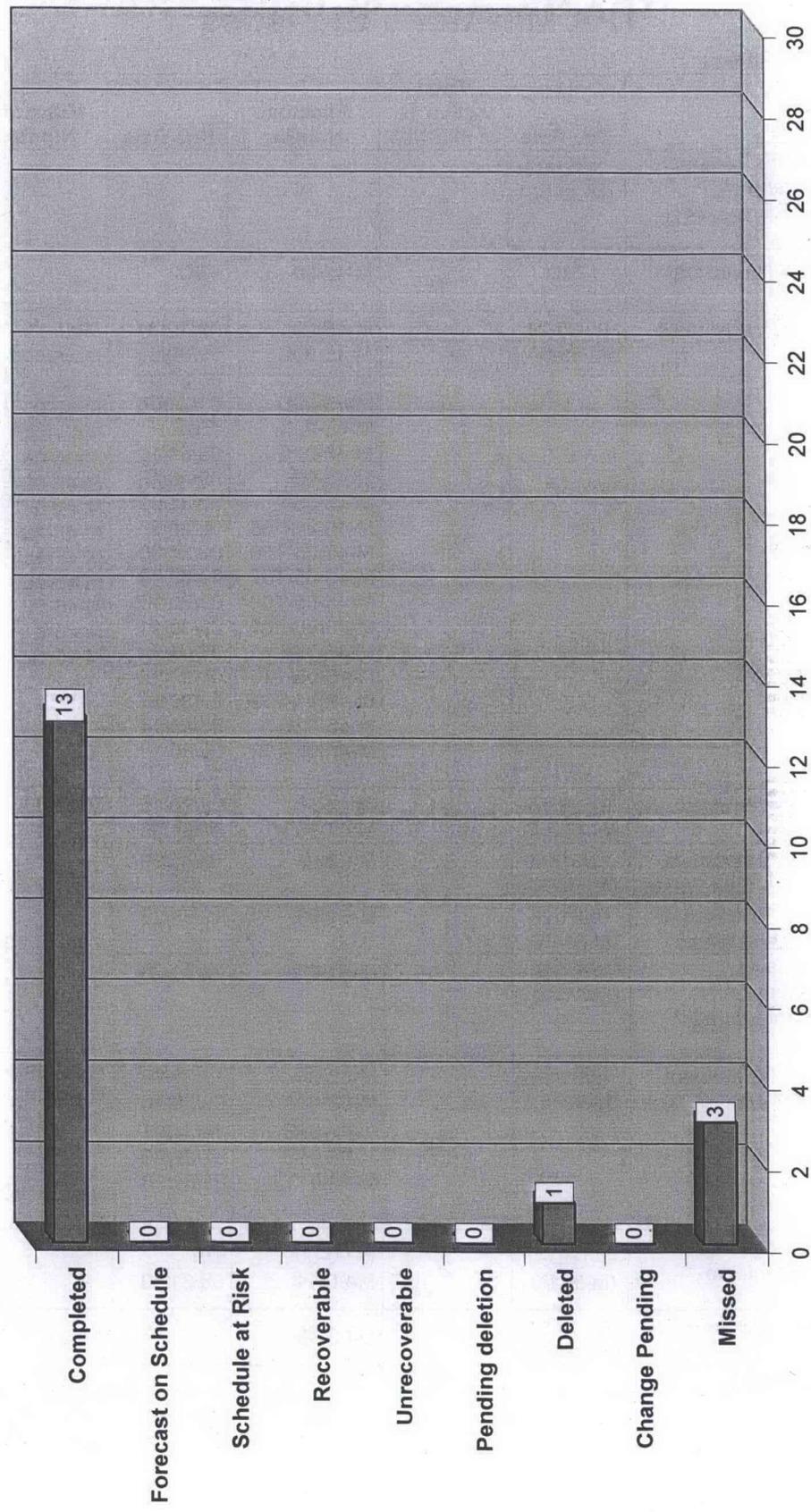
Page	Topic	Leads	Time
41	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober /Joe Caggiano	9:00
43	M-45-00, Complete Closure of All Single-Shell Tank Farms	Chris Kemp /Jeff Lyon	9:10
53	Interim Stabilization Consent Decree	John Long /Nancy Uziemblo	9:25
54	In Tank Characterization and Summary	John Long /Michael Barnes	9:35
55	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Ben Harp /Les Fort	9:40
57	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/Disposal of ILAW and M-20, Part B Permits	Ben Harp /Bud Derrick	9:45
58	M-62-08, M-62-11 Bulk Vitrification/ Supplemental Technologies	Ben Harp /Ed Fredenburg	9:50
	BREAK		
3	TPA Milestone Statistics	Woody Russell Ed Fredenburg /Jeff Lyon	9:55
21	FY 2009 ORP TPA Cost & Schedule Performance (CHG)	Janet Diediker Ed Fredenburg /Jeff Lyon	10:00
60	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bruce Nicoll /Pete Furlong /Wahed Abdul /Gary Olsen/ Fred Hidden /Ed Fredenburg	10:05

TPA Milestone Statistics

(Including target milestones)

Milestone	Due Date	Total Active as of 02/21/08	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	12/31/08 (M-20-00)	0				
M-42-00 , Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-45-00 , Complete Closure of all SST Farms	09/30/24 (M-45-00)	35	M-45-00 M-45-00B M-45-00C M-45-00D M-45-02 M-45-02O M-45-05 M-45-05A M-45-05-T05 M-45-05-T06 M-45-05-T07 M-45-05-T08 M-45-05-T09 M-45-02P M-45-05-T10 M-45-05-T11 M-45-02Q M-45-05-T12	09/30/24 09/30/06 09/30/06 01/31/08 TBD 03/01/10 09/30/18 03/31/07 09/30/07 09/30/08 09/30/09 09/30/10 09/30/11 03/01/12 09/30/12 09/30/13 03/01/14 09/30/14	M-45-05-T13 M-45-02R M-45-05-T14 M-45-05-T15 M45-02S M-45-06 M-45-06-T03 M-45-06-T04 M-45-13 M-45-15 M-45-56 M-45-59 M-45-61 M-45-62	09/30/15 03/01/16 09/30/16 09/30/17 03/01/18 09/30/24 03/31/12 03/31/14 06/30/11 06/30/11 TBD TBD 12/31/10 07/31/12
M-47-00 , Complete All Work for Phase 1 Operations	02/28/18 (M-47-00)	3	M-47-00 M-47-03A	02/28/18 03/31/09	M-47-06	06/30/10
M-50-00 , Complete Pretreatment Processing of Hanford Tank Waste	12/31/28 (M-50-00)	1	M-50-00	12/31/28		
M-51-00 , Complete Vitrification of Hanford High Level Tank Waste	12/31/28 (M-51-00)	1	M-51-00	12/31/28		
M-61-00* (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/28 (M-61-00)	1	M-61-00	12/31/28		
M-62-00 , Complete Pretreatment Processing and Vitrification of Tank Wastes	12/31/28 (M-62-00)	13	M-62-00 M-62-00A M-62-07B M-62-01S M-62-01T	12/31/28 02/28/18 12/31/07 07/31/09 01/31/10	M-62-08 M-62-09 M-62-01U M-62-01V M-62-10 M-62-01W M-62-11	06/30/06 02/28/09 07/31/10 01/31/11 01/31/11 07/31/11 06/30/07
M-90-00 , Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	2	M-90-00 M-90-11	TBD 08/31/10		
Interim Stabilization Consent Decree	09/30/04 (D-001-00)	1	D-001-00			
Total Active Milestones:		59				

FY 2006 MILESTONE PERFORMANCE



Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R26	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/05	10/31/05								
M-048-07A-A	Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service by October 31, 2005. This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-A.	10/31/05	10/24/05								
M-046-21	Complete Implementation Of Double Shell Tank Space Optimization Study Recommendations (Tank Space Options Report Document No. RPP-7702, April 12, 2001).	12/31/05	12/15/05								
M-062-01L	Submit Semi-Annual Project Compliance Report.	01/31/06	01/31/06								
M-045-02M	Submit biennial update to SST retrieval sequence document (agreement Appendix 1. Section 2.1.2), double-shell tank space evaluation document and Ecology concurrence of additional tank acquisition.	3/1/06	3/13/06								

Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-048-07A-B	Completion of construction for the 241-AP-106A central pump pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-B.	3/31/06	3/30/06								
M-048-14	Submit Written Integrity Report For The Double-Shell Tank System.	3/31/06	3/31/06								
M-047-05A	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).	4/30/06	12/29/04								
M-45-55-T04	Submit to Ecology for review and comment a draft Field Investigation Report combining the results of field investigations and analysis for WMAs A-AX, C and U. As part of the Phase 2 Vadose Zone project renegotiations being developed, this target milestone scope has been included in M-45-55 Phase 1 rollup documentation due in 1/08.	4/30/06								X	

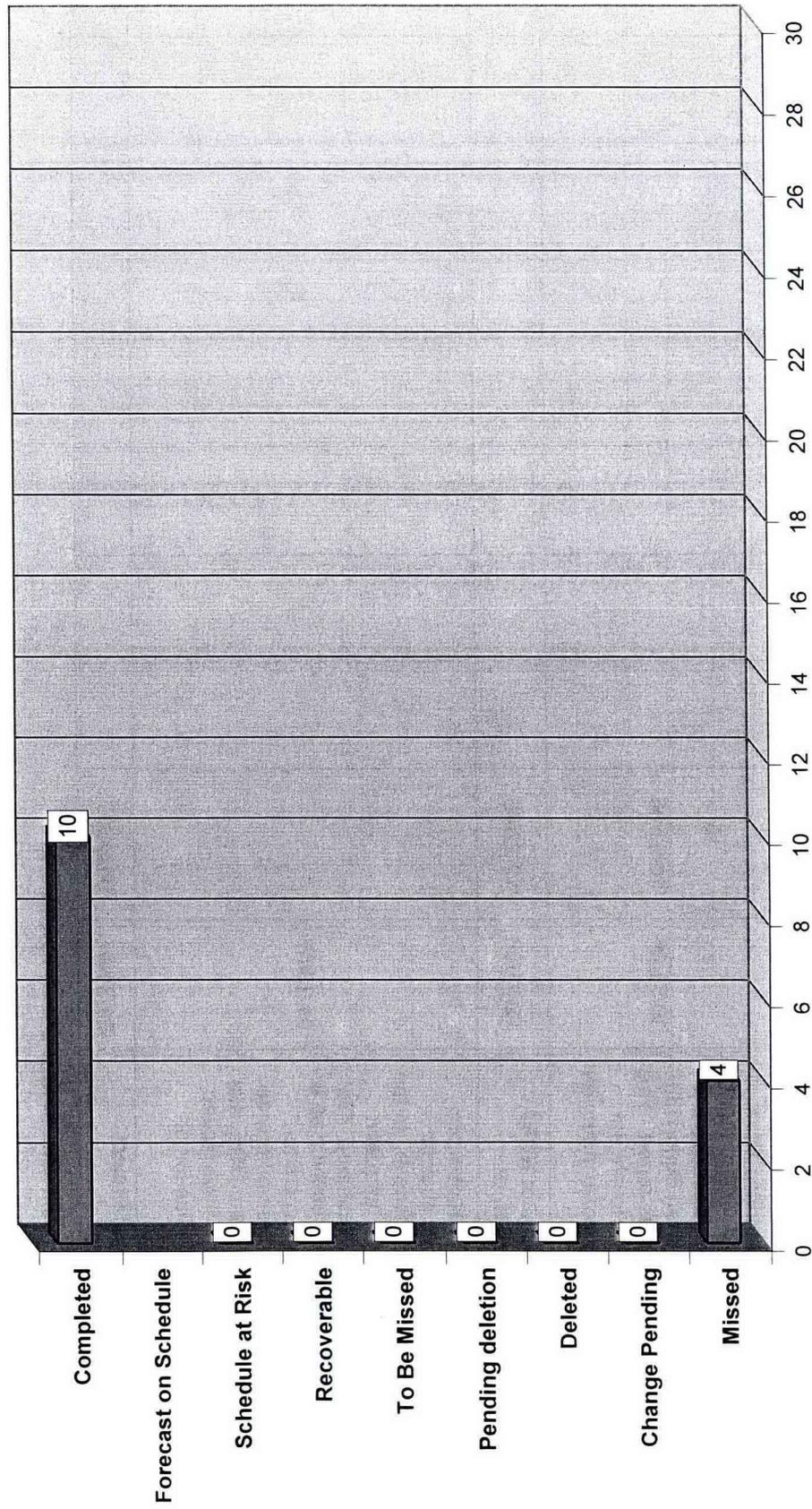
Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-048-07A	Complete construction of the AZ-301 condensate return system and pit upgrades. This includes: 1) Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service [see M 45-07A-A]; 2) Complete construction of AP-106A Central Pump upgrade [M-48-07A-B]; and 3) complete construction of SY-B Valve Pit upgrade [see M 48-07A-C].	06/30/06	06/08/06								
M-048-07A-C	Completion of construction for the 241-SY-B valve pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-C.	06/30/06	06/08/06								
M-048-07B	The Disposition of all Double-Shell Tank Transfer System Components that will not remain in use beyond June 30, 2005.	06/30/06	6/22/06								
M-062-08	Submittal Of Hanford Tank Waste Supplemental Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline, And Draft Negotiations Agreement In Principle (AIP).	06/3/06						X			

Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-56B	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/01/06	07/01/06								
M-062-01M	Submit Semi-Annual Project Compliance Report.	07/31/06	07/31/06								
M-045-00B	Complete specified "near term" SST waste retrieval and interim closure activities, to result in the retrieval of all tank wastes in WMA-C SSTs pursuant to the agreement criteria in milestone M-45-00.	09/30/06						X			
M-045-00C	Initiate negotiation of SST waste retrieval and closure activities and associated schedules (for the period February 07 through August 08).	09/30/06						X			

FY 2007 MILESTONE PERFORMANCE



Fiscal Year 2007 Tri-Party Agreement Milestone Status											
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R30	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/06	10/31/06								
M-062-03	Submit DOE Petition for RCRA Delisting of Vitrified HLW.	12/31/06	12/22/06								
M-045-00C-A	Ecology and DOE negotiations under this milestone shall be completed within 120 days. In the event the parties do not reach agreement within timeframe, the negotiations will be resolved as a resolution of dispute via final determination. Unless otherwise agreed by Ecology and DOE, this final determination will be issued within 150 days of initiation of negotiations.	01/28/07						X			
M-062-01N	Submit Semi-Annual Project Compliance Report.	01/31/07	01/31/07								

Fiscal Year 2007 Tri-Party Agreement Milestone Status

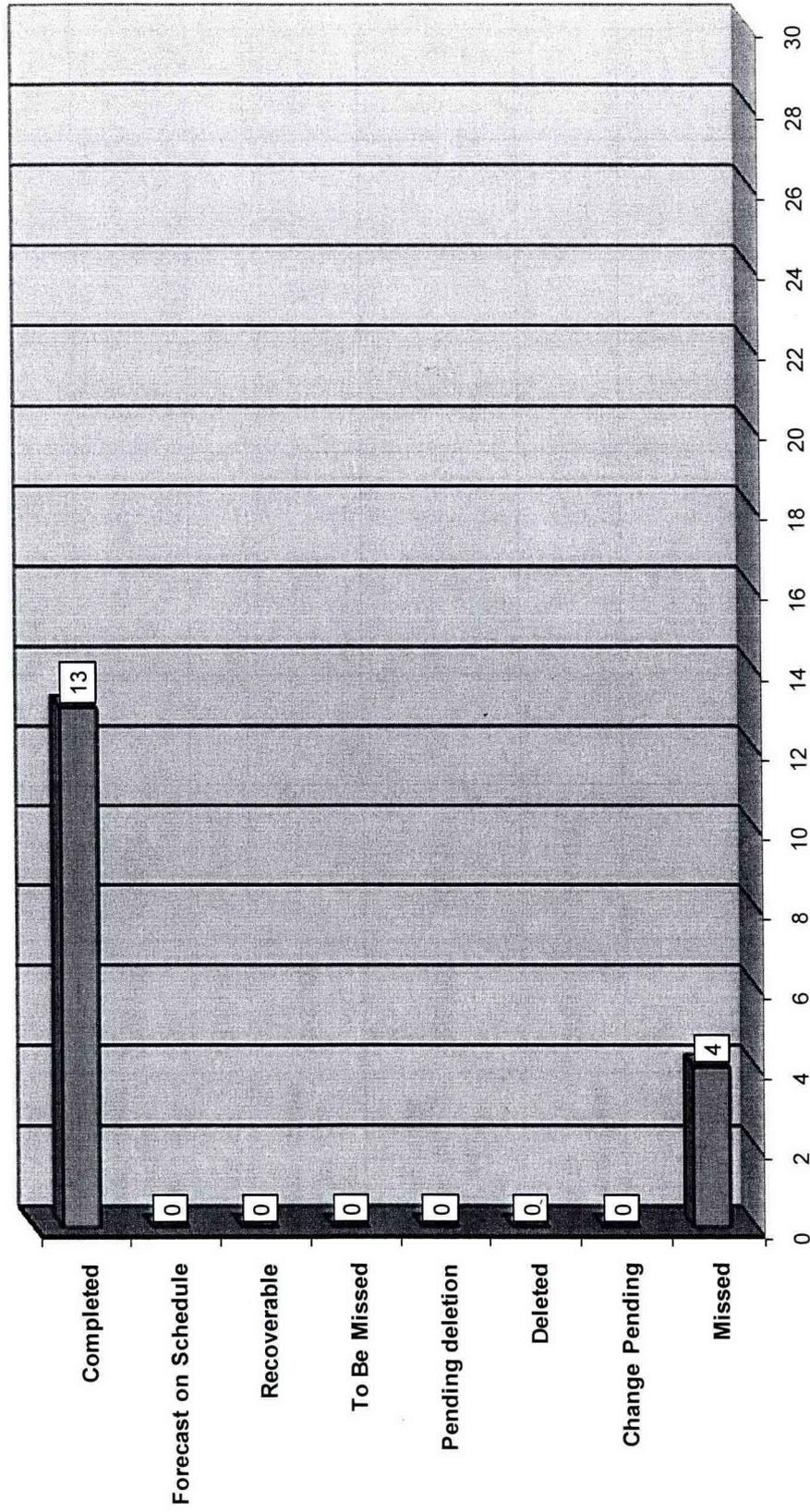
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R31	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/07	01/26/07								
M-045-05A	Complete Waste Retrieval from S-102.	3/31/07						X			
D-001-00-R32	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/07	04/27/07								
M-062-11	Submit a Final Hanford Tank Waste Treatment Baseline. Following completion of negotiations required by M-62-08, DOE will modify its draft baseline as required and submit its revised, agreed-to baseline for treating all Hanford Tank Waste (HLW, LAW, and TRU) by 12/31/2028.	06/30/07						X			

Fiscal Year 2007 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-56C	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/07	07/24/07								
D-001-00-R33	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/07	07/30/07								
M-062-01O	Submit Semi-Annual Project Compliance Report.	07/31/07	07/31/07								
M-048-15	Submit a report to Ecology for the re-examination of six (6) DSTs by ultrasonic testing in all areas previously examined to provide comparative data from which to calculate corrosion rates in each of the six DSTs examined.	09/30/07	09/26/07								
M-045-05-T05	Initiate tank retrieval from five additional single-shell tanks.	09/30/07						X			
M-048-00	Complete Tank Integrity Assessment activities for Hanford's Double Shell Tank (DST) system.	09/30/07	09/26/07								

* Milestone has been completed by ORP; Ecology has not yet concurred.

FY 2008 MILESTONE PERFORMANCE



Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R34	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/07	10/31/07								
M-045-13-A	Submit to Ecology a Retrieval Data Report for S-112 pursuant to Agreement Appendix I.	12/31/07	12/21/07								
M-045-13-B	Remaining waste has been adequately characterized, and a risk assessment completed for S-112 residuals that remain in the tank.	12/31/07	12/21/07								
M-062-07B	Complete Assembly of LAW Vittrification Facility melter #1 and complete move of #1 melter into the HLW Vittrification Facility	12/31/07						X			
M-062-01P	Submit Semi-Annual Project Compliance Report.	01/31/08	01/31/08								
M-045-55	Submit to Ecology a Phase 1 RFI report integrating results of data gathering activities and evaluations for all SST WMAs.	01/31/08	01/30/08								
D-001-00-R35	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/08	01/31/08								

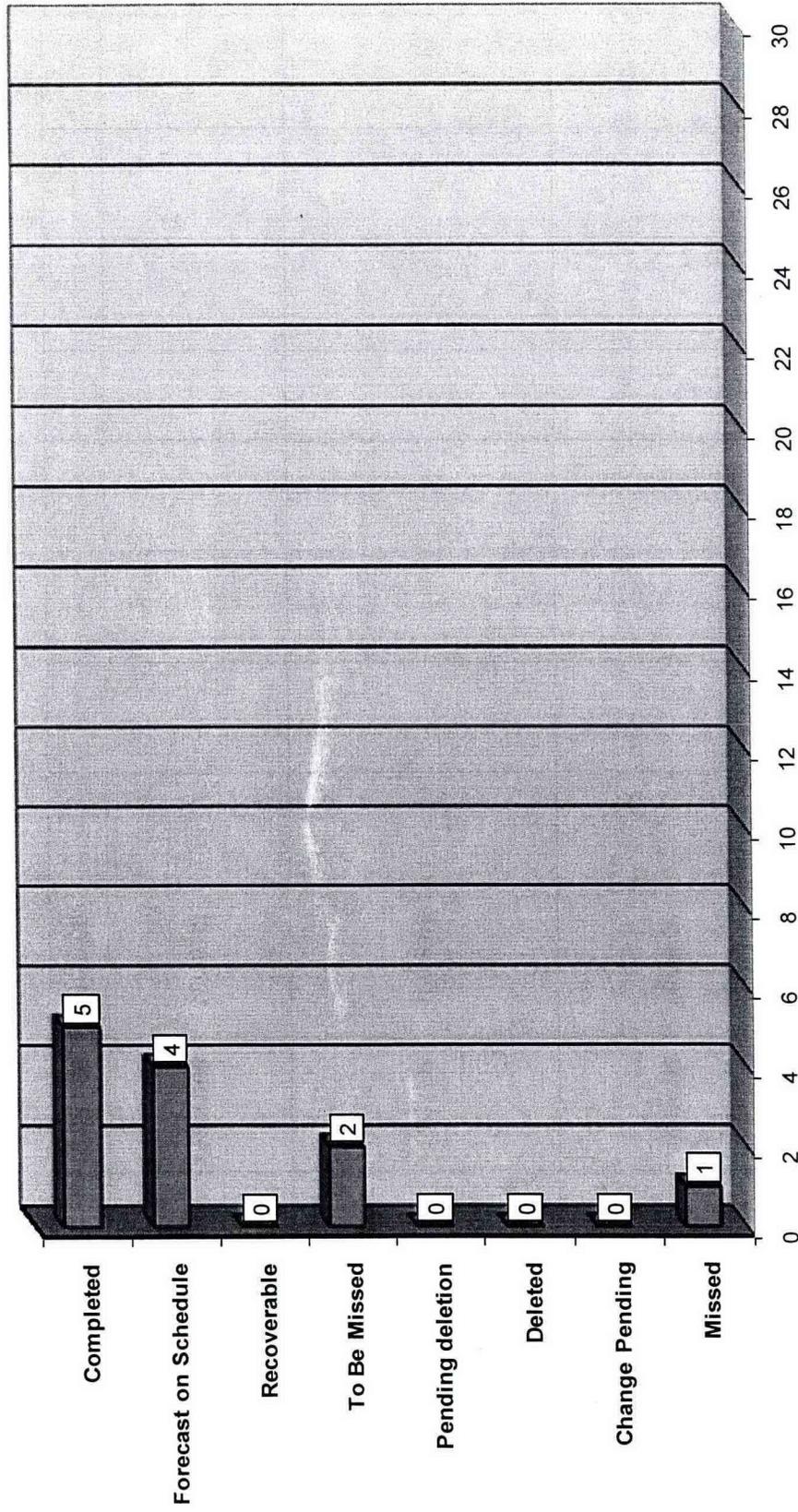
Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-00D	Initiate negotiations of SST waste retrieval and closure for 2008-2013.	01/31/08						X			
M-045-02N	Submit Biennial Update.	03/01/08	02/29/08								
M-045-02N-A	Three Parties shall meet to establish new milestones within 60 days, if required, for acquisition of additional tanks.	06/02/08	01/22/09								
D-001-00-R36	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/08	04/30/08								
M-045-00D-A	Negotiations shall be complete within 150 days.	06/29/08						X			
M-045-56D	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/08	07/22/08								
D-001-00-R37	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/08	07/31/08								

Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-062-01Q	Submit Semi-Annual Project Compliance Report.	07/31/08	07/30/08								
M-090-10	Ready to accept placement of ILAW in ILAW Disposal Facility.	08/31/08	02/13/07								
M-45-05-T06	Initiate tank retrieval from five additional SSTs.	09/30/08						X			

FY 2009 MILESTONE PERFORMANCE



Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R38	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/08	10/28/08								
M-045-58	Submit to Ecology for Review and Approval as an Agreement Primary Document Phase 2 Master Work Plan that describes the proposed approach for the completion of Corrective Action to meet final closure requirements in the Waste Management Areas as described in Appendix I, Section 2.3	12/31/08	12/18/08								
M-045-60	Submit to Ecology for review and approval as an agreement primary document, DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C.	12/31/08	12/18/08								
M-062-01R	Submit Semi-Annual Project Compliance Report	01/31/09	01/30/09								

Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R39	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/09	01/30/09								
M-062-09	Start Cold Commissioning – Waste Treatment Plant	02/28/09						X			
M-47-03A	Complete startup/turnover for waste retrieval mobilization systems for selected initial tank high-level waste feed tank	03/31/09					X				
D-001-00-R40	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/09		X							
M-045-56E	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/09		X							

Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R41	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/09		X							
M-062-01S	Submit Semi-Annual Project Compliance Report	07/31/09		X							
M-045-05-T07	Initiate tank retrieval from 7 additional SSTs	09/30/09					X				

Tank Farm Project Executive Summary

January Reporting

General

The earned value analysis is a comparison of cost and schedule performance to a one-year Interim Performance Measurement Baseline (IPMB). The one-year IPMB was developed as part of contract transition and is based on expected funding levels for fiscal year (FY) 2009. The earned value analysis is not intended to be a measurement of performance against existing Tri-Party Agreement Milestones.

The earned value performance reporting reflects the format, Work Breakdown Structure (WBS) reporting levels, and variance thresholds as agreed to with the Tank Farms Operations Contractor (TOC) for monthly performance reporting. Generally, performance is reported at WBS level 3 with the exception of WBS 5.01.01, Base Operations, and WBS 5.01.05, Project Support, wherein reporting is at level 4 to provide additional visibility and analysis.

The schedule and cost variance analysis thresholds at the reporting levels are as follows:

Current Month (CM) = +/- 10% and \$150K

Cumulative to Date (CTD) = +/- 10% and \$500K

PROJECT BASELINE PERFORMANCE STATUS

WRPS Project Performance - January (\$K)										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	16,623.0	16,836.8	15,210.0	213.8	1,626.8	1.01	1.11			
CTD	64,671.8	63,467.6	59,840.9	-1,204.3	3,626.7	0.98	1.06	228,932.7	230,186.9	-1,254.2

The prime contributors to the unfavorable CTD SV of \$1,204.3K are primarily due to:

C-104 Retrieval delays in removing water from 04B-Pit, the awarding of procurement/construction contracts, and technical issues relating to the engineering standards for pumps, and C-Farm Infrastructure as resources were focused on C-110 Retrieval Operations.

The SV was partially offset by acceleration and completion of C-110 construction activities to support restart of Retrieval Operations and both the Equipment Shuffle for the AY-102 Corrosion Probe and fabrication of the AY-

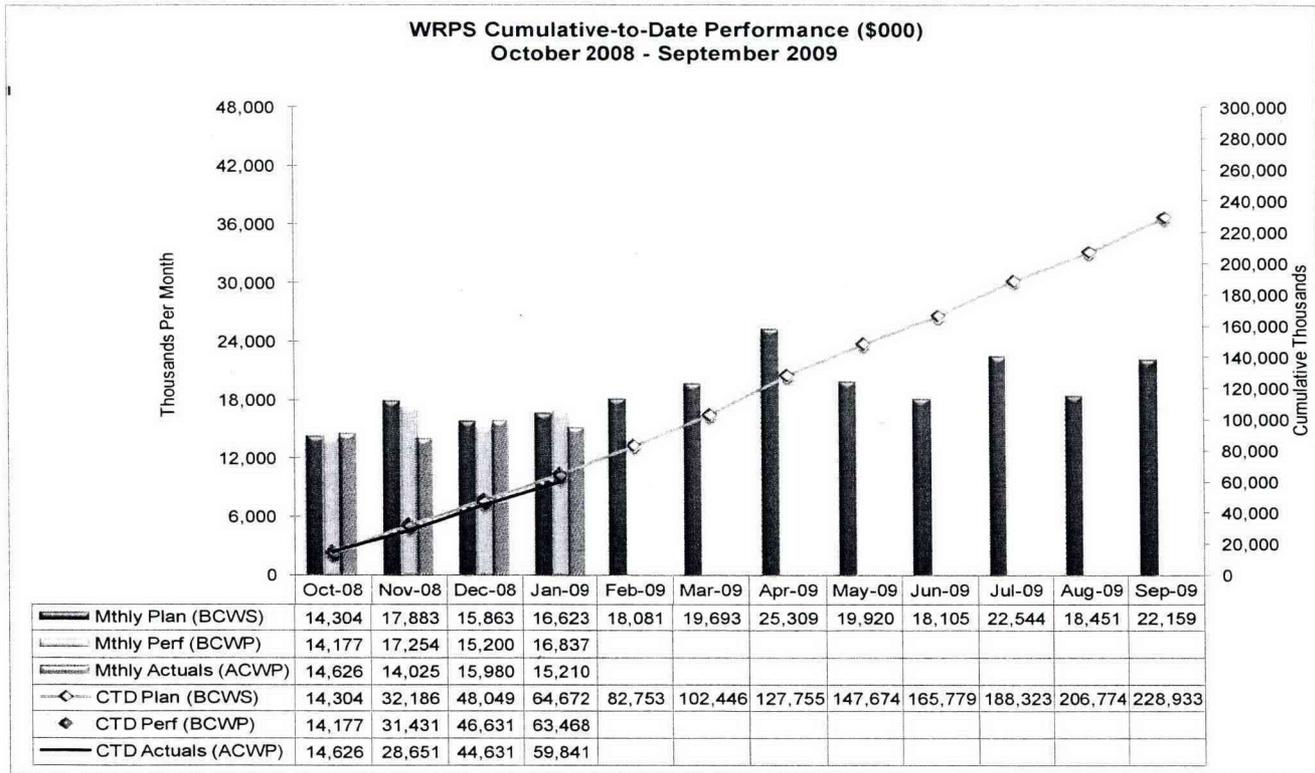
102 Corrosion Probe which were initiated ahead of the May 2009 start date. In addition DST Integrity activities for performing the AW-101 UT Examination were initiated ahead of the April 2009 start date.

The primary contributors to the favorable CTD CV of \$3,626.7K are:

Underruns and efficiencies in Waste Feed Delivery Program, Business Services, ESH&Q and Workforce Resources related to performing with less than planned staffs, administrative expenses, tax and liability, training, and occupancy costs.

The CTD CV is partially offset by unplanned costs for C-110 Retrieval.

The CM and CTD earned value performance data is shown on the graph below.



CURRENT MONTH PERFORMANCE MEASUREMENT - 01/2009
BY WORK BREAKDOWN STRUCTURE
Dollars in Thousands

WBS	TITLE	Current Month						
		Budgeted Cost			Variance			
		Work Scheduled	Work Performed	Actual Cost Work Performed	Schedule	SV %	Cost	CV %
5.1	BASE OPERATIONS							
5.1.1	Base Operations	4,720.1	5,311.3	4,806.5	591.2	12.5%	504.8	9.5%
5.1.2	DST Space Management	394.7	482.2	519.6	87.5	22.2%	(37.4)	-7.8%
5.1.3	TOC Facility Operations	1,558.2	1,487.9	1,247.8	(70.3)	-4.5%	240.1	16.1%
5.1.4	Tank Farm Upgrades	-315.5	219.7	136.8	535.3	-169.7%	83.0	37.8%
5.1.5	Project Support	<u>5,883.4</u>	<u>5,869.0</u>	<u>4,895.5</u>	<u>(14.3)</u>	<u>-0.2%</u>	<u>973.5</u>	<u>16.6%</u>
	TOTAL	<u>12,240.9</u>	<u>13,370.1</u>	<u>11,606.2</u>	<u>1,129.4</u>	<u>9.2%</u>	<u>1,764.0</u>	<u>13.2%</u>
5.2	RETRIEVE AND CLOSE SSTs							
5.2.1	Retrieval/Closure Program	1,687.8	1,554.5	1,308.6	(133.3)	-7.9%	245.9	15.8%
5.2.2	SST Retrieval East Area	1,858.0	1,143.4	1,640.5	(714.6)	-38.5%	(497.1)	-43.5%
5.2.3	SST Retrieval West Area	15.9	9.3	18.3	(6.6)	-41.5%	(9.1)	-97.8%
5.2.4	Closure Program	103.5	99.7	48.1	(3.8)	-3.7%	51.7	51.9%
5.2.5	SST Closure	<u>76.2</u>	<u>42.0</u>	<u>28.3</u>	<u>(34.2)</u>	<u>-44.9%</u>	<u>13.6</u>	<u>32.4%</u>
	TOTAL	<u>3,741.4</u>	<u>2,848.9</u>	<u>3,043.8</u>	<u>(892.5)</u>	<u>-23.9%</u>	<u>(195.0)</u>	<u>-6.8%</u>
5.3	WFD/TREATMENT PLNG/DST RETRIEVAL/CLOSURE							
5.3.1	WTP Feed Delivery Program	512.6	489.7	399.6	(22.9)	-4.5%	90.1	18.4%
5.3.2	Construct DST Retrieval Systems	78.1	78.1	79.7	(0.0)	0.0%	(1.6)	-2.0%
5.3.6	Immobilization Program	<u>50.0</u>	<u>50.0</u>	<u>80.8</u>	<u>0.0</u>	<u>0.0%</u>	<u>(30.6)</u>	<u>-61.2%</u>
	TOTAL	<u>640.7</u>	<u>617.8</u>	<u>560.1</u>	<u>(22.9)</u>	<u>-3.6%</u>	<u>57.9</u>	<u>9.4%</u>
TFC TOTAL		<u>16,623.0</u>	<u>16,836.8</u>	<u>15,210.0</u>	<u>213.8</u>	<u>-1.3%</u>	<u>1,626.8</u>	<u>9.7%</u>

CONTRACT-TO-DATE PERFORMANCE MEASUREMENT - 10/2008 - 01/2009

BY WORK BREAKDOWN STRUCTURE

Dollars in Thousands

		Cumulative Contract-To-Date							
WBS	TITLE	Budgeted Cost			Variance			Budget at Completion (BAC)	
		Work Scheduled	Work Performed	Actual Cost Work Performed	Schedule	SV%	Cost		CV%
5.1	BASE OPERATIONS								
5.1.1	Base Operations	19,248.9	20,124.7	20,240.0	875.8	4.5%	-115.3	-0.6%	65,684.5
5.1.2	DST Space Management	1,684.0	1,495.9	1,814.1	(188.1)	-11.2%	-318.2	-21.3%	4,970.1
5.1.3	TOC Facility Operations	6,028.2	5,928.7	5,147.7	(99.5)	-1.7%	781.0	13.2%	19,567.9
5.1.4	Tank Farm Upgrades	657.8	505.4	343.3	(152.4)	-23.2%	162.1	32.1%	3,280.9
5.1.5	Project Support	<u>23,963.8</u>	<u>23,942.7</u>	<u>20,340.3</u>	<u>(21.1)</u>	-0.1%	<u>3,602.4</u>	15.0%	<u>76,140.7</u>
	TOTAL	<u>51,582.7</u>	<u>51,997.4</u>	<u>47,885.4</u>	<u>414.7</u>	<u>0.8%</u>	<u>4,112.0</u>	<u>7.9%</u>	<u>169,644.1</u>
5.2	RETRIEVE AND CLOSE SSTs								
5.2.1	Retrieval/Closure Program	5,453.6	4,954.2	5,001.6	(499.4)	-9.2%	-47.4	-1.0%	24,916.0
5.2.2	SST Retrieval East Area	4,329.7	3,399.6	4,790.5	(930.1)	-21.5%	-1,390.9	-40.9%	22,298.1
5.2.3	SST Retrieval West Area	50.7	52.4	60.1	1.7	3.4%	-7.7	-14.7%	137.3
5.2.4	Closure Program	471.6	427.8	178.0	(43.8)	-9.3%	249.8	58.4%	1,403.5
5.2.5	SST Closure	<u>286.9</u>	<u>155.3</u>	<u>65.5</u>	<u>(131.6)</u>	-45.9%	<u>89.8</u>	57.8%	<u>1,619.7</u>
	TOTAL	<u>10,592.5</u>	<u>8,989.3</u>	<u>10,095.7</u>	<u>(1,603.2)</u>	<u>-15.1%</u>	<u>-1,106.4</u>	<u>-12.3%</u>	<u>50,374.6</u>
5.3	WFD/TREATMENT PLNG/DST RETRIEVAL/CLOSURE								
5.3.1	WTP Feed Delivery Program	1,970.8	1,955.2	1,451.4	(15.6)	-0.8%	503.8	25.8%	7,159.6
5.3.2	Construct DST Retrieval Systems	320.5	320.5	203.9	0.0	0.0%	116.6	36.4%	1,091.0
5.3.6	Immobilization Program	<u>205.3</u>	<u>205.4</u>	<u>204.4</u>	<u>0.1</u>	0.0%	<u>1.0</u>	0.5%	<u>663.4</u>
	TOTAL	<u>2,496.6</u>	<u>2,481.1</u>	<u>1,859.7</u>	<u>(15.5)</u>	<u>-0.6%</u>	<u>621.4</u>	<u>25.0%</u>	<u>8,914.0</u>
TFC TOTAL		64,671.8	63,467.7	59,840.9	(1,204.1)	-1.9%	3,626.8	5.7%	228,932.7

5.01.01-BASE OPERATIONS

WBS 5.01.01.02 –TSR/Surveillance & Maintenance

This WBS element includes (1) Waste Feed Operations Safe Storage Surveillance and Monitoring activities for DST operations monitoring and response activities necessary to satisfy TSRs; (2) DST TSR/Basic Maintenance activities necessary to maintain DST Farms and the 242-A Evaporator; (3) DST Control Spare Parts, Materials and Tools; (4) Waste Feed Operations DST radiological surveys.

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	3,152.5	3,152.5	3,025.3	0.0	127.2	1.00	1.04	
CTD	13,010.5	12,942.3	13,852.2	-68.2	-909.9	0.99	0.93	41,882.3

Schedule and Cost Variance Analysis

The CM schedule and cost variances and the CTD schedule variance are within the reporting thresholds.

The CTD cost variance of -\$909.9K is due to:

Description/Cause: Expending more labor than planned to perform the DST and SST TSR/Basic Maintenance activities.

Impact: The DST & SST TSR/Basic Maintenance accounts are projected to be overrun at fiscal year-end but will be offset by efficiencies in other Base Operation areas.

Corrective Action: Monitor labor charging practices and maintain overtime at minimum levels.

5.01.01 –BASE OPERATIONS – CONTINUED**WBS 5.01.01.05 – Tank Chemistry and Integrity**

This WBS element includes activities necessary to ensure that the waste within the DSTs complies with the chemistry control limits of Administrative Control (AC) 5.16, "Corrosion Mitigation Controls," of the HNF-SD-WM-TSR-006, Tank Farm Technical Safety Requirements. Activities are based on periodic assessments of the hydroxide and nitrite ion waste concentrations as part of the DST Chemistry Control Program, including engineering support; laboratory testing and analysis; DST chemistry and thermodynamic mixing modeling; DST chemistry optimization studies and corrosion expert panel support; development, testing, and deployment of new DST corrosion monitoring systems. Other activities include the DST Integrity Project to maintain and improve the longevity of the DST systems and SST Integrity Project.

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	462.3	1,070.5	833.8	608.2	236.7	2.32	1.28	
CTD	1,461.2	2,465.8	2,264.3	1,004.6	201.5	1.69	1.09	7,730.7

Schedule and Cost Variance Analysis

The CTD cost variance is within the reporting thresholds.

The CM schedule variance of \$608.2K is reportable:

Description/Cause: The CM favorable schedule variance is due to: 1) the Equipment Shuffle for the AY-102 Corrosion Probe work was initiated ahead of the May 2009 start date; 2) performed the AW-101 UT Examination ahead of April 2009 schedule date.

Impact: None.

Corrective Action: None required.

The CM cost variance of \$236.7K is reportable:

Description/Cause: The CM favorable cost variance is due to: 1) labor efficiencies during the early performance of the Equipment Shuffle for the AY-102 Corrosion; 2) AW-101 Ultrasonic Testing (UT) Examination Data Collection efficiencies for conducting "long scans".

Impact: None.

Corrective Action: None required.

WBS 5.01.01.05 – Tank Chemistry and Integrity (continued)

The CTD schedule variance of \$1,004.6K is reportable:

Description/Cause: The CTD favorable schedule variance is due to 1)the Equipment Shuffle for the AY-102 Corrosion Probe work was initiated ahead of the May 2009 start date and the AY-102 Corrosion Probe fabrication is ahead of schedule ; and 2) the AW-101 UT Examination was initiated ahead of April 2009 schedule date .

Impact: None

Corrective Action: None required.

5.01.03 – TOC FACILITY OPERATIONS

This work scope provides for the 222S Management, Analytical Process Development, Operations, Engineering, Maintenance, ESH&Q, Nuclear Safety, Radiological Controls, Laboratory Support Services, and Waste Handling necessary to operate the 222S Laboratory.

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	1,558.2	1,487.9	1,247.8	-70.3	240.1	0.95	1.19	
CTD	6,028.2	5,928.7	5,147.7	-99.5	781.0	0.98	1.15	19,567.9

Schedule and Cost Variance Analysis

The CM and CTD schedule variance is within reporting thresholds.

The CM cost variance of \$240.1K is reportable:

Description/Cause: The CM cost variance is primarily due to less than planned support from FH for corrective and preventative maintenance including material procurements and contractor design and calculation support. Attrition (electrical engineer and a QA engineer) is contributing to the current month positive cost variance.

Impact: None.

Corrective Action: Electrical engineer and a QA engineer will be filled.

The CTD cost variance of \$781.0K is reportable:

Description/Cause: The CTD cost variance is due to the procurement of analytical equipment (Mercury Analyzers, Ion Chromatography, and Multi-potentiostat chassis) and annual renewal of analytical equipment service agreements will be performed later in the fiscal year than planned.

Impact: None.

Corrective Action: None required.

5.01.04 – TANK FARM UPGRADES

This scope includes special administrative projects and field projects. Administrative projects include RPP planning and integration, Defense Nuclear Facilities Safety Board (DNFSB) liaison interaction, work force realignment and restructuring, and the Senior Safety Review Board. Field projects include completion of the Tank Farms Documented Safety Analysis (DSA) and implementation, Standard Hydrogen Monitoring System (SHMS) program, budget accounts for 242-A evaporator upgrades, and DST life extension projects.

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	-315.5	219.7	136.8	535.3	83.0	-0.70	1.61	
CTD	657.8	505.4	343.3	-152.4	162.0	0.77	1.47	3,280.9

Schedule and Cost Variance Analysis

The CM cost variance and the CTD schedule and cost variances are within the reporting threshold.

The CM schedule variance of \$535.3K is reportable:

Description/Cause: The CM favorable schedule variance is due to correcting the logic tie that was inadvertently omitted in which held out the AW-B Pit Work until after the FY09 Evaporator Campaigns are completed.

Impact: None

Corrective Action: None

5.01.05– PROJECT SUPPORT

WBS 5.01.05.02 – Environmental, Safety, Health and Quality Assurance (QA)

This function (1) provides management, oversight, and administration to the ESH&Q Assurance Functional Organization; (2) sets policy, establishes work objectives, and interfaces with TOC senior management; and (3) respond to requests from the Tank Farms line and support organizations to handle emergent work issues pertaining to environmental protection, industrial safety, environmental health, quality assurance (QA), radiation protection, event reporting, security, and emergency operations. Other activities include verification that regulatory compliance and best management practices are achieved. This element also provides Environmental Management (EM) core infrastructure for the TOC and environmental services to operations. General TOC environmental strategies, regulatory analyses, negotiations, permitting, and compliance oversight not specifically included in other WBS elements are part of this work scope.

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	1,127.6	1,126.0	1,020.2	-1.6	105.8	1.00	1.10	
CTD	4,556.7	4,555.2	3,985.1	-1.6	570.0	1.00	1.14	14,526.1

Schedule and Cost Variance Analysis

The CM schedule and cost variance and the CTD schedule variance are within the reporting thresholds.

The CTD cost variance of \$570.0K is reportable:

Description/Cause: The favorable CTD cost variance is primarily due to: 1) QA personnel are supporting projects and field activities delaying Program scope; 2) performing Environmental and Radiation Protection work with less staff than planned and an overall delay in placing contracts.

Impact: None.

Corrective Action: Increasing staff to planned levels.

5.01.05 – PROJECT SUPPORT – CONTINUED**WBS 5.01.05.05 – Workforce Resources**

This function serves as the central organization to provide Human Resources services in the areas of Staffing, Recruiting, and Workforce Restructuring; Compensation and Benefit Administration; Personnel Records; Diversity; Employee Relations; Employee Concerns; Human Resource Development to include Human Performance Improvement; and Labor Relations.

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	586.1	586.1	660.4	0.0	-74.4	1.00	0.89	
CTD	2,406.0	2,406.0	1,853.4	0.0	552.6	1.00	1.30	8,875.2

Schedule and Cost Variance Analysis

The CM schedule and cost variances and the CTD schedule variance are within the reporting thresholds.

The CTD cost variance of \$552.6K is reportable:

Description/Cause: The favorable cost variance is the result of training class attendance through January being below planned levels, resulting in lower subcontracted tuition charges in this WBS. In addition, the Collective Bargaining Agreement (CBA) negotiations occurring less frequently than projected.

Impact: None.

Corrective Action: None. Actual training class attendance is projected to increase throughout the fiscal year and this cumulative under run, resulting from lower subcontracted tuition charges, will begin to diminish. Costs related to the negotiations of the CBA should increase as more frequent negotiating sessions occur.

5.01.05 – PROJECT SUPPORT – CONTINUED

WBS 5.01.05.06 – Business Services

This element includes the management of (1) Procurement and Contracts to ensure that the TOC contracts and procurement functions are planned, budgeted, and controlled; (2) Chief Financial Officer, the Controller, to provide full range of financial services including accounts payable, accounts receivable, general accounting, general ledger, funds control, and (3) Information Resources Management for computer-related technologies, systems, applications, data and information capabilities support.

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	1,715.3	1,715.3	793.1	0.0	922.2	1.00	2.16	
CTD	6,972.8	6,972.8	5,372.4	0.0	1,600.4	1.00	1.30	20,608.5

Schedule and Cost Variance Analysis

The CM schedule variance and the CTD schedule variance are within the reporting thresholds.

The CM cost variance of \$922.2K is reportable:

Description/Cause: The favorable cost variance is driven by: 1) Information Resource Management related to the lack of costs from LMIT for January charges for Desktop Support and Computer Hardware purchases; 2) B&O Tax reversal. The baseline projected a \$90K charge in January for B&O Taxes, and the reversal was for -\$175K, which generated a net \$265K positive cost variance; 3) Under run in labor and occupancy and DOE contracts costs not received .

Impact: Any additional impact will depend on Washington State Department of Revenue's ruling on WRPS tax status.

Corrective Action: Closely monitor LMIT billings and accruals to ensure all contracts have been appropriately charged for the month. Continue to monitor the B&O Tax issue for the Washington State Department of Revenue ruling.

The CTD cost variance of \$1,600.4K is reportable:

Description/Cause: The favorable cost variance is due to: 1) performing work with less staff than planned; 2) miscellaneous Administrative Expenses less than planned; 3) Hanford Pension Fund (due to retiring medical claims being paid as incurred and less than planned); 4) occupancy costs not received; and 5) LMIT costs not incurred.

Impact: Any additional impact will depend on Washington State Department of Revenue's ruling on WRPS tax status.

Corrective Action: Continue to monitor the B&O Tax issue.

5.02.01 – RETRIEVAL/CLOSURE PROGRAM

This work element provides support to the Retrieval and Closure projects that will retrieve waste from the tanks and close tank farm facilities. This work element also develops the common technology platforms and systems used by the retrieval and closure projects that include the new Mobile Retrieval System (MRS) development and Leak Detection Monitoring and Mitigation (LDMM) technology development. Finally, this work element includes the retrieval, deactivation, and/or closure of non-tank SST and DST facilities and inactive waste sites, including: (1) SST retrieval demonstration documentation, and procurement and testing of the MRS; (2) National Environmental Policy Act (NEPA), closure, and permitting documentation including the NEPA Environmental Impact Statement (EIS), Resource Conservation and Recovery Act (RCRA) closure plan updates, DOE O 435.1 documentation, and air permit applications; (3) Retrieval and closure technology development; (4) Cold Test Facility (CTF) management and maintenance; (5) Vadose zone investigations and risk assessments; (6) Engineering, design, construction and procurement, startup, testing, and turnover to operations of waste receiver facilities supporting SST retrieval; (7) Inactive waste site surveillance, maintenance, and management; and (8) Isolation of the 244-CR vault and disposition of hose-in-hose transfer line (HIHTL).

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	1,687.8	1,554.5	1,308.6	-133.3	245.9	0.92	1.19	
CTD	5,453.6	4,954.2	5,001.6	-499.4	-47.5	0.91	0.99	24,916.0

Schedule and Cost Variance Analysis

The CTD cost variance is within the reporting thresholds.

The CM schedule variance of \$133K is reportable:

Description/Cause: The primary contributors to the unfavorable schedule variance are Retrieval Technology Development and Surface Geophysical Exploration. These were partially offset by favorable variances in Direct Push and Other Characterization. Technology activities are performing at levels below the current baseline, and Surface Geophysical Exploration work-scope was impacted by a shift in baseline activities.

Impact: None. Technology work-scope is planned to recover the current variance by March month-end, and Surface Geophysical Exploration will recover by the end of June, 2009. No other long term impacts are anticipated.

Corrective Action: No action required.

5.02.01 – RETRIEVAL/CLOSURE PROGRAM (continued)

The CM cost variance of \$246K is reportable:

Description/Cause: The favorable cost variance is due to Other Characterization and Hose in Hose Transfer Line (HIHTL) Disposition primarily due to less resources than planned.

Impact: None

Corrective Action: None.

The CTD schedule variance of -\$499K is reportable:

Description/Cause: The unfavorable CTD schedule variance is due to current work plans utilized in Retrieval Technology Development. These plans forecast higher progress in the coming quarters.

Impact: Account will continue to report a negative schedule variance through February, 2009. Beginning in March performance earned value will increase resulting in a positive schedule variance in May and continuing for the remainder of the fiscal year.

Corrective Action: No action required.

5.02.02 – SST RETRIEVAL EAST AREA

The WBS element includes activities to retrieve waste from the 200 East SSTs. Retrieval activities include design, procurement, construction, startup, readiness, and operation of SST waste retrieval systems.

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	1,858.0	1,143.4	1,640.5	-714.6	-497.1	0.62	0.70	
CTD	4,329.7	3,399.6	4,790.5	-930.1	-1,390.9	0.79	0.71	22,298.1

Schedule and Cost Variance Analysis

There are no variances within the reporting thresholds.

The CM schedule variance of -\$714.6K is reportable:

Description/Cause: The primary drivers of the CM unfavorable cost variance were: 1) C-104 Retrieval relating to delays in removing water from the 04B-Pit, awarding of procurement and construction contracts, and technical issues related to the engineering standard for pumps. The variance is also influenced by resource priority being given to restarting C-110 Retrieval Operations but was offset by acceleration of C-110.

Impact: For C-104, delaying the water removal from the 04B-Pit postpones the removal of the failed Heel Jet Pump in Riser 13 (04B-Pit). This ultimately delays installation of the new Slurry Pump in Riser 13, and the final connection of HIHTL. Current schedules still support completion of AN-01A Pit modification to support C-104 Retrieval as planned.

Corrective Action: The corrective action for C-104 Retrieval is the 04B-Pit pumping system is currently being installed. Changes to Engineering Standards 22 & 25 are being expedited. The construction field activities have been resequenced to work A & C Pits prior to removal of the Heel Jet from B-Pit (simultaneous with water removal from B-Pit). The need for a C-Farm electrical outage in March is being coordinated with C-110 Retrieval operations. For C Farm Infrastructure, an electrical outage is planned for AN-Farm in March to allow for AN-01A Pit work and excavation activities supporting C-104 Retrieval. This will require suspending C-110 Retrieval operations. No corrective action for C-110 Retrieval.

The CM cost variance of -\$497.1 is reportable:

Description/Cause: The C-104 and C Farm Infrastructure unfavorable cost variance was primarily attributed to a Construction Subcontract over-run, somewhat attributed to the Safety Basis Change for B Pit Pumping which created 'down time', however some construction activities were started. Unplanned

costs incurred by Contract Action Log items, including but not limited to installation (and backfill) of steel plates for crane access in C Farm, fabrication of Zoller pump per draft ECN, move sluicers and support equipment to Ontermech, move control trailer and excavate, and some over time.

Impact: For C-104, although the monthly cost variance is negative, cost recovery will be realized in the spring, when construction completion activities are completed.

There is no impact for C Farm Infrastructure, variance will self correct as work is completed in both construction and engineering.

Corrective Action: None required.

The CTD schedule variance of -930.1K is reportable:

Description/Cause: Significant factors for the CTD schedule variance are due to C-104 Retrieval delays in removing water from the 04B-Pit, awarding of procurement and construction contracts, and technical issues related to the engineering standard for pumps. The variance is also influenced by resource priority being given to restarting C-110 Retrieval Operations.

The negative SV was partially offset by the acceleration and completion of C-110 construction activities to support restart of Retrieval Operations.

Impact: For C-104 Retrieval, delaying the water removal from the 04B-Pit postpones the removal of the failed Heel Jet Pump in Riser 13 (04B-Pit). This ultimately delays installation of the new Slurry Pump in Riser 13, and the final connection of HIHTL. For C-110 Retrieval, this allowed Retrieval Operations to restart ahead of schedule and help ensure completion of C-110 retrieval this fiscal year. C Farm Infrastructure, current schedules still support completion of AN-01A pit modification to support C-104 Retrieval as planned.

Corrective Action: 1) C-104, the 04B-Pit pumping system is currently being installed. Changes to Engineering Standards 22 & 25 are being expedited. The construction field activities have been re-sequenced to work A & C Pits prior to removal of the Heel Jet from B-Pit (simultaneous with water removal from B-Pit). The need for a C-Farm electrical outage in March is being coordinated with C-110 Retrieval operations. 2) C-110 Retrieval, none to report. 3) C Farm Infrastructure, an electrical outage is planned for AN-Farm in March to allow for AN-01A Pit work and excavation activities supporting C-104 Retrieval. This will require suspending C-110 Retrieval operations.

The CTD cost variance of -\$1,390.0K is reportable:

Description/Cause: Primary drivers for the unfavorable CTD cost variance are: 1) C-110 Retrieval due to higher labor resources than expected; 2) the Safety Basis Change for B Pit Pumping created 'down

time' during which some construction activities were started and 3) Contracts for design and engineering received a front load of costs due to receipt of design media.

Impact: None.

Corrective Action: None at this time.

5.03.01 – WTP FEED DELIVERY PROGRAM

This WBS element includes capital asset construction activities performed for Waste Feed Delivery (WFD) to the Waste Treatment Plant (WTP), Infrastructure Upgrades, Construction, and Acceptance Testing. Sub elements of this WBS include Program Management, Engineering/Modeling, Characterization, Retrieval and Transfer Management.

January 2009 (K\$)

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	512.6	489.7	399.6	-22.9	90.1	0.96	1.23	
CTD	1,970.8	1,955.2	1,451.4	-15.6	503.8	0.99	1.35	7,159.6

Schedule and Cost Variance Analysis

The CM schedule and cost variances and CTD schedule variance are within the reporting thresholds.

The CTD cost variance of \$503.8K is reportable:

Description/Cause: Key contributors to CTD cost variance are WTP Support Program Development and Tank Waste Database Management. WTP Support Program Development CV was due to labor under runs caused by staffing vacancies and contracts have not been awarded to support strategic initiatives after HTWO's runs are complete. Tank Waste Database Management CV was due to PNNL Database Management not being as intensive for this month to support the BBI Quality update and Tank Summary reports as planned. In addition Labor is under run due to staffing vacancies.

Impact: None required.

Corrective Action: Contracts will be awarded in February to supplement staff to support PMB Planning. And additional contracts are anticipated to be awarded in the April-May time frame to support WFD Strategic initiatives and to update the BBI "Free Hydroxides" and to develop a plan to transition the BBI database to an in house system.

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

I. Near-Term Deliverables:

- **M-45-56F, Complete Implementation of Agreed to Interim Measures**
Due: 07/31/09
Status: On Schedule.
- **M-45-58, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Master Work Plan that describes the proposed approach for the completion of Corrective Action to meet Final Closure Requirements in the Waste Management Areas as described in Appendix I, Section 2.3**
Due: 12/31/08
Status: Complete. Report transmitted by ORP/Richland Operations Office (RL) to Ecology on December 23, 2008. Awaiting Ecology comments.
- **M-45-60, Submit to Ecology for review and approval as an Agreement primary document DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C**
Due: 12/31/08
Status: Complete. Report transmitted by ORP/RL to Ecology on December 19, 2008. Awaiting Ecology comments.
- **M-45-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RCRA Facility Investigation/Corrective Measures Study Report for WMA C**
Due: 12/31/10
Status: At Risk. See issues below.
- **M-45-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Implementation Work Plan for WMA C**
Due: 7/31/12
Status: At Risk. See issues below.

II. Significant Accomplishments:

- T-Farm interim barrier monitoring continues.
- Completed spectral gamma data collection in T Farm to support barrier effectiveness evaluation on January 30; data analysis is on track to be completed in March 2009.

- Analysis of spectral gamma data collected in T Farm to support barrier effectiveness evaluation is on track to be completed in March 2009.
- Initiated direct push characterization in C Farm per the Phase 2 RFI/CMS work plan and SAP for WMA C.
- Initiated next phase of surface geophysical exploration in SX Farm.
- Initiated a process involving Ecology, EPA and other regulatory agencies to define the requirements, assumptions, methods and data that will be used to develop a performance assessment for WMA C.
- Completed field work, testing of surface geophysical exploration using deep electrodes in C Farm; preliminary results are encouraging.

III. Significant Planned Actions in the Next Six Months:

- Initiate direct push characterization in SX Farm in support of interim barrier.

IV. Issues

- The transmittal letter for M-45-50 (WMA C work plan and SAP) indicated that the scope of characterization activities identified in the plan could not be completed in time to support the currently scheduled dates for M-45-61 and M-45-62. Discussion of a change proposal will be initiated.
- There is no apparent maintenance plan for the ongoing maintenance of interim measures.

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

I. Deliverables

- **M-45-00, Complete Closure of all Single-Shell Tank Farms**
Due: 9/30/24
Status: To Be Missed (based on current DOE Baseline planning).

- **M-45-00B, Complete Specified "Near-Term" SST Waste Retrieval and Interim Closure Activities, to Result in the Retrieval of all Tank Wastes in WMA-C SSTs Pursuant to the Agreement Criteria in Milestone M-45-00**
Due: 9/30/06 (Or as otherwise indicated within the descriptive text of this milestone.)
Status: Missed.
 - Completion of four limits of technology retrieval demonstrations:
 - Saltcake dissolution (S-112): Completed (M-45-03C).
 - Modified sluicing (C-106): Completed.
 - Vacuum retrieval (C-200s): Completed; C-203 field retrieval operations completed on March 24, 2005; C-202 retrieval completed on August 11, 2005; C-201 retrieval completed on March 23, 2006; C-204 retrieval completed on December 11, 2006.
 - Mobile retrieval (C-101, C-105, or C-111): Not completed. C-101 start of retrieval is currently projected for FY 2011.

 - Implementation of full-scale leak detection monitoring and mitigation (LDMM) technologies for the first three 100-series tank retrievals following Tank S-112:
 - Tank S-102: High Resolution Resistivity System (HRR) installed; supporting retrieval operations.
 - Tank C-103: HRR demonstration complete.
 - Tank C-108: HRR installed; supporting retrieval operations.
 - Completed HRR injection tests at S-102.
 - Submitted HRR evaluation report and recommendation for further deployment.

 - Submittal of Tank Waste Retrieval Work Plans (TWRWP):
 - Tanks C-201, C-202, C-203, and C-204: Completed on April 8, 2004.
 - Two (2) 100-series tanks by July 31, 2004: Completed on July 29, 2004 (C-103 and C-109).
 - Four (4) 100-series tanks by 10/31/04: Completed on October 8, 2004 (C-102, C-104, C-107, C-108, and C-112).
 - Five (5) 100-series tanks by January 31, 2005: Completed on January 24, 2005 (C-101, C-105, C-110, and C-111).

- **M-45-00C, Initiate Negotiation of SST Waste Retrieval and Closure Activities and Associated Schedules (for the period February 2007 through August 2008)**
Due: 9/30/06
Status: Missed.
- **M-45-00D, Initiate Negotiation of the SST Waste Retrieval and Closure Activities (for the period September 2008 to September 2013)**
Due: 1/31/08
Status: Missed.
- **M-45-00D-A, Ecology and DOE Negotiations Shall Be Completed within 150 days.**
Due: 06/28/08
Status: Missed
- **M-45-00E, Initiate Negotiation of SST Waste Retrieval and Closure Activities for the Remainder of the SST Program**
Due: 10/31/12
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-00E-A, Ecology and DOE Negotiations Shall Be Completed within 120 Days.**
Due: 02/27/13
- **M-45-05, Retrieve Waste from all Remaining Single-Shell Tanks**
Due: 9/30/18
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-05-T05, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**
Due: 9/30/07
Status: Missed.
- **M-45-05-T06, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**
Due: 9/30/08
Status: Missed.
- **M-45-05-T07, Initiate Tank Retrieval from Seven Additional Single-Shell Tanks**
Due: 9/30/09
Status: To Be Missed (based on current DOE Baseline planning).

- **M-45-05-T08, Initiate Tank Retrieval from Eight Additional Single-Shell Tanks**
Due: 9/30/10
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-05-T09, Initiate Tank Retrieval from Ten Additional Single-Shell Tanks**
Due: 9/30/11
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-05-T10, Initiate Tank Retrieval from 12 Additional Single-Shell Tanks**
Due: 9/30/12
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-05-T11, Initiate Tank Retrieval from 14 Additional Single-Shell Tanks**
Due: 9/30/13
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-05-T12, Initiate Tank Retrieval from 17 Additional Single-Shell Tanks**
Due: 9/30/14
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-05-T13, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
Due: 9/30/15
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-05-T14, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
Due: 9/30/16
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-05-T15, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
Due: 9/30/17
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-06, Complete Closure of all Single-Shell Tank Farms in Accordance with Approved Closure/Post Closure Plan(s)**
Due: 9/30/24
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-06-T03, Initiate Closure Actions on a WMA Basis**
Due: 3/31/12
Status: To Be Missed (based on current DOE Baseline planning).
- **M-45-06-T04, Complete Closure Actions on one WMA**
Due: 3/31/14
Status: To Be Missed (based on current DOE Baseline planning).

II. Significant Accomplishments

- Retrieval was restarted on C-110 on January 22, 2009. Retrieval is approximately 80% to 85% complete.
- Initiated C-111 retrieval system design.

III. Significant Planned Activities in the Next Six Months

- Complete retrieval of Tank C-110.
- Continue design of retrieval system for Tank C-111.
- Complete construction activities at Tank C-104.

IV. Issues

- Milestones M-45-00B (retrieve all C Farm tanks), M-45-00C (initiate negotiations on SST retrievals for 2007-2008), and M-45-00D (initiate negotiations on SST retrievals for 2008-2013) were missed. TPA negotiations to address these and other milestones are ongoing.
- Ecology formally requested re-start dates for C-108, C-109, C-110, and S-102 in a letter dated October 13, 2008. Restart dates for these retrievals are in the process of being identified.

C-FARM RETRIEVAL SUMMARY SCHEDULE FORECASTS ^a

Tank	Final Design Drawings complete	Construction Complete	Process Control Plan Complete	Start Retrieval	Complete Retrieval	TSAP Complete	Retrieval Data Report or Appendix H to Ecology/EPA
C-101	TBD	TBD	TBD	TBD	TBD	TBD	TBD
C-102	1/14/11	10/13/11	12/9/12	1/9/12	11/20/12	10/20/12	11/18/13
C-103	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-104 ^c	4/16/09	5/22/09	4/16/09	7/22/09	3/10/10	2/10/10	2/1/11
C-105	5/2/12	6/5/13	7/30/13	8/30/13	3/6/14	2/6/14	12/4/14
C-106	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-107	3/21/14	12/19/14	2/26/15	3/26/15	12/18/15	11/18/15	4/26/17
C-108 ^d	Complete	Complete	Complete	Complete	TBD	TBD	TBD
C-109 ^{de}	Complete	Complete	Complete	Complete	TBD	TBD	TBD
C-110 ^{bc}	Complete	Complete	Complete	Complete	9/30/09	8/30/09	7/6/10
C-111	TBD	TBD	TBD	TBD	TBD	TBD	TBD
C-112	10/18/13	7/23/14	9/9/14	10/9/14	3/25/15	2/25/15	3/1/17
C-201	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-202	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-203	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-204	Complete	Complete	Complete	Complete	Complete	Complete	Complete

- a. Completion dates are based on the stated February month-end Integrated Mission Execution Schedule (IMES) as of 1/28/09 and are subject to change as efforts continue to identify and implement schedule efficiencies.
- b. Projected dates for C-110 are based on utilizing modified sluicing technology and availability of acceleration funding.
- c. Schedules are being updated for inclusion of S-102 corrective actions and compensatory measures.
- d. Sluicing was performed to the limits of the sluicing system technology.
- e. Hard Heel Retrieval using MRT complete to limits of technology, not achieving less than 360 cu ft residual, awaiting future retrieval path forward.
- f. NOTE: For all tanks with a "TBD" in a column, dates will be identified for those "TBDs" following development of the PMB. The PMB will be based on the system plan, which will be approved by Ecology.

SST RETRIEVAL SEQUENCE DOCUMENT

I. Deliverables

- **M-45-02N, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (see text of M-45-02N for further details)**
Due: 3/1/08 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: Complete.

- **M-45-02N-A, Embedded Milestone; Within 60 days of receiving the DST Space Evaluation Document, the Three Parties Shall meet to Establish New Milestones, If Required, for Acquisition of Additional Tanks**
Due: 06/02/08
Status: Complete. On May 15, 2008, Ecology transmitted comments on the M45-02N deliverable. On July 23, 2008, ORP transmitted letter 08-TF-049 to Ecology with a plan for responding to Ecology comments on and updating the Retrieval Sequence Document (RPP-21216). The revised document was submitted to Ecology on September 12, 2008, by letter 08-TF-062. Ecology approved the document on January 22, 2009, by letter 0900343.

- **M-45-02O, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (see text of M-45-02M for further details)**
Due: 3/1/10 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: On schedule. Ecology has requested the Parties meet to discuss the methodology and contents of the next biennial update.

- **M-45-02O-A, 3 Parties Shall Meet To Establish New Milestones Within 60 Days**
Due: 04/30/10
Status: On Schedule.

- **M-45-02P, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (see text of M-45-02M for further details)**
Due: 3/1/12 (Biennially thereafter. Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: On schedule.

- **M-45-02P-A, Embedded Milestone; Within 60 days of receiving the DST Space Evaluation Document, the Three Parties Shall meet to Establish New Milestones, If Required, for Acquisition of Additional Tanks**
Due: 4/30/12
Status: On schedule.
- **M-45-02Q, Submit Biennial Update to SST Retrieval Sequence Document**
Due: 03/01/14
Status: On Schedule
- **M-45-02Q-A, 3 Parties Shall Meet to Establish New Milestones Within 60 Days**
Due: 04/30/14
Status: On Schedule
- **M-045-02R, Submit Biennial Update to SST Retrieval Sequence Document**
Due: 03/01/16
Status: On Schedule
- **M-045-02R-A, 3 Parties Shall Meet to Establish New Milestones Within 60 Days**
Due: 04/30/16
Status: On Schedule
- **M-45-02S, Submit Biennial Update to SST Retrieval Sequence Document**
Due: 03/01/18
Status: On Schedule
- **M-45-02S-A, 3 Parties Shall Meet to Establish New Milestones Within 60 Days**
Due: 04/30/18
Status: On Schedule

II. Significant Accomplishments

- Ecology approved completion of M-45-02N on January 22, 2009.

III. Significant Planned Activities in the Next Six Months

- None.

IV. Issues

- None.

TANK RETRIEVALS WITH INDIVIDUAL MILESTONES

Tank 241-C-106

I. Deliverables

- **M-45-05M-T01, Submit C-106 Waste Retrieval Results, Analysis of Residual Waste(s), and (if appropriate) Request for Exception to the Criteria Pursuant to Agreement Appendix H**

Due: 2/27/04

Status: Complete.

II. Significant Accomplishments

- None.

III. Significant Planned Activities (PA) in the Next Six Months

- Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A Request for Additional Information (RAI) was received from the NRC in February 2009.
- Continue PA workshops with Ecology, EPA, NRC, and DOE HQ focused on residual waste in C Farm tanks and pipelines following retrieval.

IV. Issues

- C-106 Closure Plan approval and SST radiological Categorical Notice of Construction (NOC) Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement (EIS) and associated Record of Decision (ROD); forecast completion for the final EIS ROD is in 2010.

Tank 241-S-102

I. Deliverables

- **M-45-05A, Complete Waste Retrieval from Tank S-102**

Due: 3/31/07

Status: Missed. As a result of equipment failure on March 14, 2007, retrieval operations were suspended at Tank S-102 with retrieval approximately 91% complete and approximately 423,000 gallons total waste removed.

- **M-45-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**

Due: 6/30/11

Status: On Schedule. Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**
Due: 6/30/11
Status: On schedule.
- **M-45-15B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank**
Due: 6/30/11
Status: On schedule.
- **M-45-15C, Embedded Milestone, An update to the S-102 Component Closure Activity Plan has been submitted by DOE**
Due: 6/30/11
Status: On schedule.
- **M-45-15D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H**
Due: 6/30/11
Status: On schedule.

II. Significant Accomplishments

- None.

III. Significant Planned Activities in the Next Six Months

- None.

IV. Issues

- Retrieval of Tank 241-S-102 was not completed by TPA milestone date of March 31, 2007, due to pump failure.

Tank 241-S-112

I. Deliverables

- **M-45-03C, Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Single-Shell Tank S-112**
Due: 6/30/05
Status: Complete.
- **M-45-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**
Due: 6/30/11
Status: On Schedule. Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-13A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**

Due: 12/31/07

Status: Completed (ORP letter, 07-TPD-066, dated December 21, 2007). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-13B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank**

Due: 12/31/07

Status: Completed (ORP letter, 07-TPD-066, dated December 21, 2007). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-13C, Embedded Milestone, An update to the S-112 Component Closure Activity Plan has been submitted by DOE**

Due: 6/30/11

Status: On schedule.

- **M-45-13D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H**

Due: 6/30/11

Status: On schedule.

II. Significant Accomplishments

- Ecology letter of August 28, 2008, concurred with ORP that retrieval of Tank S-112 is complete.

III. Significant Planned Activities in the Next Six Months

- None.

IV. Issues

- None.

Interim Stabilization Consent Decree

I. Near-Term Deliverables:

D-001-00, Complete Interim Stabilization of all 29 SSTs

Due: 09/30/04

Status: Completed on March 31, 2004, with discontinuation of pumping in U-108 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 held in abeyance by third amendment to the Consent Decree. ORP's obligation to interim stabilize S-102 and S-112 will be satisfied upon completion of retrieval operations. Retrieval of S-102 has been impacted by the spill at this tank.

II. Significant Accomplishments:

- None.

III. Significant Planned Actions in the Next 6 Months:

- None.

IV. Issues

Tank S-102 retrieval not completed by milestone M-45-05A date of March 31, 2007.

In Tank Characterization and Summary

For the period from February 1 – January 28, 2009:

I. Accomplishments:

- Completed Tank 241-AN-106 grab sampling for mid C-110 retrieval on February 1, 2009
- Completed revision 6 of document, HNF-SD-WM-DQO-014 , *242-A Evaporator Data Quality Objectives* on February 25, 2009.
- Completed revision 14 of document HNF-SD-WM-DQO-001, *Data Quality Objectives for Tank Farms Waste Compatibility Program*, on February 19, 2009.
- Completed sampling plan RPP-PLAN-39967, *Grab Sampling and Analysis Plan for Liquids in the 244-CR Vault Cells*, on February 2, 2009.

II. Planned Action within the next Six Months:

- Tank Sampling
 - Tank 241-AZ-102 liquid grab samples scheduled for May 2009.
 - Tank 241-AP-107 liquid grab samples scheduled for May 2009.
 - Tank 241-AW-106 liquid grab samples scheduled for March 2009.
 - Tank 241-AN-106 liquid grab samples for pre caustic addition scheduled for March 2009.
 - 244-CR Vault 1, 2, and 3 grab samples scheduled for March 2009.
 - Tank 241-AY-101 liquid grab samples scheduled for July 2009.
 - Tank 241-AN-106 liquid grab samples for post caustic addition scheduled for April 2009.
 - 244-CR Vault 4 grab sample scheduled for April 2009.
 - Tank 241-C-108 solid samples for retrieval data schedule for May 2009.
- BBI Updates
 - Six tank updates are planned for the second quarter of FY 2009. One of the six has been completed and 4 are underway. They are scheduled to be completed and published by April 15, 2009.
- Data Quality Objectives (DQO)
 - Complete SST Component Closure DQO, Rev. 4 in March 2009.
 - Complete Evaporator DQO Rev. 7 in August 2009.

III. Issues:

- None.

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-47-03A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial high-level waste feed tank**
Due: 03/31/09
Status: Will Be Missed. Pending path forward with Ecology for renegotiation of new milestone commitments.

- **M-47-06, Complete negotiation of additional agreement requirements (milestones, target dates, and associated language) governing work necessary to support completion of treatment complex Phase I operations by 2018**
Due: 06/30/10
Status: Negotiations are not yet underway.

II. Significant Accomplishments:

- None.

III. Significant Planned Actions in the Next Six Months:

- None.

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

- None.

V. Issues:

- Nothing to report.

242-A Evaporator Status (previously reported under Milestone M-48, which has been closed out)

EVAPORATOR CAMPAIGNS

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY09	09-01	AP-101/AP-105	AP-104	Previously planned as 08-01, this campaign will be performed "back-to-back" with Campaign 09-02 in March/April 2009.
FY09	09-02	AP-101/AP-105	AP-104/ AP-101	Previously planned as 08-02, this campaign will be performed performed "back-tl-back" with Campaign 09-01 in March/April 2009.
FY10	10-01	AW-106	AP-104	Detailed planning for FY10 and outyear campaigns subject to retrieval activities and Tank Operations Contractor commitments and requirements. Forecast FY10 campaigns are based on preliminary planning associated with blending AZ-102.
FY10	10-02	AP-107	AP-104/ AP-107	Detailed planning for FY10 and outyear campaigns subject to retrieval activities and Tank Operations Contractor commitments and requirements. Forecast FY10 campaigns are based on preliminary planning associated with blending AZ-102.
FY10	10-03	AZ-102	AP-107	Detailed planning for FY10 and outyear campaigns subject to retrieval activities and Tank Operations Contractor commitments and requirements. Forecast FY10 campaigns are based on preliminary planning associated with blending AZ-102.

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-90-10, Ready to Accept Placement of ILAW Waste in ILAW Disposal Facility**

Due: 8/31/08

Status: Complete.

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

Due: 8/31/10

Status: To Be Missed. To be renegotiated to align with WTP schedule.

II. Significant Accomplishments:

- None to report.

III. Significant Planned Actions in the Next Six Months:

- None to report.

IV. Issues

- None to report.

Milestone M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes

I. Near-Term Deliverables:

- **M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes**
Due: 12/31/2028
Status: To Be Missed.
- **M-62-00A, Complete WTP Pretreatment Processing and Vitrification of Hanford HLW and LAW Tank Wastes**
Due: 02/28/2018
Status: To Be Missed.
- **M-62-01R, Submit Semi-Annual Project Compliance Report**
Due: 01/31/2009
Status: Complete.
- **M-62-01S, Submit Semi-Annual Project Compliance Report**
Due: 07/31/2009
Status: On Schedule.
- **M-62-07B, Complete Assembly of Low Activity Waste Vitrification Facility Melter #1 So That It Is Ready for Transport and Installation in the LAW Vitrification Building (BNI Baseline Schedule Activity 4DL321A200 as Part of DOE Contract No. DEAC27-01RV14136), and Complete Schedule Activity ID 4DH46102A2 – Move #1 Melter into the High Level Waste Vitrification Facility**
Due: 12/31/2007
Status: Missed.
- **M-62-08, Submittal of Hanford Tank Waste Supplement Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline and Draft Negotiations Agreement in Principle**
Due: 06/30/2006
Status: Missed.
- **M-62-09, Start Cold Commissioning – Waste Treatment Plant**
Due: 02/28/2009
Status: To Be Missed (based on current DOE Baseline planning).

- **M-62-10, Complete Hot Commissioning – Waste Treatment Plant**

Due: 01/31/2011

Status: To Be Missed (based on current DOE Baseline planning).

- **M-62-11, Submit a Final Hanford Tank Waste Treatment Baseline**

Due: 06/30/2007

Status: Missed.

II. Significant Accomplishments:

- None to report.

III. Significant Planned Actions in the Next Six Months:

- The Early LAW initiative is currently on hold, pending further funding for FY 2009. Should funding be made available, planned work scope will include Research and Development (R&D) testing of an in-tank alternative and a review of several configurations; i.e., vault system, in-tank system.

IV. Issues:

- None.

Hanford Waste Treatment and Immobilization Plant (WTP) Project

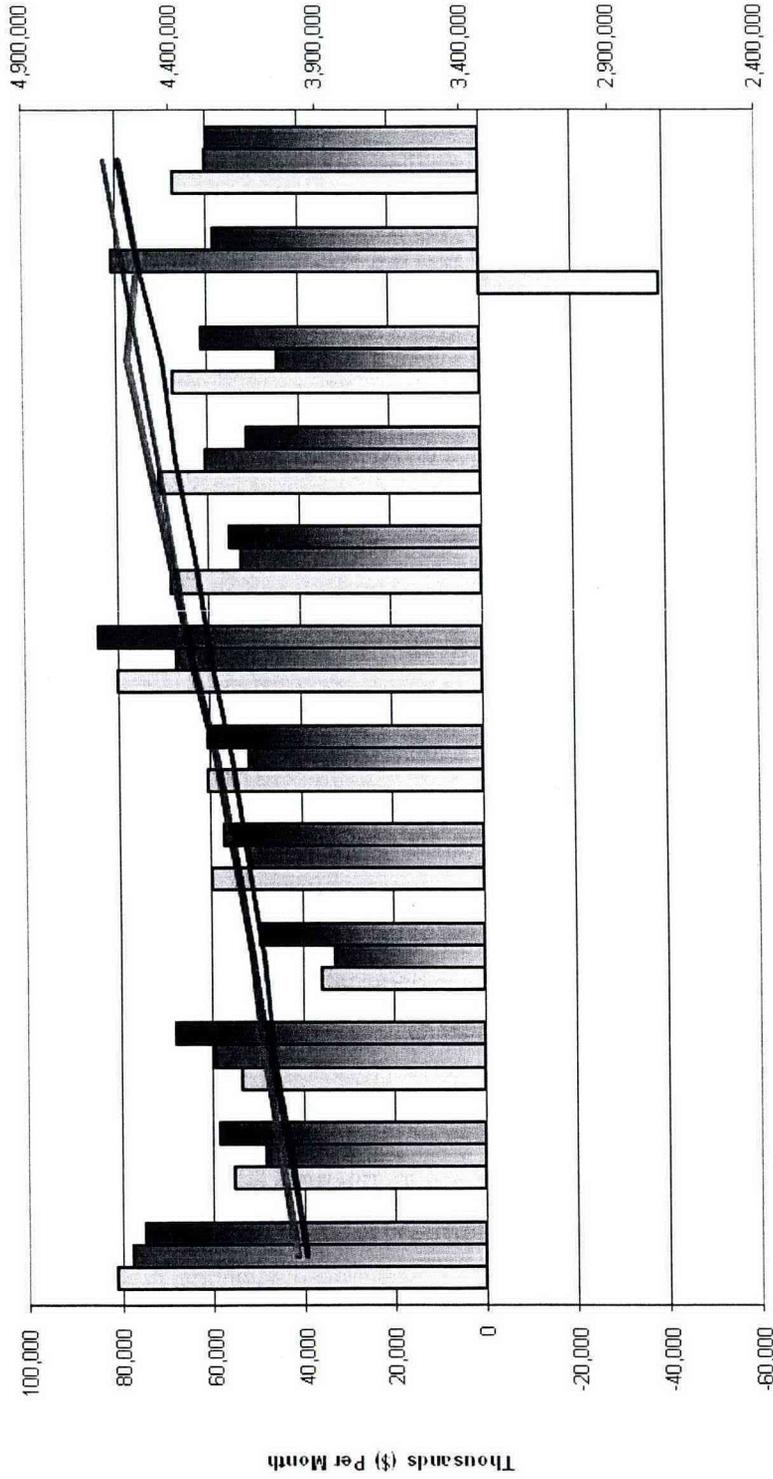
There are 1,395 people assigned to the WTP construction site (all facilities); 860 manual and 535 non-manual. Overall project percent complete through January 2009, is 46%. Design and engineering is 70% complete and construction is 41% complete.

Review of the BNI internal re-plan is still underway. The team, including staff from DOE, the Office of Engineering and Construction Management (OECM), and the Consolidated Business Center (CBC) are assessing the accuracy and reasonableness of adjustments to the WTP project cost and schedule baseline. A report, documenting DOE observations and findings, is expected in mid-March.

ORP met with the DNFSB in February to discuss various WTP activities including conclusions and recommendation of the Material at Risk (MAR) review team, application of DOE-STD-1066, Section 14; results of the Broad Based Review, status of the Pretreatment Engineering Platform (PEP) and the WTP turnover process.

As part of BNI's evaluation of the approximately 14,000 pipe spools for the black cells, the last of 107 open spools were dispositioned. BNI Engineering will propose an alternative that will require DOE concurrence for 15 inaccessible spools. Within this overall activity, BNI is also reviewing low and high-risk Q spools. The disposition and inspection of low-risk and high-risk Q spools resulted in 7 rejected welds out of 164 low-risk Q spools (4.3% rejection rate); and 46 rejected welds out of 499 high-risk Q spools (9% rejection rate). BNI and ORP are evaluating these levels of rejection to determine adequacy.

Total Project WTP Performance Cost / Schedule (\$ In Thousands) Inception To Date



	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
Monthly Plan (BCWS)	81,216	55,591	53,776	36,107	59,814	60,791	80,003	68,230	70,758	67,579	-38,879	67,150
Monthly Perf (BCWP)	77,439	48,637	59,681	33,020	51,658	51,685	67,302	53,105	60,635	44,807	80,838	60,176
Monthly Actuals (ACWP)	74,769	58,559	67,938	49,737	57,349	60,678	84,103	55,413	51,680	61,458	58,506	59,980
Cum Plan (BCWS)	3,992,700	4,048,292	4,102,067	4,138,174	4,197,988	4,258,779	4,338,782	4,407,012	4,477,770	4,545,349	4,506,470	4,573,621
Cum Perf (BCWP)	3,957,623	4,006,260	4,065,941	4,098,962	4,150,619	4,202,304	4,269,606	4,322,711	4,363,346	4,428,153	4,506,990	4,569,166
Cum Actuals (ACWP)	3,959,441	4,018,000	4,085,938	4,135,675	4,193,023	4,253,701	4,337,805	4,393,218	4,444,898	4,506,356	4,564,862	4,624,841

Pretreatment (PT) Facility

The PT Facility will separate radioactive tank waste into high-level waste (HLW) and low-activity waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Overall facility percent complete is 41%, design is 63% complete, and construction is 27% complete.

ORP review of the BNI internal re-plan is on-going, is assessing the accuracy and reasonableness of adjustments to the WTP project cost and schedule baseline. Review is anticipated to be completed in March.

Over 300 revised piping isometric drawings were issued this month. Other engineering and procurement activities included issuance of drawings for the fourth-lift concrete rebar, between column lines 26 and 31, fire water pit platform and revised design proposal drawings for the pretreatment filter cave handling (PFH) system tool storage rack. Jumper lists were issued for the Component Information System (CIS) for the cesium nitric acid recovery process (CNP) and ultrafiltration process (UFP) systems and calculation change notices for the DIW, CHW, and plant wash and disposal (PWD) systems. Two air separator vessels were released for shipment. Purchase orders were awarded for the release of UFP system vessel 1A, and material requisitions for the process jumper and jumper frame bulk material.

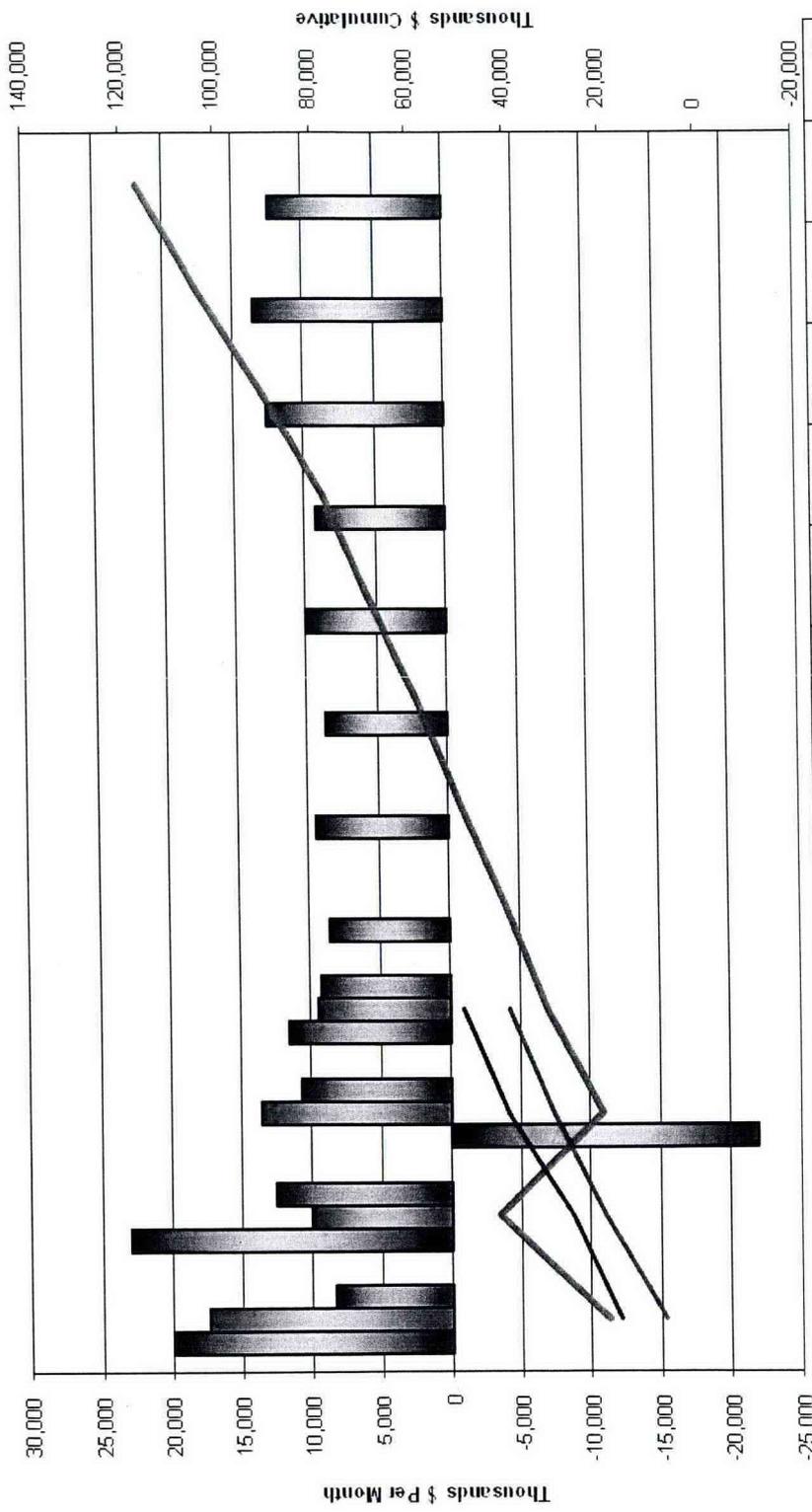
Construction installations for the month included: over 2,700 ft² of metal decking, 569 yd³ of concrete, 151 tons of rebar, and 53,038 lbs of embeds. Over 158 tons of tier -3 structural steel were also erected.

Construction forces at the +56 elevation placed more than 320 cubic yards of concrete for walls and slabs at 56' elevation. Crews are also continuing to install tier 3 structural steel. Crews at the 0' elevation continue installing liner and grillage at the south cells; fabricating rebar curtains; building scaffolding; and installing drain piping. At the +28 elevation, crews continue to sandblast and coat structural steel, and are installing crane 12 beam rails in spent filter cell. Ironworkers successfully installed 2 of 10 major shield doors in the southeast corner of the PT Facility. These doors were for the spent filter cask-lidding room and drum-lidding room. The doors weigh 22 tons, stands 10-feet high by 11-feet wide, and is approximately 8 inches thick.

Phase 1, Test A has been completed, and Test B started. Start of Test B was delayed due to the failure of the recirculation pumps, which resulted in a nitric acid spill. The PEP, prototypical equipment used to confirm the performance of the PT ultrafiltration system and leaching processes, had been performing as expected, except some of the non- protypic equipment experienced additional maintenance.

Pretreatment - Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
Mthly Plan (BCWS)	17,263	9,824	13,441	9,389	12,437	10,595	20,729	42,671	27,087	20,744		
Mthly Perf (BCWP)	19,822	22,850	-21,942	11,504	8,529	9,381	8,678	9,937	9,221	12,594	13,460	12,314
Mthly Actuals (ACWP)	8,307	12,437	10,595	9,141	40,762	50,143	58,821	68,758	77,979	90,572	104,032	116,346
FYTD Plan (BCWS)	17,263	27,087	40,527	49,916								
FYTD Perf (BCWP)	8,307	20,744	31,339	40,479								
FYTD Actuals (ACWP)												

High-Level Waste (HLW) Facility

The HLW Facility will receive the high-level waste fraction from the PT Facility. The waste will be mixed with glass formers, converted to glass, and placed in stainless steel canisters that will initially be stored in the Hanford onsite Canister Storage Building. Final disposition is proposed to be at the national geologic repository. HLW design and construction completions are 74% and 22%, respectively. Overall, facility completion is 43%.

Implementation of the Workable Backlog Program (WBP) plan is continuing. The WBP strategy is to establish a rolling six-month backlog of materials and approved construction work packages prior to hiring additional craft in FY 2009, third quarter (Q3). The intent is to stabilize construction resource loading and reduce the impacts caused by late design changes and unavailable materials. Construction will lag behind the baseline schedule until the backlog is established and then accelerate, with additional craft, to regain lost schedule. The schedule baseline "lag/gap" will be corrected by February 2010. In December 2008, the Concrete Backlog accounted for less than two weeks (i.e., less than 10,000 man-hours) of field work. With the increased Project Management focus on improving these levels, the backlog has grown to over one month in January to nearly two months in February.

The workable backlog levels have shown only modest improvements in recent months because of offset wall-penetration ("joggle") delivery delays. The WTP Contractor has developed metrics to improve status visibility, provide early warnings, and mitigate potential future delays. In addition, the team has implemented a detailed schedule review process to monitor future joggle design and procurement processes as well as fabrication and delivery schedules. As large joggle orders are delivered to the site in the upcoming two months, multiple walls can be released for construction and the workable backlog levels will increase dramatically.

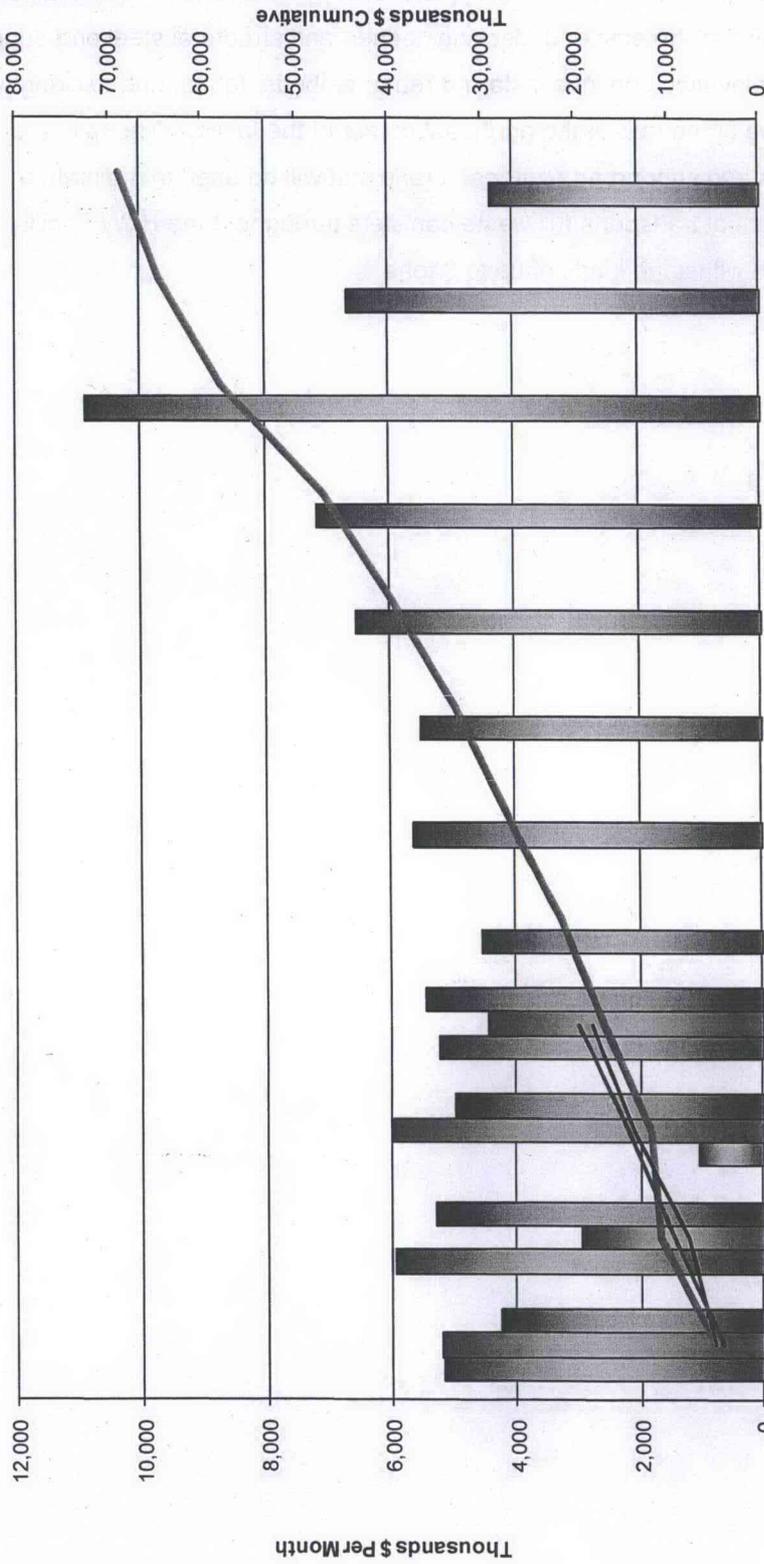
Other engineering activities for this period include issuance of the elevation +14' lighting layout drawings and the mechanical sequence diagram for the Canister Handling system; and completion of the melter cave conceptual jumper design. The HEPA housing seismic/nozzle loading issue has been solved with the addition of bellows into the design and the Structural Summary Report has been completed. Other engineering activities include the issuance of revised drawings for elevation +14' steel, 32 system block diagrams, data sheets and associated equipment lists released for melter off-gas treatment process systems and calculations for the Melter Bus Wall Penetration Heat Flow completed. In addition, the Melter design revisions to incorporate RGM and jumper loads are continuing and will be completed in time to support the completion of Melter 1 fabrication in 2009. Several notable procurements were also completed this period, including the receipt of three Master Slave Manipulators; 75 tons of steel; 3,820 LF of pipe, the delivery of the BSA Cylinder Rack, and the packaging by the vendor of the HMH Melter Cave Shield Door for shipment to the WTP.

Construction forces placed 114 cubic yards (CY) of concrete for slab 1025 above the melter #2 pour tunnel, 20 CY of concrete for a slab at the +14' elevation south perimeter, and 180 CY for wall 1136. At

the -21' elevation, crews continue to work on ducting; install structural steel, conduit, and cable tray supports; and apply coatings in cask transfer tunnel. At the 0' elevation, crews continue to install wall and slab rebar, embeds, and commodities at the east end; decking, ledger, and structural steel and supports; and liner plate. Crews at the +14' elevation continue installing rebar, embeds, forms, and decking west of the facility. Crews finished installing crane rails in the northeast corner of the facility. The rails are located inside a maintenance room and support an overhead crane that will be used to maintain a transfer bogie, which is a large cart that transports full waste canisters throughout the HLW Facility. The crane rails are 17 feet long and can withstand loads of up to 3 tons.

High Level Waste - Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



Low-Activity Waste (LAW) Facility

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel containers that will be disposed on site in the Integrated Disposal Facility. Overall facility percent complete is 63%, design is 86%, and construction is 57%.

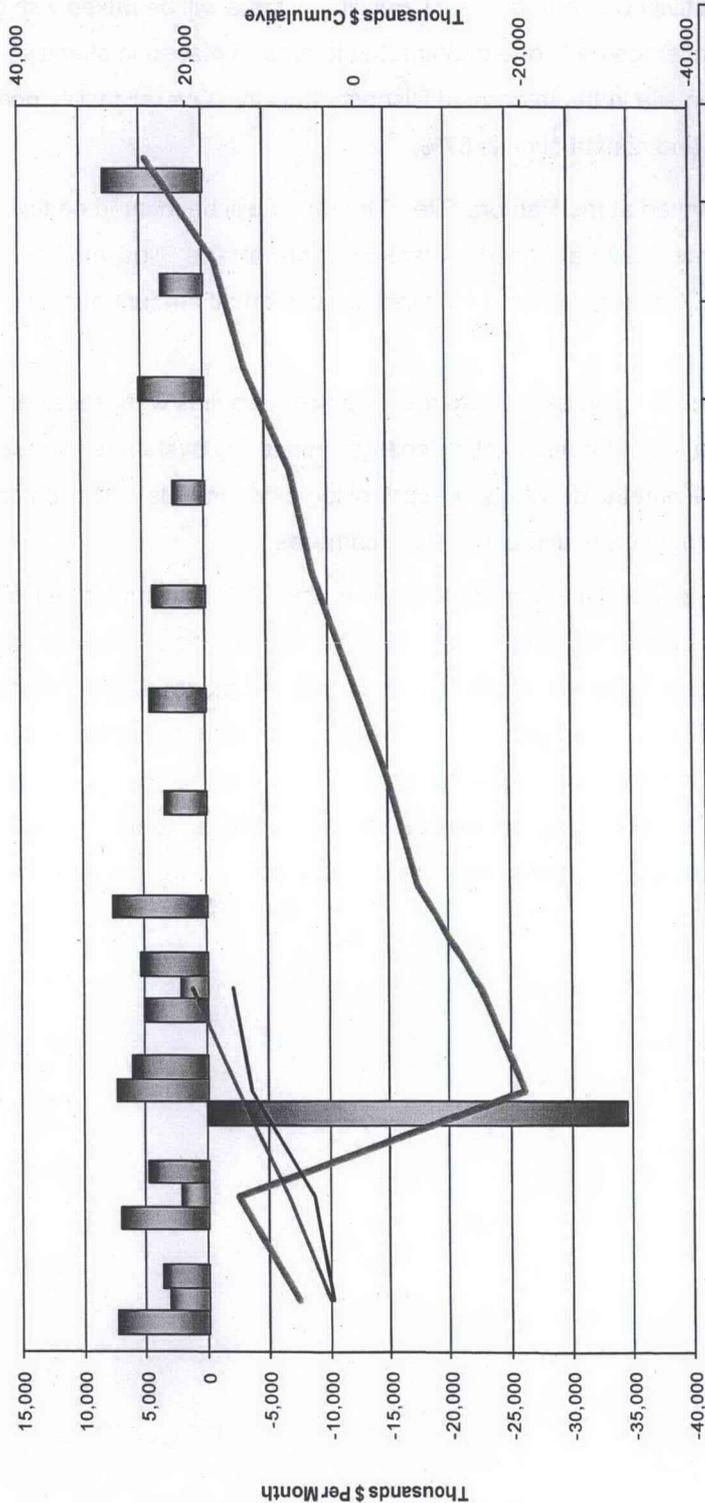
The LAW Facility mixer #1 has arrived at the Hanford Site. The mixer will be located on top of the LAW Facility and will receive glass former material from the Glass Former Storage Silos, mix the materials, and feed the mixture into the melters. Once the mixer is installed, a substantial amount of piping work that has been on hold can begin.

Four bogies, two air-separator vessels, and associated melter power supplies were received in February. The gas analyzer instrument data sheet for the stack discharge monitoring system was released this month along with more than 100 isometric drawings, 15 control logic documents and a computational fluid dynamics calculation for the pour cave and buffer store cameras.

Construction forces have started to install metal partition walls in the LAW switchgear building. Crews continue to install #2 melter rail inside of the building and steel framing for the elevator doors. Installation activities are also ongoing for six air displacement slurry pumps into the melter #2 feed vessel, fire sprinkler piping in the import bay; buss bar steel at the +28' elevation; and cooling panel supports in pour cave #2. Microporous insulation is being installed on the south wall of the melter #1 pour cave and ductwork from the C3 fans to the exhaust stack on the +48' elevation. Other continuing activities include fireproofing on the second floor annex and piping, electrical conduit and drywall on various levels.

Low Activity Waste - Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
Monthly Plan (BCWS)	7,401	7,152	-34,410	5,207	7,829	3,437	4,546	4,399	2,600	5,279	3,502	8,089
Monthly Perf (BCWP)	3,231	2,302	7,418	2,214								
Monthly Actuals (ACWP)	3,770	4,824	6,093	5,417								
FYTD Plan (BCWS)	7,401	14,552	-19,858	-14,652	-7,023	-3,586	960	5,359	7,959	13,238	16,740	24,828
FYTD Perf (BCWP)	3,231	5,533	12,950	15,164								
FYTD Actuals (ACWP)	3,770	8,594	14,687	20,105								

Analytical Laboratory (LAB)

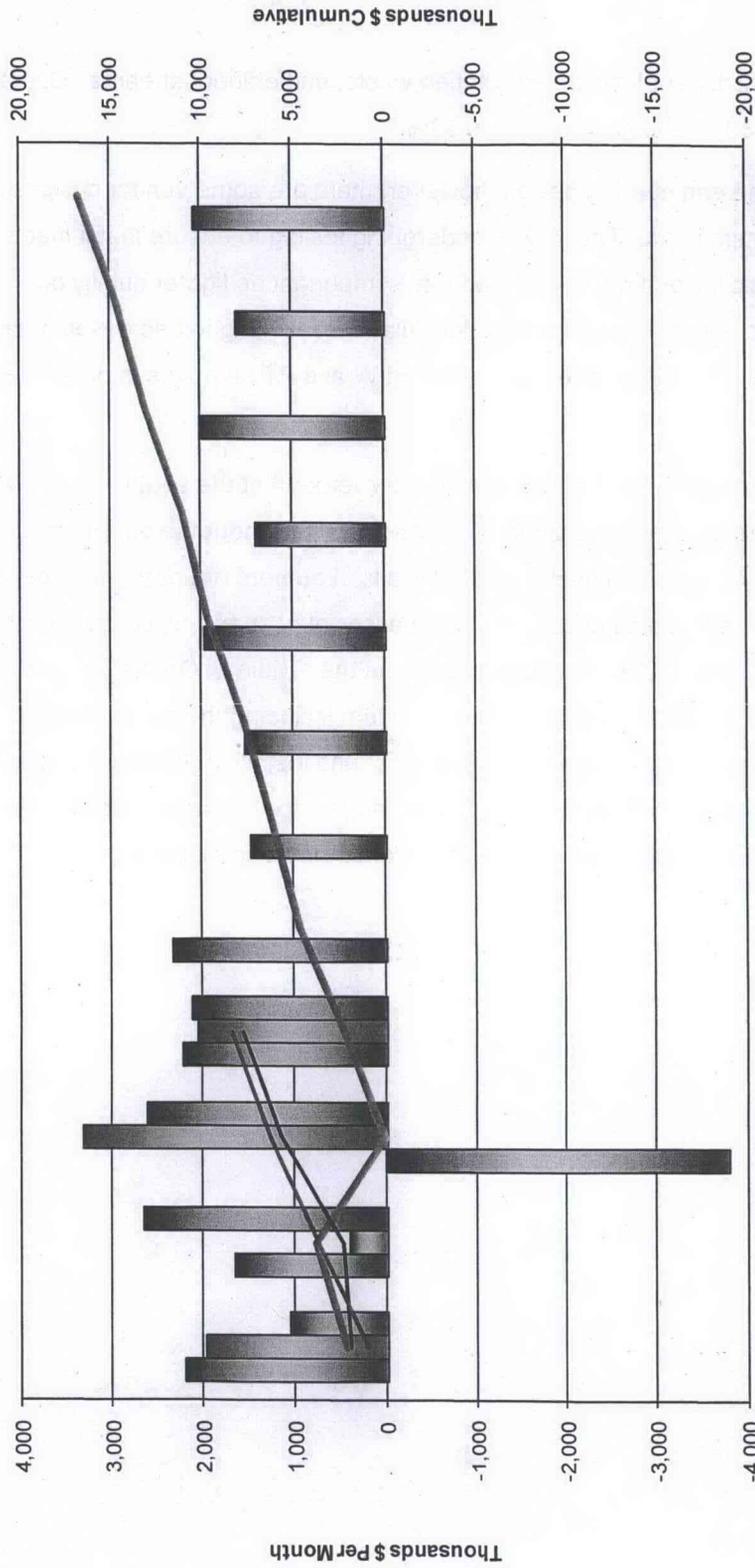
The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 41%, design is 80%, and construction is 53%.

BNI is substantially complete with the engineering design; however, there are some vendor designs of various components that are still outstanding. The ASX is undergoing testing to ensure that it meets adequate reproducibility. Reproducibility of the sampling system is important as tighter quality on reproducibility will result in improved waste to glass loading formulations resulting in decreased operational costs. The portions of the ASX that are still being tested are the HLW and PT samplers in order to verify adequate reproducibility.

Pipefitters continue to install pipe, hangers and a steam pipe in the overhead at the south end of the building, 0' elevation. Carpenters are working on scaffold support for other craft throughout the building and ironworkers are performing fit-ups and installing (weld) partition walls. Laborers are performing general area cleanups and subcontractors continue to install ducting including associated supports; coat ventilation hangers; and install framing/drywall at available locations throughout the building. On the +17' elevation, crews installed components related to the breathing service air system including the compressors. The subcontractor continues caulking and taping for drywall installations, and installing ducting/supports for ventilation. Pipefitters are installing chill water piping, and piping/hangers for the steam system. Progress in the LAB has been good and there are no large technical risks to construction completion.

Analytical Laboratory - Fiscal Year to Date Performance (\$ In Thousands)

October 2008 - September 2009



	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
Monthly Plan (BCWS)	2,209	1,668	-3,784	2,225	2,337	1,488	1,552	1,984	1,410	2,006	1,617	2,083
Monthly Perf (BCWP)	1,982	412	3,338	2,068								
Monthly Actuals (ACWP)	1,059	2,668	2,620	2,129								
FYTD Plan (BCWS)	2,209	3,878	94	2,319	4,656	6,144	7,695	9,680	11,089	13,095	14,711	16,794
FYTD Perf (BCWP)	1,982	2,394	5,732	7,801								
FYTD Actuals (ACWP)	1,059	3,728	6,348	8,477								

Balance of Facilities (BOF)

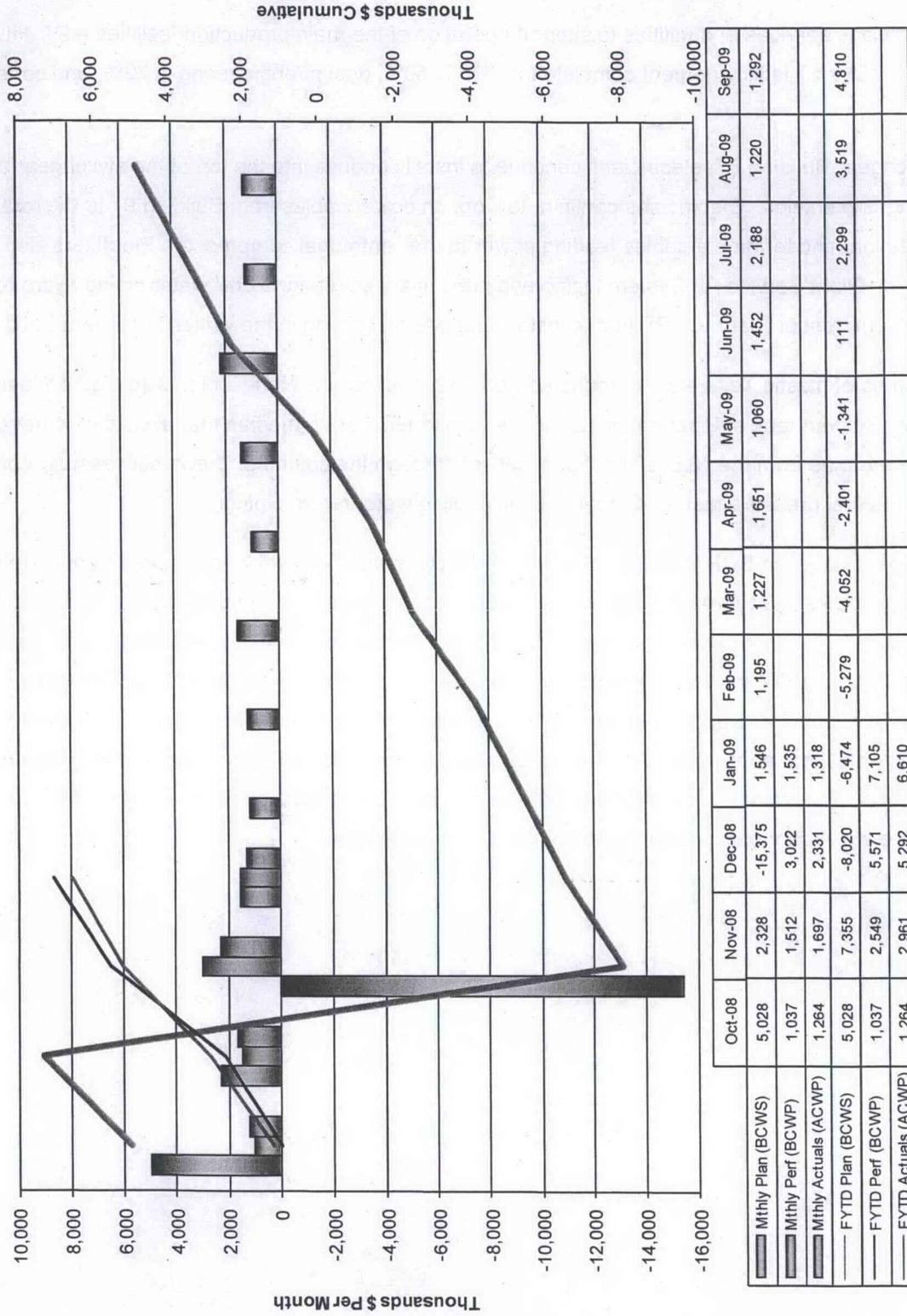
BOF provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. Overall facility percent complete for BOF is 50%, design/engineering is 72%, and construction is 61%.

In Switchgear Building 87, electricians continue to install conduits into the top of the switchgear after installing drip shields. Electricians continue to work on power cables from Building 91 to the rotary screw compressors and terminate cables feeding power to the centrifugal compressor. Pipefitters also continue to work on Plant Service Air System piping and preliminary set up for a chill water piping hydro test in the Chiller Compressor Plant (CCP), and to install supports and piping in the Water Treatment Building.

Thousands of plastic Tellerette components were installed into the Non-Radioactive Liquid Waste Disposal System tank stripper columns. These components are a median that assists in removal of the trihalomethanes from the NLD effluent as it passes through the columns. Crews successfully completed the CCP's first pressure test – 440 feet of plant cooling water return piping.

The largest issues in BOF that are being followed include the electrical load required to operate WTP, the Emergency Diesel Generator (EDG) facility and the Melter Assembly Building (MAB). The electrical load required for WTP may exceed the current 55 MW that the A-6 sub-station can deliver. This issue is being worked through WTP's technical resolution process. The EDG's are not currently scheduled for procurement until late 2009; however, ORP is evaluating the procurement strategy. The MAB requirements were evaluated through a Value Improvement Process and currently ORP is evaluating a draft report that evaluates potential alternatives. None of these are significant technical risks; however, there are significant costs associated with each of these issues.

Balance of Facilities - Fiscal Year to Date Performance (\$ In Thousands) October 2008 - September 2009



Waste Treatment Plant Project - Percent Complete Status Through January 2009									
(Dollars - Millions)	Overall Facility Percent Complete			Design/Engineering			Construction		
	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities									
Low-Activity Waste	1,646.8	1,038.8	63%	139.5	120.4	86%	256.9	145.8	57%
Analytical Lab	617.6	255.8	41%	41.6	33.2	80%	69.0	36.8	53%
Balance of Facilities	964.6	483.8	50%	64.9	47.0	72%	184.3	113.2	61%
High-Level Waste	2,579.4	1,098.0	43%	237.4	175.2	74%	433.9	97.1	22%
Pretreatment	4,155.2	1,692.7	41%	365.4	230.4	63%	717.5	193.6	27%
Plant Wide/Gen Services	incl. above	incl. above	incl. above	692.7	469.8	68%	1,641.3	774.6	47%
Undistributed Budget	6.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	9,970.2	4,569.1	46%	1,541.5	1,076.0	70%	3,302.9	1,361.1	41%

Source: WTP Contract Performance Report

KEY COMMODITY QUANTITY PROGRESS

Commodity	Unit of Measure	Current Planned at Completion Quantity	Installed through January 2009	Percent Complete
Concrete	1000 cy	262.23	181.97	69.4%
Structural Steel	1 ton	36,481	12,955	35.5%
Piping (in buildings)	1000 lf	900.78	144.78	16.1%
Piping (underground)	1000 lf	116.01	95.40	82.2%
Conduit (in buildings)	1000 lf	780.07	98.03	12.6%
Conduit (underground)	1000 lf	192.91	176.64	91.6%
Cable Tray	1000 lf	98.17	18.55	18.9%
Cable and Wire	1000 lf	4,762.42	228.70	4.8%

Sign In Sheet
Monthly Milestone Review Meeting
March 24, 2009

NAME	ORG	MSIN	PHONE
Becky Wiegman	PAE		373-9443
Jeff Luke	WRPS		376-8629
Mike Barnes	Ecology		372-7927
Chris Kemp	ORP		373-0649
Bob Loban	ORP		373-7949
JOE CAGGIANO	Ecology		372-7915
Woody Russell	ORP		373-5227
Nancy Biondi	Ecology		372-7928
Jeff Lyon	Ecology		539-1996
Ed Fredenburg	ECY		372-7899
JOHN LONG	ORP		376-5416
Felix Miera	WRPS		376-7634
Janet Diediker	WRPS		372-3043
Gail Laws	WDOH		946-0712
Wany Gao	ECY		372-7901
Brian Speer	ECY		372-7985
Kobbie Biyani	ECY		372-7884
DAVID BECKER	ECY		372-7990
BRUCE NICOLL	ORP		438-0456
Shann Salisbury	ORP		376-3575
Wahed Abdul	ORP		438-0455
Gary Olson	ORP		438-4707