

Office of River Protection

Tri-Party Agreement
Monthly Milestone Review Meeting
January 22, 2008

Office of River Protection

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

December 2007

RECEIVED
FEB 22 2010
EDMC

Agenda

Office of River Protection
Tri-Party Agreement
Managers Milestone Review Meeting
2440 Stevens, CR 1200
January 22, 2008
9:00 a.m. – 12:00 p.m.

Page	Topic	Leads	Time
3	TPA Milestone Statistics	Woody Russell Suzanne Dahl / Jeff Lyon	9:00
52	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	9:10
54	M-45-00, Complete Closure of All Single-Shell Tank Farms	Roger Quintero / Jeff Lyon	9:30
64	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	10:00
65	M-23-00, Tank Integrity and Monitoring	John Long / Jeff Lyon	10:10
66	In Tank Characterization and Summary	John Long / Michael Barnes	10:20
67	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Corbun Babel / Les Fort	10:30
69	M-48-00, DST Integrity Assessment Program	Cathy Louie / Les Fort	10:40
70	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/ Disposal of ILAW and M-20, Part B Permits	Cathy Louie / Bud Derrick	10:50
	BREAK		
18	FY 2007 ORP TPA Cost & Schedule Performance (CHG)	Janet Diediker Suzanne Dahl / Jeff Lyon	11:10
88	M-62-08, M-62-11 Bulk Vitrification/Supplemental Technologies	Ben Harp / Suzanne Dahl	11:20
72	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bruce Nicoll / Pete Furlong / Wahed Abdul / Suzanne Dahl	11:30

TPA Milestone Statistics

(Including target milestones)

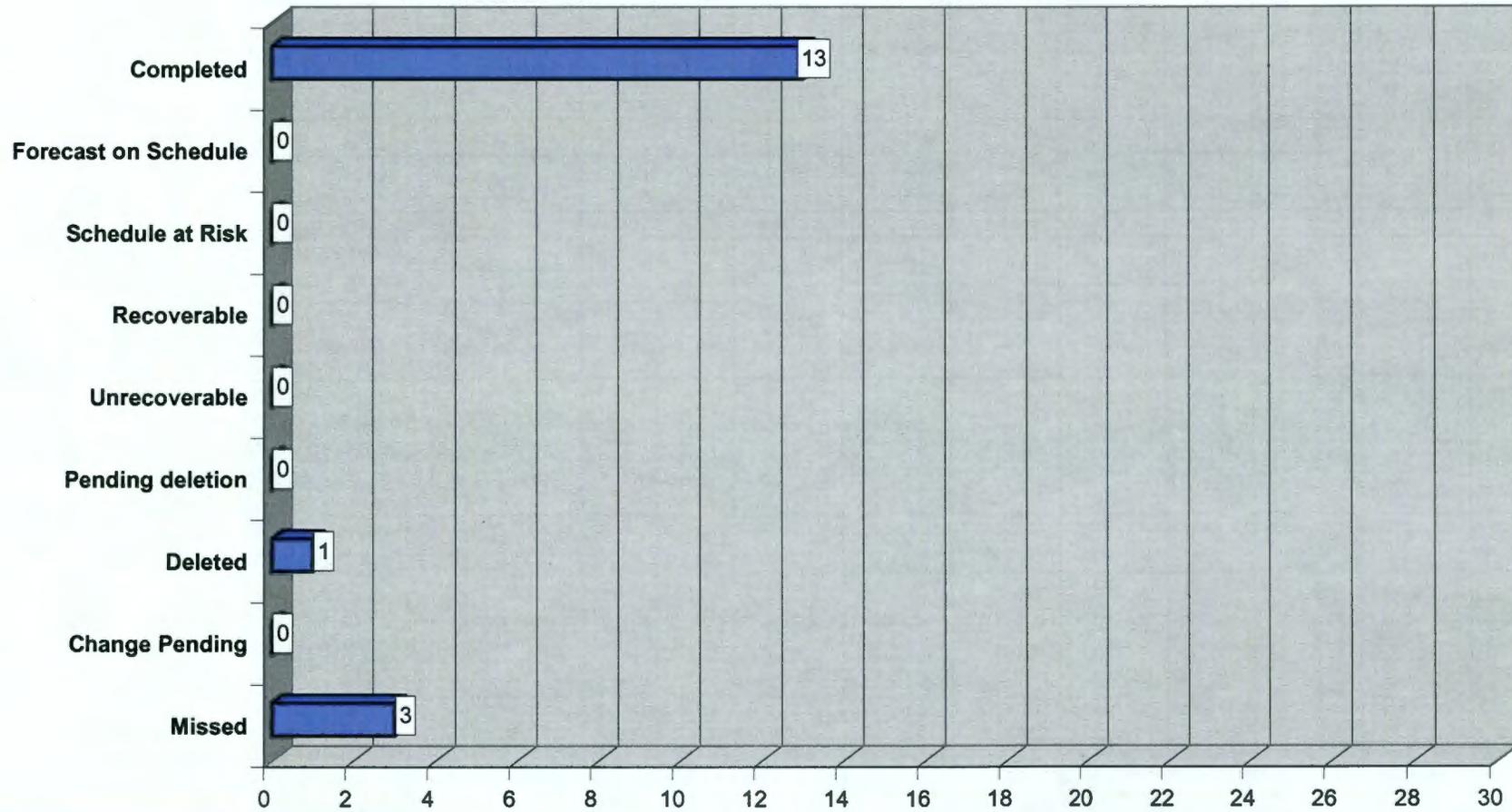
Milestone	Due Date	Total Active as of 03/31/06	Milestone Number	Due Date	Milestone Number	Due Date
M-20-00 , Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	12/31/08 (M-20-00)	0				
M-23-25 , Tank Integrity and Monitoring	03/31/05 (M-23-25)	0				
M-23-27 , Complete 244-CR Liquid Level Assessment	12/30/04	0				
M-42-00 , Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-43-00 , Complete Tank Farm Upgrades	06/30/05 (M-43-00)	0				
M-45-00 , Complete Closure of all SST Farms	09/30/24 (M-45-00)	31	M-45-00 M-45-00B M-45-00C M-45-00D M-45-02 M-45-02N 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-45-05-T10 M-45-05-T11 M-45-05-T12	09/30/24 09/30/06 09/30/06 01/31/08 TBD 03/01/08 03/01/10 09/30/18 03/31/07 09/30/07 09/30/08 09/30/09 09/30/10 09/30/11 09/30/12 09/30/13 09/30/14	M-45-05-T13 M-45-05-T14 M-45-05-T15 M-45-06 M-45-06-T03 M-45-06-T04 M-45-13 M-45-13A M-45-13B M-45-15 M-45-55 M-45-56 M-45-58 M-45-59 M-45-60 M-45-61 M-45-62	09/30/15 09/30/16 09/30/17 09/30/24 03/31/12 03/31/14 06/30/11 12/31/07 12/31/07 06/30/11 01/31/08 TBD 12/31/08 TBD 12/31/08 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)	9	M-62-00 M-62-00A M-62-01P M-62-01Q	12/31/28 02/28/18 01/31/08 07/31/08	M-62-07B M-62-08 M-62-09 M-62-10 M-62-11	12/31/07 06/30/06 02/28/09 01/31/11 06/30/07
M-90-00 , Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	3	M-90-00 M-90-10 M-90-11	TBD 08/31/08 08/31/10		
M-48-00 , DST Integrity Program, Submit Results of 4 DSTs not Previously Examined	09/30/07	0				
Interim Stabilization Consent	09/30/04	1	D-001-00			

TPA Milestone Statistics

(Including target milestones)

Milestone	Due Date	Total Active as of 03/31/06	Milestone Number	Due Date	Milestone Number	Due Date
Decree	(D-001-00)					
Total Active Milestones:		51				

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	10/31/05								
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 I. 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	02/2/05								
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	
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	06/30/06	06/28/06								

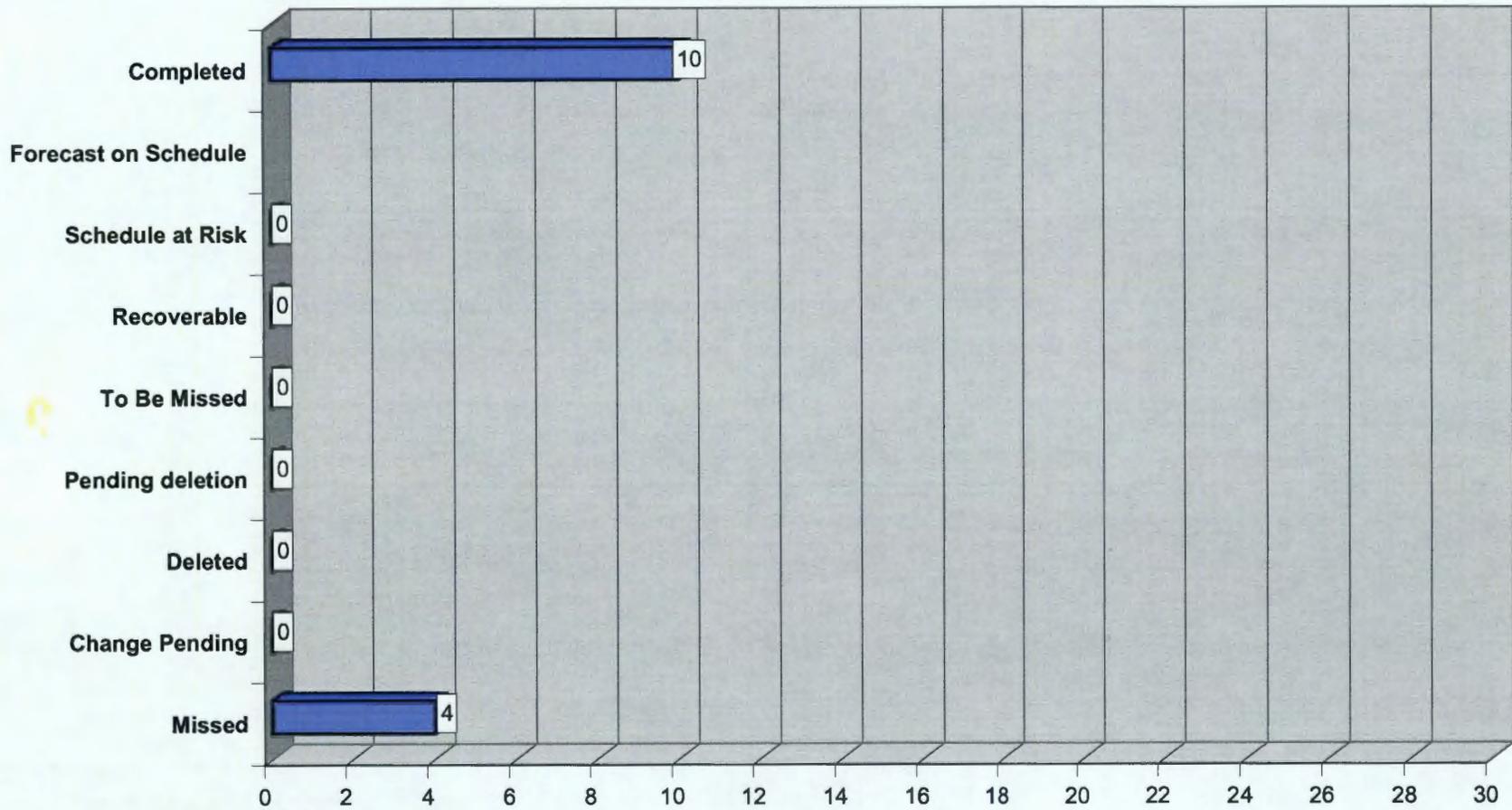
Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
	upgrade [see M 48-07A-C].										
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	6/27/06								
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			
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	09/05/06								
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	09/30/06						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						
	retrieval and closure activities and associated schedules (for the period February 07 through August 08).										

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	12/31/06								
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

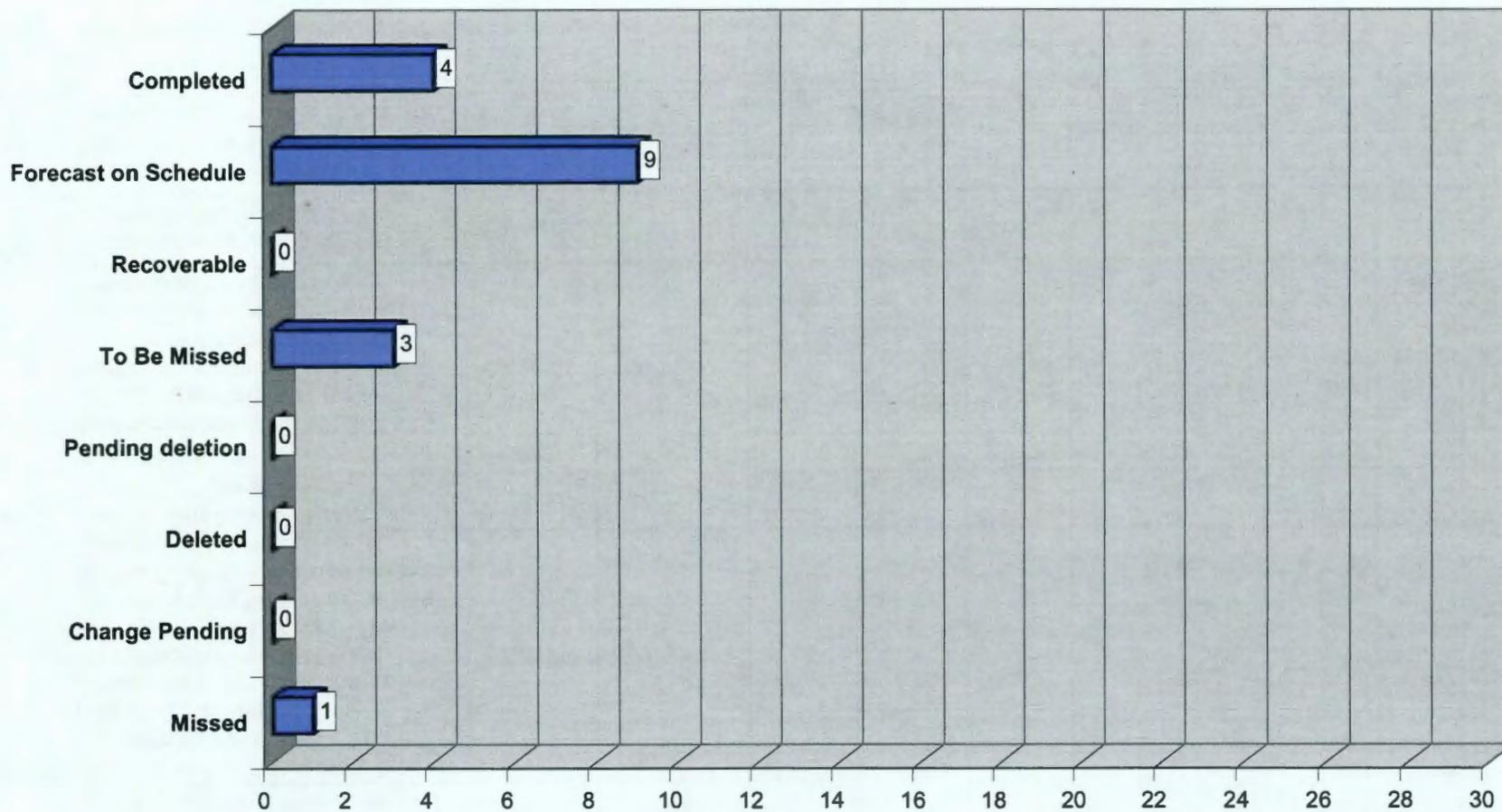
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R31	DOE Shall, On A Quarterly Basis, Submit To Ecology A Written Report Documenting Tank Stabilization Activities That Occurred During The Period Covered By The Report. This Written Report Shall Provide The Status Of Progress Made During The Reporting Period.	01/31/07	01/31/07								
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			
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	07/31/07	07/31/07								

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						
	establishment of additional agreement interim measures.										
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-062-010	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	09/27/07								
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	09/27/07								

* 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 have 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 Vitrification Facility melter #1 and complete move of #1 melter into the HLW Vitrification Facility	12/31/07						X			
M-062-01P	Submit Semi-Annual Project Compliance Report	01/31/08		X							
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		X							
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	01/31/08		X							

Fiscal Year 2008 Tri-Party Agreement Milestone Status

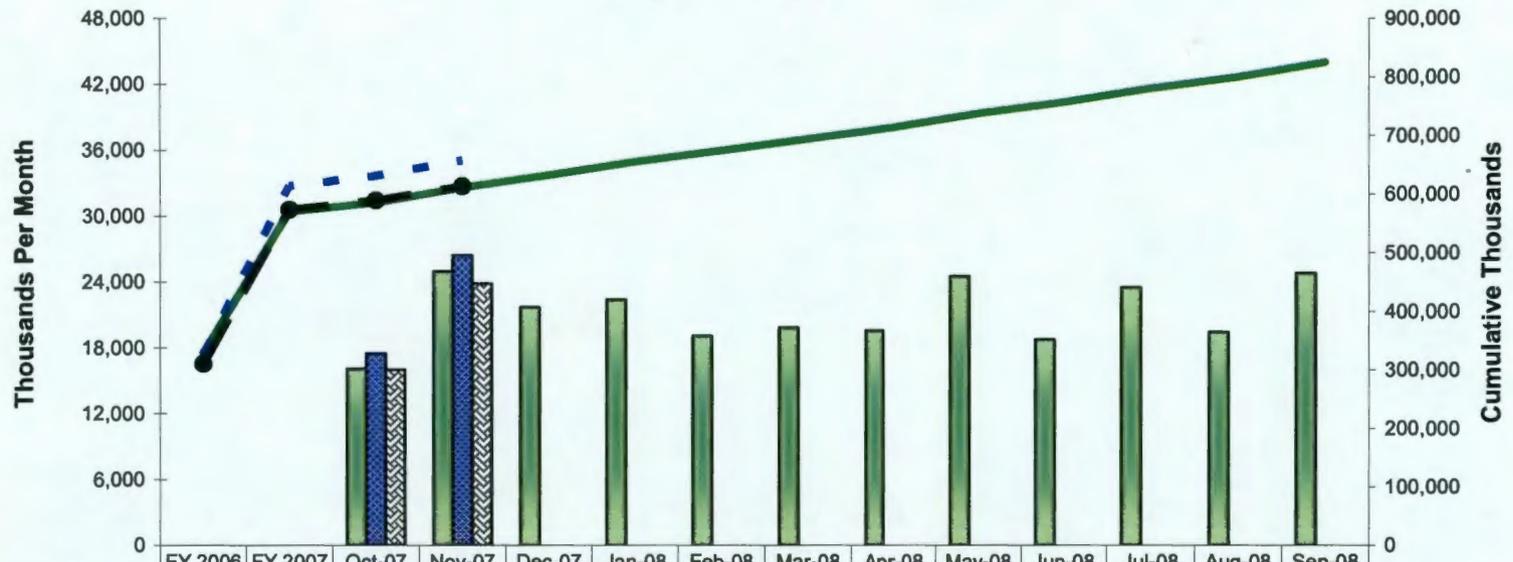
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
	reporting period.										
M-045-00D	Initiate negotiations of SST waste retrieval and closure for 2008-2013	01/31/08					X				
M-045-02N	Submit Biennial Update	03/01/08			X						
M-045-02N-A	Three Parties shall meet to establish new milestones within 60 days, if required, for acquisition of additional tanks	04/30/08			X						
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		X							
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.	07/01/08		X							
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		X							
M-062-01Q	Submit Semi-Annual Project	07/31/08		X							

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						
	Compliance Report										
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				

CURRENT MONTH/CONTRACT TO-DATE PERFORMANCE – GRAPH

CH2M HILL Contract-to-Date Performance (\$000)
10/2005 - 11/2007



	FY 2006	FY 2007	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	0	0	16,097	24,963	21,712	22,394	19,078	19,831	19,581	24,515	18,776	23,498	19,429	24,788
Mthly Perf (BCWP)	0	0	17,469	26,403										
Mthly Actuals (ACWP)	0	0	16,004	23,850										
CTD Plan (BCWS)	328,060	569,029	585,126	610,089	631,801	654,195	673,273	693,104	712,685	737,200	755,976	779,474	798,903	823,691
CTD Perf (BCWP)	326,127	613,344	630,813	657,216										
CTD Actuals (ACWP)	310,197	573,240	589,243	613,093										

BCWS = Budgeted Cost For Work Scheduled

BCWP = Budgeted Cost for Work Performed

ACWP = Actual Cost for Work Perform

CURRENT MONTH (CM) PERFORMANCE - CHART

CH2M HILL Hanford Group, Inc.

CURRENT MONTH PERFORMANCE MEASUREMENT - 11/2007

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 %
5.07	BASE OPERATIONS - Excluding 5.07.02	12,926.6	13,455.4	11,105.6	528.8	4.1%	2,349.8	17.5%
5.07.02	Env/TPA Milestone Achievement	<u>1,014.7</u>	<u>1,117.8</u>	<u>995.9</u>	<u>103.1</u>	10.2%	<u>121.9</u>	10.9%
	TOTAL BASE OPERATIONS	<u>13,941.4</u>	<u>14,573.2</u>	<u>12,101.5</u>	<u>631.8</u>	4.5%	<u>2,471.7</u>	17.0%
5.08	RETRIEVE AND CLOSE - Excluding foll. WBS Elements	0.0	0.0	5.2	0.0	0.0%	(5.2)	-5.2%
5.08.02	WTP Feed Delivery Program	673.4	673.4	536.9	0.0	0.0%	136.6	20.3%
5.08.03	DST Retrieval Program	0.0	53.6	9.7	53.6	53.6%	43.9	81.9%
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	0.0	204.2	456.3	204.2	204.2%	(252.0)	-123.4%
5.08.04.02	Upgrade Transfer System (E-525)	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
5.08.05	Retrieval / Closure Program	4,735.1	4,773.5	4,714.3	38.4	0.8%	59.2	1.2%
5.08.06/.07	SST Retrieval East / West Area	2,286.2	2,135.5	2,755.2	(150.7)	-6.6%	(619.7)	-29.0%
5.08.12/.13	SST Closure	<u>29.6</u>	<u>29.6</u>	<u>58.6</u>	<u>0.0</u>	0.0%	<u>(29.0)</u>	-98.1%
	TOTAL RETRIEVE AND CLOSE	<u>7,724.3</u>	<u>7,869.7</u>	<u>8,536.1</u>	<u>145.4</u>	1.9%	<u>(666.4)</u>	-8.5%
5.09	TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements	469.9	460.0	375.0	(10.0)	-2.1%	84.9	18.5%
5.09.02.02	TRU / LLW Packaging	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
5.09.02.03/.08	LAW Treatment	66.0	65.9	149.2	(0.1)	-0.2%	(83.3)	-126.4%
5.09.02.05/.11	Bulk Vitrification System (BVS) Project	278.9	978.0	596.7	699.1	250.7%	381.3	39.0%
5.09.03.01	Integrated Disposal Facility	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
5.09.03.04	Initial IHLW Storage Facility (W-464)	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	0.0%	<u>0.0</u>	0.0%
	TOTAL TREAT AND DISPOSE WASTE	<u>814.8</u>	<u>1,503.8</u>	<u>1,120.9</u>	<u>689.1</u>	84.6%	<u>382.9</u>	25.5%
5.10	ANALYTICAL/TECHNICAL SERVICES	<u>2,482.4</u>	<u>2,456.3</u>	<u>2,091.3</u>	<u>(26.1)</u>	-1.1%	<u>364.9</u>	14.9%
TFC TOTAL		<u>24,962.9</u>	<u>26,403.1</u>	<u>23,849.9</u>	<u>1,440.2</u>	5.8%	<u>2,553.2</u>	9.7%

BCWS = Budgeted Cost For Work Scheduled

BCWP = Budgeted Cost for Work Performed

ACWP = Actual Cost for Work Perform

CONTRACT-TO-DATE PERFORMANCE - CHART

CH2M HILL Hanford Group, Inc.

CONTRACT-TO-DATE PERFORMANCE MEASUREMENT - 10/2005 - 11/2007

BY WORK BREAKDOWN STRUCTURE

Dollars in Thousands

WBS	TITLE	Cumulative Contract-To-Date									
		Budgeted Cost			Variance				Budget at Completion (BAC)*	Accelerated Scope**	Estimate at Completion (EAC)***
		Work Scheduled	Work Performed	Actual Cost Work Performed	Schedule	SV %	Cost	CV %			
5.07	BASE OPERATIONS - Excluding 5.07.02	296,083.6	296,813.5	276,359.0	730.0	0.2%	20,454.5	6.9%	414,933.4	3,399.2	385,423.1
5.07.02	Env/TPA Milestone Achievement	<u>38,164.5</u>	<u>41,268.0</u>	<u>40,025.6</u>	<u>3,103.5</u>	8.1%	<u>1,242.5</u>	3.0%	<u>48,986.5</u>	<u>4,431.6</u>	<u>53,103.0</u>
	TOTAL BASE OPERATIONS	<u>334,248.1</u>	<u>338,081.6</u>	<u>316,384.6</u>	<u>3,833.5</u>	1.1%	<u>21,697.0</u>	6.4%	<u>463,919.9</u>	<u>7,830.8</u>	<u>438,526.1</u>
5.08	RETRIEVE AND CLOSE - Excluding foll. WBS Elements	0.0	268.4	209.3	268.4	268.4%	59.0	22.0%	0.0	298.2	240.1
5.08.02	WTP Feed Delivery Program	15,724.5	15,724.5	14,096.6	0.0	0.0%	1,627.9	10.4%	22,019.8	0.0	19,906.2
5.08.03	DST Retrieval Program	1,676.3	1,984.2	2,220.1	307.9	18.4%	(235.9)	-11.9%	1,676.3	1,338.9	2,528.8
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	2,865.8	6,860.4	7,308.8	3,994.6	139.4%	(448.4)	-6.5%	2,865.8	7,892.0	9,980.8
5.08.04.02	Upgrade Transfer System (E-525)	2,712.4	2,712.4	2,982.8	0.0	0.0%	(270.4)	-10.0%	2,712.4	0.0	2,982.8
5.08.05	Retrieval / Closure Program	108,768.5	106,571.9	100,708.7	(2,196.6)	-2.0%	5,863.1	5.5%	148,974.5	0.0	143,456.8
5.08.06/.07	SST Retrieval East / West Area	44,674.3	72,004.5	63,409.1	27,330.2	61.2%	8,595.4	11.9%	52,240.1	63,659.9	85,505.9
5.08.12/.13	SST Closure	<u>825.4</u>	<u>825.4</u>	<u>812.8</u>	<u>0.0</u>	0.0%	<u>12.5</u>	1.5%	<u>1,101.8</u>	<u>0.0</u>	<u>1,156.8</u>
	TOTAL RETRIEVE AND CLOSE	<u>177,247.1</u>	<u>206,951.6</u>	<u>191,748.4</u>	<u>29,704.5</u>	16.8%	<u>15,203.2</u>	7.3%	<u>231,590.7</u>	<u>73,189.0</u>	<u>265,758.2</u>
5.09	TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements	9,511.3	9,514.2	7,652.4	2.9	0.0%	1,861.7	19.6%	13,904.0	0.0	11,294.7
5.09.02.02	TRU / LLW Packaging	0.0	0.0	65.6	0.0	0.0%	(65.6)	-65.6%	0.0	0.0	65.6
5.09.02.03/.08	LAW Treatment	1,533.2	1,533.1	1,534.0	(0.1)	0.0%	(0.9)	-0.1%	2,150.2	0.0	2,041.3
5.09.02.05/.11	Bulk Vitrification System (BVS) Project	27,099.9	40,954.2	43,368.8	13,854.3	51.1%	(2,414.6)	-5.9%	28,231.4	13,841.7	45,438.5
5.09.03.01	Integrated Disposal Facility	7,132.9	7,132.9	5,366.1	0.0	0.0%	1,766.8	24.8%	7,132.9	0.0	5,366.1
5.09.03.04	Initial IHLW Storage Facility (W-464)	<u>109.4</u>	<u>109.4</u>	<u>35.1</u>	<u>0.0</u>	0.0%	<u>74.3</u>	67.9%	<u>109.4</u>	<u>0.0</u>	<u>35.1</u>
	TOTAL TREAT AND DISPOSE WASTE	<u>45,386.6</u>	<u>59,243.7</u>	<u>58,022.0</u>	<u>13,857.1</u>	30.5%	<u>1,221.7</u>	2.1%	<u>51,527.8</u>	<u>13,841.7</u>	<u>64,241.3</u>
5.10	ANALYTICAL/TECHNICAL SERVICES	<u>53,207.1</u>	<u>52,939.4</u>	<u>46,938.3</u>	<u>(267.7)</u>	-0.5%	<u>6,001.1</u>	11.3%	<u>76,652.5</u>	<u>0.0</u>	<u>67,707.4</u>
TFC TOTAL		<u>610,089.0</u>	<u>657,216.3</u>	<u>613,093.3</u>	<u>47,127.4</u>	<u>7.7%</u>	<u>44,123.1</u>	<u>6.7%</u>	<u>823,690.9</u>	<u>94,861.6</u>	<u>836,233.0</u>

* BAC on this chart and in succeeding Cumulative Performance tables is for the period FY 2006 - FY 2008.

** The following accelerated work is included in the EAC and in the adjusted total: Tanks 241-C-104, 241-C-110, 241-S-102 Retrievals; W-314 and WFO Upgrades work; Cross-Site Transfer; and DBVS Technology Development.

*** EAC on this chart is for the contract period (through FY 2008).

BAC 823,690.9
Adjusted Total with Accelerated Scope 918,552.5

BCWS = Budgeted Cost For Work Scheduled

BCWP = Budgeted Cost for Work Performed

ACWP = Actual Cost for Work Perform

EXECUTIVE SUMMARY

ON

TANK FARM EARNED VALUE REPORTING

This Executive Summary reports the cost and schedule performance for the Tank Farm Contractor (TFC), CH2M HILL Hanford Group, Inc. for the month November 2007.

The company's current month (CM) cost variance (CV) was a positive \$2.6M which increased the favorable contract-to-date (CTD) CV from \$41.6M to \$44.1M. The CTD CPI is 1.07; the CTD SPI is 1.08. The CM CV of \$2.6M is due to cost savings and efficiencies in the TFC Program area (Shared Services, Miscellaneous Services, Liquidations, Baseline Integration Support, Information Resource Management Manage Facilities and Property Services, and others); AY/AZ Upgrades (use of spare pump for AZ-102 replacement instead of new procurement resulting in cost savings); C Farm Retrievals (C-104, 109, 110 and C Farm Infrastructure); ATS (Tank Waste Sampling, General Support and Advanced Technologies and Laboratories International, Inc. [ATL] Readiness to Serve); Single-Shell Tank (SST) Operations Essential Services (partially offset by labor assigned to Maintenance Preventative Maintenance [PM]/Corrective Maintenance [CM]); DBVS Technology Development (completion of IDMT sample analysis, final report and reduction of subcontractor staff); WFO Safe Storage Surveillance and Monitoring, Essential Services and Project Controls; Tank Farm Risk Assessments (FY 2007 activity was completed) and miscellaneous other efficiencies and cost savings in Safety, Health and Quality Assurance, Strategic Planning and Project Controls and Engineering. Favorable cost variances partially offset by unfavorable variances related to unplanned costs for S-102 spill event investigation, action plan and cleanup; T Farm Interim Barrier construction costs (higher than budgeted due to additional steps required to complete the construction); Finance accrual for Union Ratification payment; and miscellaneous other variances for SST and WFO TSR/Basic Maintenance (efforts to decrease preventative/corrective maintenance backlog), DST Integrity Project (AY-101 UT tool development and testing), DST Infrastructure Upgrades (progress, budgeted cost of work performed [BCWP], on Advanced Work Authorization [AWA] work held pending revised approach and final BCR), Project W-314 Upgrades (Master Pump Shutdown System [MPS] Startup and Turnover), 244-CR Vault, and Evaporator Upgrades (HVAC and MCS Upgrades).

The CTD CV of \$44.1M is due to variances for 1) C-100 Tanks and infrastructure due to efficiencies in preparation and retrieval work for Tanks C-109, C-108, C-104, and C-110; 2) Efficiencies in S Farm tank retrievals; 3) Tank Farm Program support and Site Services savings and cost efficiencies in Shared Services, Miscellaneous Services, Liquidations, Executive Management, Legal, Information Resource Management, Manage Facilities and Property Services and Work Force Realignment and Restructure; 4) WFO due to savings and efficiencies in Surveillance and Monitoring, DST to DST Transfers, Project Controls, Cross-Site Transfers, Essential Services, AY/AZ Upgrades (use of spare pump for AZ-102 replacement instead of new procurement), Isolation of Transfer System Components and miscellaneous other accounts; 5) Closure Operations Base Operations due to efficiencies in the Essential Services and Infrastructure accounts; 6) 222-S Laboratory Services due to less than planned dedicated and matrixed staff, planning labor rates being greater than actual costs, and revised waste volume projections for 222-S base services less than originally planned; and 7) Labor

efficiencies and cost savings in other areas including Engineering, Safe Work Environment/Personnel Readiness, Safety, Health and Quality Assurance and Strategic Planning and Project Controls. These favorable CVs are partially offset by unfavorable variances for 1) Low-Activity Waste (LAW) Treatment due to DBVS design labor and subcontract costs incurred in FY 2006; 2) Vadose Zone due to T Farm Interim Barrier construction costs higher than baseline estimates due to additional steps required to complete work; 3) C-100 and C-200 Tanks due to overruns on C-103 and C-201 to C-204 retrievals due to technical difficulties; 4) Office of the Vice President (VP) Project Delivery due to additional resources necessary to manage unplanned work for the Expert Review Panel (ERP) issues resolution, Molten Ionic Salt issue resolution, the Integrated Dryer and Melter Test and a cost correction for exhauster fabrication; 5) Chief Financial Officer-Business Services due to an early pension payment of \$11M which offsets an under-liquidation of Continuity of Service (COS) Benefits applied to salary costs; 6) SST and WFO Technical Safety Requirement/Basic Maintenance; and 7) Unplanned costs for the S-102 spill event investigation and recovery.

The company's CM positive schedule variance (SV) was \$1.4M which increased the CTD favorable SV from \$45.7M to \$47.1M. The CM SV of \$1.4M is due to acceleration (work performed that is planned outside the Contract period in the Baseline) on Tanks C-104 and C-110 Retrievals (design, construction and procurement), C Farm Infrastructure (design and construction), W-314 Project (electrical upgrades and turnover), DBVS Project (IDMT sample analysis and final report) and AY/AZ Upgrades (use of spare pump for AZ-102 replacement instead of new procurement); ahead of schedule work on Vadose Zone (direct push sampling and Surface Geophysical Exploration), 242-A Evaporator Upgrades (monitoring and control system and supply side HVAC), S-102 Retrieval (Sand Mantis tool development and testing) and progress earned on Tank Farms Risk Assessments (SST Performance Assessment). The favorable variances are partially offset this month by unfavorable variances related to C-108 Retrieval (equipment removal delayed until the end of Hard Heel removal) and C-109 Retrieval (budget in the current month for work completed earlier), behind schedule on the Hose in Hose Transfer Line (HIHTL) Disposition Project and Liquid Mitigation of Catch Tanks/Double-Contained Receiver Tanks (S-302) and hold on progress for DST valve positioning AWA work pending revised approach and final BCR RPP-08-001.

The CTD positive SV is due to 1) C-100 Tank accelerated work on C-104 and C-110 retrievals, C Farm Infrastructure and work completed ahead of schedule for C-108 and C-109 retrievals; 2) LAW Treatment accelerated work for DBVS Technology Development and Design to address ERP issues (IDMT); 3) Tank S-102 Retrieval accelerated work; 4) W-314 Project accelerated work for completion and turnover of AN, AP, AW, SY Farms electrical and ventilation exhauster upgrades, and the Master Pump Shutdown/MCS; 5) WFO Base Operations accelerated work for cross-site transfers and the SY prefabricated pump pit line replacement, as well as work completed ahead of schedule for DST to DST transfers and 242-A Evaporator campaign, all in support of SST retrievals; 6) Accelerated work for AY/AZ Upgrades (AZ-102 pump replacement); 7) Accelerated work on vapor mitigation; and 8) Ahead of schedule work on the 242-A Evaporator Upgrades (monitoring and control system and supply side HVAC). These favorable SVs have minor, partially offsetting unfavorable variances for 1) Closure Projects due to delays in the HIHTL Disposition Project pending a Life Extension Study and agreement with Regulators on a path forward, and delays in the 244-CR Vault work and Liquid Mitigation of Catch Tanks/Double-Contained Receiver Tanks (S-302) due to required alternate pump replacements; 2) WFO Projects due to delays in initiating work on SL-3160 encasement leak check (low priority work), hold on progress for DST valve positioning AWA pending revised approach and final BCR RPP-08-001 and hold on DST

Flammable Gas Assessment for Tank C-109 (BCR RPP-07-028); and 3) 222-S Laboratory Base Services due to delays in installation of the Inductively Coupled Plasma Mass Spectrometer (ICP/MS).

5.07 - BASE OPERATIONS (EXCLUDES 5.07.02)

Scope Description: The baseline scope for this Work Breakdown Structure (WBS) includes monitoring and maintaining the DSTs and equipment in compliance with TSRs, and Environmental, Safety, Health and Quality programmatic requirements. This scope also includes necessary support activities such as project management, engineering, business services, and support to training and procedures. Base Operations also provides site, shared, and miscellaneous services including Service Assessment Pool and Advanced Medical Services. In addition, the contract fee for FY 2006 is included.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	12,926.6	13,455.4	11,105.6	528.8 4.1%	2,349.8 17.5%	
CTD	296,083.6	296,813.5	276,359.0	703.0 0.2%	20,454.5 6.9%	414,933.4

Note (All tables): Dollars in thousands.

SCHEDULE VARIANCE

Description and Cause: The CTD variance is within the threshold of ± 10 percent or \$1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: Significant contributors to the CM favorable CV include 1) Project Support costs (ongoing efficiencies in Information Resource Management, RPP Baseline Integration Support, TFC Executive Management, Manage Facilities and Property Services and Standards and Compliance); 2) Efficiencies in Essential Services (Fluor Hanford, Inc. [FH] allocation for Site-Wide Services and Shared Services and Miscellaneous Services) and liquidation of COS rates on labor (more employees worked for others than anticipated in the baseline and over liquidation of Mound Pension which will be adjusted in December 2007); 3) Efficiencies in Base Operations Tank Waste

Sampling (Labor costs and crane and rigging less than planned for sampling) and other areas (WFO Safe Storage Surveillance and monitoring, Engineering, Industrial Health and Safety and WFO Essential Services, operations management and training); and 4) Cost savings in Other Mission Support (spare pump used for AZ-102 replacement instead of new procurement). The favorable variances are partially offset by minor unfavorable variances in Project Support (Finance accrual for Union Ratification payment), WFO TSR/Basic Maintenance (CMs/PMs on overtime and costs to replace the sanitary water system in the 272-AW Building), Environmental Health Program, accrual of off-site legal costs, Other Mission Support for Evaporator Upgrades (HVAC System subcontractor costs and MCS software development) and DST Infrastructure Upgrades (progress [BCWP] on AWA work for DST valve positioning issue held pending revised approach and final BCR).

Significant contributors to the CTD favorable CV include efficiencies and cost savings in 1) Essential Services (FH allocation for Site-Wide Services and Shared Services and Miscellaneous Services) and liquidation of COS rates on labor (more employees worked for others than anticipated in the baseline); 2) Ongoing efficiencies in Base Operations (WFO Safe Storage Surveillance and Monitoring, Tank Waste Sampling, Industrial Health and Safety/Health and Safety Plan (HASP), Quality Assurance (QA) Program, Assessments, Price-Anderson Amendment Act of 1988 Program, WFO Essential Services, WFO Facilities Operations Management, WFO Bargaining Unit Training and Nuclear Operations Program Management); 3) Ongoing efficiencies in Project Support (RPP Baseline Integration Support, Information Resource Management, TFC Executive Management, Legal Counsel, Manage Facilities and Property Services and Standards and Compliance); and 4) Other Mission Support efficiencies on Work Force Realignment and Restructure (fewer employees impacted by Involuntary Reduction of Force in 2006 than anticipated). The favorable variances are partially offset by unfavorable variances related to WFO TSR/Basic Maintenance (efforts to reduce the PM/CM backlog and support to S Farm Retrieval acceleration including DST to DST Transfers and Cross-Site Transfer, electrical outages and cathodic protection); Tank Chemistry Control (AN-107

Probe costs); Environmental Health Program costs (vapors sampling support and ATL Readiness to Serve adder); Labor Relations (subcontractor support to Hanford Atomic Metal Trades Council Contract negotiations and ratification); Procurement and Contracts costs (work performed on the Marshalling Yard and Connector Road Improvements); Finance (early pension payment of \$11M was made in September 2007 which offset CTD under liquidations of COS Benefits applied to salary costs); and Other Mission Support (Evaporator Upgrades for HVAC System subcontractor costs and MCS software development).

Impact: None.

Corrective Action: The early pension payment will be recovered by the application of a reduced COS rate on FY 2008 labor. The favorable CVs are expected to continue for the level of effort Support and Base Operations accounts. BCR RPP-08-001 is being processed for the revised approach on DST valve positioning which will allow progress (BCWP) to be taken. The accrual will be adjusted in December 2007 for the over-liquidation of Mound Pension costs.

5.07.02 - ENVIRONMENTAL/TRI-PARTY AGREEMENT MILESTONE ACHIEVEMENT

Scope Description: The baseline provides for the safe and compliant storage of the Hanford Site tank wastes until waste is retrieved for processing (currently 53 million gallons of waste in 177 SSTs and DSTs and approximately 60 miscellaneous underground storage tanks). This includes monitoring and maintaining activities associated with the Hanford Federal Facility Agreement and Consent Order, commonly referred to as the Tri-Party Agreement (TPA). Scope includes compliance efforts to meet TPA Milestones M-23, M-46, and M-48, including characterization, DST Space Management and DST Integrity. Scope includes transfer operations, and the operations and maintenance of the 242-A Evaporator to reduce the volume of waste stored in DSTs.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	1,014.7	1,117.8	995.9	103.1 10.2%	121.9 10.9%	
CTD	38,164.5	41,268.0	40,025.6	3,103.5 8.1%	1,242.5 3.0%	48,986.5

SCHEDULE VARIANCE

Description and Cause: The CM SV is due to progress on the UT rescan of Tank 241-AY-101 and AP Level Rise anchor bolt analysis. The CTD favorable SV is due to early performance of DST to DST Transfers (supports tank retrievals, Evaporator and tank level increases) and 242-A Evaporator Campaign 08-01; and work accelerated (planned outside the contract period in the baseline) for Cross-Site Transfers and the SY PPP Line Replacement, both in support of tank retrievals.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM unfavorable CV is due to efficiencies on the DST to DST Transfer work and 242-A Evaporator Operation and Maintenance.

The CTD favorable CV is due to efficiencies in completing DST to DST Transfers, Cross-Site Transfers, DST Facility Upgrades Project Management and the Environmental Support and Assessment Program. Favorable CVs are partially offset by unfavorable variances for the DST Integrity Project (AP Valve Pit Integrity Assessment, AY-101 and AN-107 UT, Independent Qualified Registered Professional Engineer services and DST Infrastructure Integrity Assessment); Catch Tank Pumping (UX-302-A and ER-311); SY PPP Line Replacement; and Increase Specific Gravity costs.

Impact: None.

Corrective Action: Lessons learned on the AP Valve Pit integrity work has been incorporated into ongoing work with notable improvements.

**5.08 - RETRIEVE AND CLOSE (EXCLUDES 5.08.02/.03;
5.08.04.01/.02; 5.08.05/.06/.07/.12/.13)**

Scope Description: In the future, specific life cycle scope in this WBS includes DST Retrieval and Closure, Closure of Long Term Facilities, and Post Closure Monitoring. These activities are all outside of the contract period reporting window. The scope also includes preparation of a 200-IS-1 Operable Unit Work Plan and Sampling and Analysis Plan as directed by the ORP.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	5.2	0.0 0.0%	(5.2) -5.2%	
CTD	0.0	268.4	209.3	268.4 268.4%	59.0 22.0%	0.0

SCHEDULE VARIANCE

Description and Cause: The CTD favorable SV is due to ORP directed acceleration of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 IS-1 work plans in support of the DOE, Richland Operations Office (RL) TPA M-15 Milestones.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CTD favorable CV is due to cost savings in closure of old cross site transfer lines.

Impact: None.

Corrective Action: None required.

5.08.02 - WASTE TREATMENT PLANT FEED DELIVERY PROGRAM

Scope Description: The Waste Feed Delivery (WFD) program provides the minimum required technical analysis, waste characterization, and project definition activities necessary to provide waste to the Waste Treatment Plant (WTP). The WFD program work activities include a variety of cross-cutting programmatic activities supporting WFD to the waste treatment facilities, including characterization, WFD engineering and modeling support including management and maintenance of the retrieval and transfer technical baseline, WFD program/project management support, and DST retrieval/transfer management. This work element will provide feed delivery evaluations using the Hanford Tank Waste Operations Simulator model.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	673.4	673.4	536.9	0.0 0.0%	136.6 20.3%	
CTD	15,724.5	15,724.5	14,096.6	0.0 0.0%	1,627.9 10.4%	22,019.8

SCHEDULE VARIANCE

Description and Cause: The CM and CTD variances are within the threshold of ± 10 percent or \$1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is due to ongoing cost efficiencies in level of effort support for WFO Project Controls (improved systems, organizational realignment and co-location to improve performance) and Tank Waste Database Support (staff reductions). The CTD favorable CV is due to ongoing cost efficiencies in level of effort labor for WFO Project Controls (improved systems, organizational realignment and co-location to improve performance); Startup and Testing (use of direct staff instead of subcontracted labor and reduced material

usage); and Tank Waste Database Support (staff reductions). Favorable CV partially offset by unfavorable CV for Office of VP Project Delivery (additional unplanned DBVS staff assigned to manage ERP issue resolution and exhauster fabrication cost correction to support vapors).

Impact: None.

Corrective Action: None required.

5.08.03 - DST RETRIEVAL PROGRAM

Scope Description: The baseline for this WBS element includes activities required to plan, provide, and operate systems for retrieving waste from the DSTs, preparing it for feed to the WTP, and then transferring it to the WTP.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	53.6	9.7	53.6 53.6%	43.9 81.9%	
CTD	1,676.3	1,984.2	2,220.1	307.9 18.4%	(235.9) -11.9%	1,676.3

SCHEDULE VARIANCE

Description and Cause: The CM and CTD favorable SV is due to acceleration of the Tank 241-AN-101 Retrieval Systems work (design, construction and startup) in support of Tank 241-C-104 Retrieval.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CTD unfavorable CV is due to previous cost overruns on the AN-101 mixer pump procurement which is partially offset by ongoing cost efficiencies on accelerated work for the AN-101 Retrieval System and level of effort Project Support to Construction of DST Retrieval Systems.

Impact: None.

Corrective Action: None required.

5.08.04.01 - PROJECT W-314 (TANK FARM RESTORATION AND SAFE OPERATIONS)

Scope Description: The baseline for Project W-314 provides essential tank farm infrastructure upgrades to support WFD to the WTP and to correct environmental compliance deficiencies with the tank farm support systems. Work scope includes completion of the Waste Transfer System, AN, AP, AW, and SY Farm electrical Upgrades, AN and AW HVAC Exhausters and the MPS System and MCS. Project Management, Project Support and Startup, Testing, Readiness and Turnover to Operations are also included.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	204.2	456.3	204.2 204.2%	(252.0) 123.4%	
CTD	2,865.8	6,860.4	7,308.8	3,994.6 139.4%	(448.4) -6.5%	2,865.8

SCHEDULE VARIANCE

Description and Cause: The CM SV is due to acceleration of the Project W-314 AP and AW Farm Upgrades and Startup, Testing and Turnover of the Phase 1 work (MPS/MCS) and Phase 2 work (Electrical Upgrades and HVAC Exhausters). The CTD favorable SV is due to the acceleration of Project W-314 work including all Farm electrical upgrades, the MPS/MCS, HVAC Exhausters and Startup, Testing, Turnover and Readiness.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is primarily due to cost overruns on the Phase 1 Startup, Testing and Turnover of the MPS due to increased labor required for Engineering support to bring the system on-line, debugging of programming and test bed setup. The CTD CV is within the threshold of ± 10 percent or \$1M.

Impact: None.

Corrective Action: None required.

5.08.04.02 - PROJECT E-525 (UPGRADE TRANSFER SYSTEMS)

Scope Description: The baseline for Project E-525 provides activities required to define, design, procure, construct, test, turnover, and manage modifications to a portion of the DST Transfer System. The scope of Project E-525 is further defined within the following five design/construction packages: 1) AZ-151 Catch Tank Replacement; 2) Clean-Out Box (COB) Modifications; 3) SY-Farm Transfer Lines; 4) 204-AR Load-Out Facility Transfer Line; and 5) Plutonium Finishing Plant Transfer Lines. These modifications brought a portion of the DST transfer system into compliance with Washington Administrative Code 173-303-640, in support of TPA Milestone M-43-00.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	2,712.4	2,712.4	2,982.8	0.0 0.0%	(270.4) -10.0%	2,712.4

SCHEDULE VARIANCE

Description and Cause: No work has been performed on Project E-525 in the FY 2007 and FY 2008 period. The CTD SV is within the threshold of ± 10 percent or \$1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CTD unfavorable CV is due to cost overruns on construction of COBs and the SY-Farm Transfer Line Backfill (work performed on supplied air which was not budgeted for at the time). Unfavorable CV for construction is partially offset by cost efficiencies on the AZ-151 Catch Tank Bypass Construction and in level of effort Project Support.

Impact: None.

Corrective Action: None required.

5.08.05 - RETRIEVAL / CLOSURE PROGRAM

Scope Description: The baseline provides for Retrieval and Closure support activities in this WBS. Specifically, the scope includes program management, regulatory documentation, SST cross-site transfers, technology development, CTF management and maintenance, Vadose Zone support, inactive waste sites administration, Tank Farm Support Facilities/Transfer Systems. The scope also includes the Closure Project TSR/Basic Maintenance on SSTs, Closure Project Operations Essential Services, Closure Project Field Projects/Upgrades, and the solid waste management programs.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	4,735.1	4,773.5	4,714.3	38.4 0.8%	59.2 1.2%	
CTD	108,768.5	106,571.9	100,708.7	(2,196.6) -2.0%	5,863.1 5.5%	148,974.5

SCHEDULE VARIANCE

Description and Cause: The CM SV is within the threshold of ± 10 percent or \$1M. The CTD unfavorable SV is due to behind schedule condition on 1) 244-CR Vault and Liquid Mitigation of Catch Tanks (S-302)/double-contained receiver tanks (DCRTs) (field work on hold pending procurement and installation of alternate retrieval pumps); 2) HIHTL Disposition Project (work delayed pending preparation of a Life Extension Study and agreement with State Regulators on a path forward and schedule); and 3) T Farm Interim Surface Barrier (design completed behind schedule and procurement/construction taking longer than expected). Unfavorable SV is partially offset by favorable variance for Vadose work ahead of schedule (direct push sampling and SGE).

Impact: Work will be completed later in FY 2008.

Corrective Actions: CR Vault and Liquid Mitigation of Catch Tanks/DCRTs fieldwork is expected to resume in December 2007 when the alternate pumps are delivered. S-302 solids analysis is in progress and an A/E contract was awarded.

Based on negotiations with Regulators and the Life Extension Study, the HIHTL Disposition Project work for FY 2007 – FY 2009 is being re-planned via BCR RPP-08-005. S Farm HIHTL Disposition will be supported in FY 2008. U Farm Disposition will be deferred to FY 2009. In November 2007, an Architecture/Engineering contract was awarded, Engineering kicked-off and planning started to investigate and survey the S Farm pits and lines.

The T Farm Surface Barrier construction is now forecast to be completed in March 2008.

COST VARIANCE

Description and Cause: The CM CV is within the threshold of ± 10 percent or \$1M. The CTD favorable CV is due to underruns in SST Operations Essential Services partially offset by overruns in SST TSR/Basic Maintenance (labor planned in Essential Services being utilized in SST TSR/Basic Maintenance account to complete preventive and corrective maintenance activities); cost savings on Isolate Transfer System Components work; cost efficiencies in Infrastructure support from FH and Lockheed Martin Services; and miscellaneous other cost efficiencies and savings in Grand Junction Gamma Logging, Tank Farms Risk Assessments, Retrieval Technology Development, CTF Management and Maintenance and Liquid Level and Video Assessment. The favorable CVs are partially offset by unfavorable variances for Vadose RCRA Corrective Actions T Farm Interim Surface Barrier work exceeding the baseline estimates (additional steps to complete the required work including transportation of soil into the respective area, grading and compaction of soil prior to placing material, development of an infiltration area for water run-off, interior trench and anchor supports for the material and associated material costs) and CP Office of the VP (unplanned purchase of spare cameras and unplanned costs for vapor sampling for chemicals of concern).

Impact: T Farm Interim Surface Barrier costs at completion will exceed the budget.

Corrective Action: Measures have been implemented to reduce the costs on the remaining T Farm Interim Surface Barrier construction work. Lessons learned will be applied to future potential interim barrier work.

5.08.06/.07 - SST RETRIEVAL EAST / WEST AREA

Scope Description: The baseline for this element includes activities required for the retrieval of all 149 SSTs. The scope includes project management, design and engineering, retrieval procurement, retrieval system installation, and retrieval startup and readiness. Scope in this WBS also includes the operations of the SST retrieval systems, post retrieval sampling, and the retrieval data reports.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	2,286.2	2,135.5	2,755.2	(150.7) -6.6%	(619.7) -29.0%	
CTD	44,674.3	72,004.5	63,409.1	27,330.2 61.2%	8,595.4 11.9%	52,240.1

SCHEDULE VARIANCE

Description and Cause: The CM SV is within the threshold of ± 10 percent or \$1M. The CTD favorable SV is due to accelerated work performed on retrieval of Tanks S-102, C-104, C-110 and C Farm Infrastructure; and work completed ahead of the contract period schedule on retrieval of Tanks C-108 and C-109 (design, construction, startup and retrieval).

Corrective Action: None required.

COST VARIANCE

Description and Cause: T The CM unfavorable CV is due to unplanned costs for S-102 leak event investigation, corrective action plan and cleanup and C-108 Retrieval (taxes and other residual costs for the FOLDTRACK® and High Resolution Resistivity Liquid Detection Monitoring and Mitigation rental) which are partially offset by efficiencies on C-104 Retrieval (Design and Engineering), C-109 Retrieval (Hard Heel removal), C-110 Retrieval (Design and Project Management), C Farm Infrastructure (equipment removal for AN-101) and S-102 Retrieval (Sand Mantis development and testing). The CTD favorable CV is due to efficiencies on Retrieval of Tanks C-104, C-108, C-109, C-110, S-102, S-112 and S-109 (partial retrieval). The favorable CV is partially offset by overruns on Tank C-103 Retrieval (equipment problems and increased sampling), Tanks C-

201-204 Retrievals (equipment issues), C Farm Infrastructure and unplanned costs for S-102 leak event investigation, corrective action plan and cleanup.

Impact: The large favorable CV generated through retrieval efficiencies and savings is being reduced by S-102 recovery costs.

Corrective Action: Continued acceleration of C-104 and C-110 Retrieval activities will help minimize the unfavorable cost variance from S-102.

5.08.12/13 - SST CLOSURE

Scope Description: The baseline provides the scope for tank farm closure which includes those activities required for interim closure of each tank in the farm, followed by closure of the entire farm once all tanks within the farm are interim closed. Scope for interim closure of each tank includes characterization, engineering evaluation and reporting, deactivation and isolation of transfer lines, pits and penetrations to the tank, and placement of a grout layer in the bottom of the tank to stabilize the residual waste.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	29.6	29.6	58.6	0.0 0.0%	(29.0) -98.1%	
CTD	825.4	825.4	812.8	0.0 0.0%	12.5 1.5%	1,101.8

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV is within the threshold of ± 10 percent or \$1M.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is due to final costs for the S-112 Interim Closure. The CTD CV is within the threshold of ± 10 percent or \$1M.

Impact: None.

Corrective Action: None required.

5.09 - TREAT & DISPOSE WASTE (EXCLUDES WBS

5.09.02.02/.03/.05/.08/.11; 5.09.03.01/.04)

Scope Description: The baseline provides for the remaining scope for WBS 5.09, which includes the Infrastructure Services that provide for electrical power to the WTP, Strategic planning including the support to Optimization Studies, Project W-QQQ immobilized high-level waste (IHLW) Shipping Facility support, and support to the TPA Milestone M-62-08 deliverables. Also included are the Failed Melter Disposal System and future expansions to Integrated Disposal Facility (IDF). Both are outside of the contract-to-date reporting. Startup and Turnover, performance of Operations Readiness Reviews, and turnover of the constructed IDF to Operations are included in this WBS.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	469.9	460.0	375.0	(10.0) -2.1%	84.9 18.5%	
CTD	9,511.3	9,514.2	7,652.4	2.9 0.0%	1,861.7 19.6%	13,904.0

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV is within the threshold of ± 10 percent or \$1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM favorable CV is due to Infrastructure Services Phase 1 (reduced electrical usage at the WTP), labor efficiencies in Supplemental Treatment Strategic Planning and Immobilized Low-Activity Waste (ILAW) Baseline Management, Systems Definition and Performance Assessment which is partially offset by IDF Operations costs to clean cell tank covers. The CTD favorable CV is due to efficiencies in the aforementioned Strategic Planning and WTP electrical usage as well as underruns in the ILAW (Baseline Management, Systems Definition and Performance Assessment). The favorable

CV is partially offset by overruns in the IDF Operations care and custody (equipment calibrations and performance testing, procedure development, training and habitat mitigation).

Impact: None.

Corrective Action: None required.

5.09.02.02 - TRU / LLW PACKAGING

Scope Description: The baseline provides for the design, construction, testing, operation, and decommissioning of a system to treat contact-handled transuranic mixed (CH-TRUM) waste for eventual shipment/disposal at the Waste Isolation Pilot Plant. 1) CH-TRUM Waste Packaging: Nine tanks are currently thought to contain CH-TRUM waste: four T-200 series SSTs, four B-200 series SSTs, and Tank 241-T-111; 2) Remote Handled transuranic mixed (RH-TRUM) Waste Packaging: Three tanks are currently thought to contain RH-TRUM waste: 241-AW-103, 241-AW-105 and 241-SY-102; and 3) Low-level waste (LLW) Packaging: activities required to operate a system to package LLW such that the packages can be sent to a licensed facility for disposal. One tank, 241-T-110, is currently thought to contain LLW. The volume of LLW in this tank is approximately 400,000 gallons.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	0.0	0.0	65.6	0.0 0.0%	(65.6) -65.6%	0.0

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the threshold of ± 10 percent or \$1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM and CTD unfavorable CV is due to residual costs received in early FY 2006.

Impact: None.

Corrective Action: None required.

5.09.02.03/.08 - LAW TREATMENT

Scope Description: This work element includes the facilities and systems to treat LAW that will not be treated at the WTP. The work scope includes design, permitting, procurement, construction, startup and testing, readiness, operations, and decontamination and decommissioning of a treatment facility in the 200 East Area. Scope includes the same activities for a 200 West Area facility and a 200 West Area Pretreatment Facility.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	66.0	65.9	149.2	(0.1) -0.2%	(83.3) -126.4%	
CTD	1,533.2	1,533.1	1,534.0	(0.1) 0.0%	(0.9) -0.1%	2,150.2

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV is within the threshold of ± 10 percent or \$1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is due to accrual of costs associated with the Fractional Crystallization Technology Development test setup work at SRNL. The CTD CV is within the threshold of ± 10 percent or \$1M.

Impact: None.

Corrective Action: None required.

5.09.02.05/.11 - DEMONSTRATION BULK VITRIFICATION SYSTEM PROJECT

Scope Description: The baseline provides work scope to issue procurement package and award contract; contract costs; support contract costs; and direct labor costs for project management and control, permitting, safety document preparation, readiness review activities, and engineering for the following: vendor design, fabrication, construction, installation, testing and operation of a Supplemental Treatment Test and Demonstration Facility; vendor design and fabrication of a salt waste retrieval system; and vendor design and construction required for Supplemental Treatment Test and Demonstration Facility site preparation, including infrastructure. The following is also provided: direct labor costs for installation, startup and operation of a salt waste retrieval system; material and utility costs in support of Supplemental Technology Demonstrations; and decontamination and decommissioning costs associated with Supplemental Technology Demonstrations.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	278.9	978.0	596.7	699.1 250.7%	381.3 39.0%	
CTD	27,099.9	40,954.2	43,368.8	13,854.3 51.1%	(2,414.6) -5.9%	28,231.4

SCHEDULE VARIANCE

Description and Cause: The CM and CTD favorable SVs are due to accelerated work performed on the DBVS Project to support resolution of the ERP issues (IDMT, Molten Ionic Salts and CD-2) and final design.

Impact: None.

Corrective Action: None

COST VARIANCE

Description and Cause: The CM CV reflects progress taken for completion of the IDMT sample analysis work, final draft report and significant reduction in subcontractor manpower as the scope of work nears completion. The CTD

unfavorable variance is due to additional subcontractors' effort to complete initial design (in prior years) and retroactive subcontractor rate adjustments resulting from a DCAA audit which are partially offset by cost efficiencies on the recent DBVS Technology Development work.

Impact: Additional funding is required for FY 2008 testing of pellet optimization in the full-scale mixer/dryer and for the FY 2008 design modification effort resulting from the ERP issues resolution.

Corrective Action: Sources of additional funding are being investigated.

5.09.03.01 - INTEGRATED DISPOSAL FACILITY

Scope Description: The baseline provides for planning, designing, and constructing the onsite expandable IDF for disposing of compliant ILAW stream packages produced at the WTP and through supplemental treatment, and the DOE, Richland Operations Office (RL) generated mixed low-level waste (MLLW) and LLW. The IDF will consist of the initial capacity near-surface, remote-handled waste trench facility to support WTP Operations ILAW Production and the RL MLLW and LLW disposal quantities. Infrastructure necessary to provide operations and maintenance support (e.g., utilities, roads, and fencing) will be provided by this WBS.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	7,132.9	7,132.9	5,366.1	0.0 0.0%	1,766.8 24.8%	7,132.9

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the threshold of ± 10 percent or \$1M. Work on this Facility is completed.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is within the threshold of ± 10 percent or \$1M. The CTD favorable CV is due to cost effective management of the IDF construction changes, utilization of internal engineering resources rather than subcontracted support, and less project management resource usage than planned.

Impact: None.

Corrective Action: None required.

5.09.03.04 - PROJECT W-464 (INITIAL IHLW STORAGE FACILITY)

Scope Description: The baseline provides for Project W-464, Interim Storage Facility, which is a Canister Storage Building Retrofit Subproject that addresses initial operations storage. This element provides onsite interim storage for Initial Operations IHLW canisters until they can be shipped to an offsite geological repository. The planning for receipt and interim storage of the IHLW canisters shall comply with the Waste Acceptance System Requirements Document and the Office of Civilian Radioactive Waste Management Waste Acceptance Preliminary Specifications. This WBS covers equipment for transportation of IHLW canisters from the WTP to the interim storage facilities. The work scope activities included under this WBS element are as follows: Provide Project Management (Capital) and project engineering required for execution of design, procurement and construction of the Interim Storage Facility.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	109.4	109.4	35.1	0.0 0.0%	74.3 67.9%	109.4

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the threshold of ± 10 percent or \$1M. No work is currently being performed on this Project.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is within the threshold of ± 10 percent or \$1M. The CTD favorable CV is due to cost effective use of support resources on Project W-464.

Impact: None.

Corrective Action: None required.

5.10 - ANALYTICAL TECHNICAL SERVICES

Scope Description: The baseline scope includes ATS management and Hanford Services support in order to meet the capability/capacity requirements on the 222-S Laboratory complex for the Hanford mission. Also included are: 222-S Laboratory spares; 222-S Laboratory spare reserves; capital equipment not related to construction; technology development activities; performance of facility assessment and characterization activities; development of National Environmental Policy Act of 1969 and other regulatory documentation, deactivation plans, post-deactivation surveillance and maintenance plans; development of deactivation endpoints and turnover package; activities to flush, isolate, and blank process or sub-process systems; and removal of radioactive and hazardous materials and mixed wastes.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	2,482.4	2,456.3	2,091.3	(26.1) -1.1%	364.9 14.9%	
CTD	53,207.1	52,939.4	46,938.3	(267.7) -0.5%	6,001.1 11.3%	76,652.5

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the threshold of ± 10 percent or \$1M.

Impact: None

Corrective Action: None.

COST VARIANCE

Description and Cause: The CM favorable CV is due to 1) 222-S Services (less FH support to corrective and preventative maintenance activities than planned and reversal of October 2007 accrual for the steam assessment as November 2007 costs were applied to the wrong charge code [will be corrected in December 2007]); 2) Efficiencies in 222-S Safe and Compliant Operations and General Support (less than planned dedicated and matrixed staff than planned and planning labor rates being greater than actual costs); and 3) ATL Waste Handling and Disposition costs less than planned.

The CTD favorable CV is due to 1) Efficiencies in Analytical Technical Services Management technical advisors (attrition and transfer to WFO); 2) Efficiencies in 222-S Services (less than planned steam assessment); 3) Efficiencies in 222-S Safe and Compliant Operations and General Support (less than planned dedicated and matrixed staff, planning rates greater than actual costs and revised waste volume projections for waste handling are less than originally planned); 4) Cost savings for 222-S Facility Reliability (Maintenance Annex HVAC and roof repair completed under budget); 5) Efficiencies in 222-S Analytical Support (re-direction of Analytical Process Development scientist and Engineering technical support to Technology Development and Tank Sampling analytical support for corrosion control activities); 6) Efficiencies in 222-S Technology Development (less than planned Analytical Methods Development activities in FY06 as resources were re-directed to support the Industrial Hygiene Program and vapor analysis); 7) Cost efficiencies in ATL Waste Handling (shipments of waste for processing have been less than planned due to actual analytical production); 8) Efficiencies in ATL Waste Handling Disposition (shipments of waste for processing have been less than planned due to actual analytical production resulting in the billing of ATL waste handling costs to the end users being less than planned); and 9) Efficiencies in ATL Readiness to Serve (ATL costs less than planned liquidations). Favorable CTD CVs partially offset by minor unfavorable variance for 1) 222-S Capital Equipment Not Related to Construction (procurement of the gas chromatograph/mass spectrometer and increased costs associated with design for the installation of the ICP/MS) and 2) ATL Waste Handling Revenue (shipment of waste for processing have been less than planned due to actual analytical production resulting in the billing of ATL waste handling costs to the end users being less than planned).

Impact: None.

Corrective Action: None required.

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

I. Near-Term Deliverables:

- **M-45-55-T04, Submit to Ecology for review and comment a draft of the A-AX, C, and U Field Investigation Report.**

Due: 04/30/06

Status: Deleted. TPA Change Request, M-45-06-03 approved by DOE and Ecology on December 4, 2007. Reports were issued in December and will also be included as appendices to the Phase 1 RCRA Field Investigation RFI report.

- **M-45-55, Submit to Ecology for review and approval as an Agreement primary document a Phase 1 RFI report integrating results of data gathering activities and evaluations for WMAs S-SX, T, TX-TY, A-AX, B-BX-BY, C, and U; and related activities, including groundwater monitoring and impacts assessment using Hanford Site groundwater models, with conclusions and recommendations.**

Due: 01/31/08

Status: On Schedule. The 33 chapters (focused on the general reader) and 14 appendices (focused on professional audiences), are in ORP review. Draft chapters and appendices have been sent to Ecology and EPA for informal review. Eight detailed documents (focused for the subject matter expert) have been released with the ninth being finalized.

TPA Change Request, M-45-06-03 approved by DOE and Ecology on December 4, 2007.

- **M-45-56, Complete Implementation of Agreed to Interim Measures.**

Due: 07/31/08

Status: On Schedule.

- **M-45-58, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Master WorkPlan 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: On Schedule. TPA Change Request, M-45-06-03 approved by DOE and Ecology on December 4, 2007.

- **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: On Schedule. TPA Change Request, M-45-06-03 approved by DOE and Ecology on December 4, 2007.
- **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: On Schedule.
- **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: On Schedule

II. Significant Accomplishments:

- The T-Farm interim barrier is being constructed. The sloped base of the barrier is complete, the run-off channel configured, and the infiltration area prepared. Geotextile anchor trenches are being excavated. Approximately 3,000 square feet of barrier has been sprayed.
- Initiated direct push work at C WMA. Eight initial exploration holes have been driven and logged. Sample horizons have been identified. Five vertically separated samples have been collected from one location and forwarded for laboratory analyses.
- The TX and TY geophysics work is proceeding: analysis of well-to-well resistivity survey has been completed, and 17 of 47 surface to surface lines have been collected.
- TPA Change Request, M-45-06-03 approved by DOE and Ecology on December 4, 2007.

III. Significant Planned Actions in the Next Six Months:

- Complete construction of the interim surface barriers at T-106.
- Complete SGE data collection at WMA TX-TY.
- Issue RCRA Facility Investigation Report (with the Field Investigation Reports for A, AX, C, and U WMAs as Appendices)
- Comment disposition workshops will continue on the initial SST-PA

IV. Issues

Weather conditions are slowing the placement of the T-106 interim barrier.

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 3/24/05; C-202 retrieval completed on 8/11/05; C-201 retrieval completed on 3/23/06; C-204 retrieval completed on 12/11/06.
 - Mobile retrieval (C-101, C-105, or C-111): C-101 start of retrieval is currently projected for fiscal year 2011 (October 2010).

 - Implementation of full-scale LDMM technologies for the first three 100-series tank retrievals following Tank S-112:
 - Tank S-102: High Resolution Resistivity (HRR) system installed; supporting retrieval operations. System was electrically shut down with all power to the S-102 area in response to a waste spill on July 27, 2007. Power will be restored to S-102 as soon as safely possible.
 - Tank C-103: HRR system demonstration complete.
 - Tank C-108: HRR system installed; supporting retrieval operations.
 - Completed HRR injection tests at S-102.
 - Submitted HRR evaluation report and recommendation for further deployment.

 - Submittal of TWRWPs:
 - Tanks C-201, C-202, C-203, and C-204: Completed on 4/8/04
 - Two (2) 100-series tanks by 7/31/04: Completed on 7/29/04 (C-103 and C-109)
 - Four (4) 100-series tanks by 10/31/04: Completed on 10/8/04 (C-102, C-104, C-107, C-108, and C-112).

- Five (5) 100-series tanks by 1/31/05: Completed on 1/24/05 (C-101, C-105, C-110, and C-111).
- Submittal of Waste Management Area (WMA) integration plans by 6/30/05:
 - WMA C: Completed; submitted from ORP to Ecology on 6/22/05
 - WMA T: Completed; submitted from ORP to Ecology on 6/22/05.
- **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: To Be Missed (Based on current DOE Baseline planning)
- **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-45-05, 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: To Be Missed
- **M-45-05-T06, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**
Due: 9/30/08
Status: To Be Missed (Based on current DOE Baseline planning)
- **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
- **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

- Continued design and construction work for the C-104 retrieval system.
- Continued testing of FoldTrak vehicle at Cold Test Facility.

III. Significant Planned Activities in the Next Six Months

- Reach resolution on missed M-45-00B and M45-00C milestones.
- Continue testing of FoldTrack at Cold Test Facility.
- Perform readiness assessment to resume C-Farm retrievals.
- Deploy FoldTrak in C-109 and complete retrieval.
- Deploy FoldTrak in C-108 and complete retrieval.
- Continue construction for C-104 retrieval system.
- Complete comment resolution on the Mobile Retrieval System (MRS) TWRWP and obtain Ecology approval.
- Complete comment resolution on the C-110 TWRWP and obtain Ecology approval.
- Revise leak detection monitoring sections of approved TWRWPs and obtain Ecology approval.

IV. Issues

- The MRS TWRWP, the last of the TWRWPs identified in Milestone M-45-00B, has not been approved by Ecology. ORP submitted a revised MRS TWRWP for tanks C-101/105/111 to Ecology on April 26, 2007. ORP received Ecology comments on October 22, 2007. Comment resolution is in progress.
- Milestones M-45-00B (retrieve all C-Farm tanks) and M-45-00C (initiate negotiations on next set of SST retrievals) were both due on September 30, 2006 and missed. DOE, Ecology, and EPA began TPA negotiations in May 2007, to address these and other milestones.

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	7/2/09	8/5/10	9/1/10	10/1/10	1/6/12	12/6/11	9/27/12
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	1/28/08	4/28/08	2/6/08	TBD	TBD	9/28/08	TBD
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	Complete	Complete	Complete	Complete	8/25/08	8/1/08	7/14/09
C-109	Complete	Complete	Complete	Complete	6/5/08	4/4/08	4/30/09
C-110 ^{bc}	1/16/08	6/10/08	3/30/08	TBD	TBD	11/3/08	TBD
C-111	8/18/14	9/21/15	11/21/15	12/21/15	4/28/16	3/28/16	1/31/17
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 staturesd performance baseline as of 12/31/07 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.

SST RETRIEVAL SEQUENCE DOCUMENT

I. Deliverables

- **M-45-02M, Submit Biennial Updates to SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days**
Due: 3/1/06 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
Status: Complete.

- **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-45-02M 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: Schedule at risk. ORP, CH2M HILL, and Ecology met repeatedly over a four-month period during 2007 to review and agree modeling assumptions needed to complete the HFFACO Milestone M-45-02N document. Agreement and Ecology approval of the necessary assumptions was not reached until November 30, 2007, some eight weeks later than originally planned to support completion of the milestone. Due to the inherent complexity of the mission modeling, this delay places completion of the milestone on schedule at risk. ORP and CH2M HILL are working to incorporate the revised assumptions into the model and are attempting to recover the original schedule. However, due to the time necessary to conduct the complex modeling, the milestone schedule remains at risk. ORP and CH2M HILL plan to meet with Ecology by the end of January to review status of assumption incorporation into the model and to review available preliminary modeling results.

- **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

- **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

II. Significant Accomplishments

- Agreed to modeling assumptions for M-45-02N submittal.

III. Significant Planned Activities in the Next Six Months

- Submit M-45-02N deliverable.

IV. Issues

- See discussion above for M-45-02N.

TANK RETRIEVALS WITH INDIVIDUAL MILESTONES

Tank 241-C-106

I. Deliverables

- **M-45-05H, Interim Completion of Tank C-106 SST Waste Retrieval and Closure Demonstration Project**

Due: 6/30/04

Status: Completed

- **M-45-05L-T01, Complete Full-Scale C-106 Waste Retrieval**

Due: 11/1/03

Status: Completed

- **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: Completed

II. Significant Accomplishments

None.

III. Significant Planned Activities in the Next Six Months

- Submit C-106 Appendix H document revisions to NRC to complete their review of the C-106 exception request (concurrent courtesy transmittal to Ecology and EPA).
- Continue SST PA comment resolution with Ecology and EPA.

IV. Issues

- C-106 Closure Plan approval and SST radiological Categorical Notice of Construction Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement and associated Record of Decision (ROD); forecast completion for the final EIS is June 2009.

Tank 241-S-102

I. Deliverables

- **M-45-05C, Complete S-102 Initial Waste Retrieval Project Construction (to Include all Physical Systems Including Those Necessary for Leak Detection, Monitoring, and Mitigation)**
Due: 3/31/04
Status: Completed
- **M-45-06C, Submit a Certified S-102 Component Closure Activity Plan, as an Application for a Modification to the Hanford Site-Wide Hazardous Waste Facility Permit to Ecology**
Due: 9/30/04
Status: Completed
- **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. Retrieval restarted on July 25, 2007 and was suspended after a waste spill on July 27, 2007. Spill recovery actions are in progress.
- **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.

II. Significant Accomplishments

- Completed removal of above grade equipment in preparation for removal of contaminated soil.
- Continued planning for removal of contaminated soil.
- Conducted Proof of Principle test on Sand Mantis. Draft test report under review.

III. Significant Planned Activities in the Next Six Months

- Recover from the waste leak of July 27, 2007 (including removal and disposal of contaminated equipment and soil).
- Resume retrieval.

IV. Issues

- Retrieval of Tank 241-S-102 was not completed by TPA milestone date of March 31, 2007, due to pump failure.
- On July 27, 2007 a leak of up to 114 gallons of tank waste occurred from the S-102 pumping system. Operations were suspended and recovery actions started immediately.

- Milestone M-45-15 requires the submittal, by ORP, and approval by Ecology of a "Closure Demonstration Plan" and incorporation of the plan in the Site-wide Permit. Approval of closure plans is being held in abeyance by Ecology until issuance of a Record Of Decision for the Tank Closure EIS (Ecology letter dated August 15, 2006).

Tank 241-S-112

I. Deliverables

- **M-45-06B, Submit a Certified S-112 Component Closure Activity Plan, as an Application for a Modification to the Hanford Site-Wide Hazardous Waste Facility Permit to Ecology**
Due: 9/30/04
Status: Completed.
- **M-45-03C, Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Single-Shell Tank S-112**
Due: 6/30/05
Status: Completed.
- **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, Imbedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**
Due: 12/31/07
Status: On Schedule. Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007
- **M-45-13B, Imbedded 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: On Schedule. Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007

II. Significant Accomplishments

- None

III. Significant Planned Activities in the Next Six Months

- Prepare and submit the S-112 RDR.

IV. Issues

- Milestone M-45-13 requires the submittal, by ORP, and approval by Ecology of a "Closure Demonstration Plan" and incorporation of the plan in the Site-wide Permit. Approval of closure plans is being held in abeyance by Ecology until issuance of a Record Of Decision for the Tank Closure EIS (Ecology letter dated August 15, 2006).

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 03/18/04 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; these two tanks are undergoing retrieval. ORP's obligation to interim stabilize S-102 and S-112 will be satisfied upon completion of retrieval operations. Retrieval of S-102 will be impacted by the recent spill at this tank.

II. Significant Accomplishments:

Retrieval of Tank S-112 complete.

III. Significant Planned Actions in the Next 6 Months:

Conduct recovery actions from the spill at S-102.

IV. Issues

Tank S-102 retrieval not completed by milestone M-45-05A date of March 31, 2007. The spill at S-102 will delay completion of this milestone.

Milestone M-23-00, Tank Integrity and Monitoring

- I. **Near-Term Deliverables:**
None.
- II. **Significant Accomplishments:**
Transmitted, "241-BY-ITS1 Liquid Level Assessment Report", RPP-RPT-32085, Revision 0, to Ecology on June 8, 2007. This closes out this milestone.
- III. **Significant Planned Actions in the Next Six Months:**
None
- IV. **Issues**
Nothing to report.

In Tank Characterization and Summary

For the period from December 1 – December 30, 2007

I. Accomplishments:

- Completed RPP-PLAN-35593, Rev. 0, Tank 241-AY-102A Leak Detection Pit Grab Sampling and Analysis Plan, on December 3, 2007.
- Completed RPP-PLAN-35521, Rev. 0, Corrosion Mitigation and Compatibility Grab Sampling and analysis Plan for Fiscal Year 2008, , on December 10, 2007.
- Completed , RPP-PLAN-35963, Rev. 0, Vapor Sampling and Analysis Plan for Single-Shell Tank 241-S-102 Headspace, on December 20, 2007.
- Completed Tank 241-S-102 soil sampling on December 9, 2007.
- Completed Tank 241-AW-105 grab sampling on December 11, 2007.
- Completed Tank 241-AY-101 grab sampling on December 17, 2007.
- Completed Tank 241-AY-102 leak detection pit grab sampling on December 5, 2007.

II. Planned Action within the next Six Months:

Tank Sampling

- Tank 241-AP-108 core corrosion samples scheduled for January 2007.
- Tank 241-AP-103 core samples scheduled for March 2008.
- Tank 241-AY-101 core samples scheduled for April 2008.
- Tank 241-S-102 vapor sample scheduled for March 2008.
- Tank 241-S-102 liquid sample scheduled for April 2008.
- Tank 241-S-102 liquid sample scheduled for April 2008.

BBI Updates

- Seventeen BBI updates were completed in the first quarter of FY 2008. These updates will be published by January 17, 2008.
- Six updates are planned for the second quarter of FY 2008. In addition, the radioactive decay date will be updated from 1/1/2004 to 1/1/2008 for all 177 tanks.

DQOs

- Complete Evaporator DQO, Rev. 5 in April 2008.
- Complete SST Component Closure DQO, Rev 4 in February 2008.
- Complete DBVS DQO, Rev. 1 in August 2008.

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-47-02, Complete startup and turnover activities for required transfer system upgrades to allow transfer of first high-level waste feed to the Pretreatment/Treatment Complex.**
Due: 03/31/09
Status: Complete. Ecology letter dated 10/18/07 acknowledges completion of milestone.
- **M-47-04, Complete startup and turnover activities for required transfer system upgrades to allow transfer of first low-activity waste feed to the pretreatment/treatment complex. Installation of the pump will not be required until necessary to support WTP waste feed activities.**
Due: 03/31/09
Status: Complete. Ecology letter dated 10/18/07 acknowledges completion of milestone.
- **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: 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:

- Completed actions as outlined in close-out letter by Ecology

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-62, which has been closed out).

EVAPORATOR CAMPAIGNS

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY07	07-01 (07-02)	AN-106/AY-102 (AW-102)	AP-103	Campaign completed 7/22/07.
FY07	07-02 (08-01)	AP-104	AP-103/ AP-104	Campaign completed 11/15/07.
FY08	08-01 (new)	AP-105	AP-104	A proposal to add up to 2 new campaigns to the FY08 schedule is under evaluation. A baseline change request will be processed to add the campaigns if approved.
FY08	08-02 (new)	AP-101	AP-101	A proposal to add up to 2 new campaigns to the FY08 schedule is under evaluation. A baseline change request will be processed to add the campaigns if approved.
FY09	09-01	TBD	TBD	Detailed planning for FY09 and outyear campaigns subject to contract requirements.

Milestone M-48-00, DST Integrity Assessment Program

I. Deliverables:

- **M-48-15, Submit a Report to Ecology for the Re-examination of Six DSTs by Ultrasonic Testing**
Due: 9/30/07
Status: Complete. Ecology letter dated 10/18/07 acknowledges completion of milestone.
- **M-48-00, Complete Tank Integrity Assessment Activities for Hanford Double Shell Tanks System**
Due: 9/30/07
Status: Complete. Ecology letter dated 10/18/07 acknowledges completion of milestone.

Milestone M-90-00, Complete Acquisition of New Facilities, Modifications of Existing facilities, and/or Modifications of Planned Facilities, as Necessary for Storage of Hanford Site Immobilized High Level Waste (IHLW), Immobilized Low Activity Waste (ILAW), and Disposal of ILAW, and M-20-00, Submit Part B Permit Applications.

I. Near-Term Deliverables:

- **M-20-56, Submit Canister Storage Facility Part B Permit Application**
Due: 6/30/03
Status: **Complete.**
- **M-20-57, Submit ILAW Disposal Facility Certified Part B Permit Application to Ecology**
Due: 6/30/03
Status: **Complete.**
- **M-90-09-T01, Complete Detailed Design of ILAW Disposal Facility Critical Systems to 80%**
Due: 5/30/03
Status: **Complete.**
- **M-90-08, Initiate ILAW Disposal Facility Construction**
Due: 2/28/05
Status: **Complete.**
- **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 renegotiated to align with WTP schedule.

II. Significant Accomplishments:

- The IDF Permit modification to place the facility in a "pre-active life" phase was issued with an effective date of November 21, 2007.
- IDF procedures have been modified to reflect the IDF Permit modification requirements – December 2007.
- Completed nursery planting of ~34,000 additional sagebrush to meet requirements of the Mitigation Action Plan – December 2007

III. Significant Planned Actions in the Next Six Months:

- Complete a survey in Fall 2008 to determine survival rate of sagebrush planted to date and determine delta to meet 60% survival required by the Mitigation Action Plan – Fall 2008.
- By agreement between ORP and Ecology, withdrawal of the Canister Storage Facility Part B Permit Application is under consideration, due to the fact that WTP operating schedule has been pushed out and the facility will not be needed as early as previously anticipated.

IV. Issues

- None.

Hanford Waste Treatment and Immobilization Plant (WTP) Project

Issues

Design Freeze

BNI is currently working on a definition of Design Freeze that represents freezing of the design. BNI's current definition is not specific enough. LAW Engineering is working on a definition that utilizes a Title II and Title III design break as the definition of Design Freeze. Title II is completion of all design necessary to award a contract for the construction of a facility. Title III design is all the work required to take the Title II design to cold commissioning of the facility.

Completion of Title II design should reduce the amount of interdisciplinary reviews, Integrated Safety Management reviews and permitting reviews. Interdisciplinary reviews have in-part been driving the higher Engineering costs.

Loss of Engineering Experience

BNI Engineering has been losing senior level engineers and is replacing them with junior or apprentice level engineers. Continued bleeding of expertise from the project will result in longer design times. The training required for new engineers is greater than for more senior engineers.

Procurements

BNI is experiencing difficulty obtaining material in time to support the construction of the facilities. The economy is very good and there is limited competition for many of the components. Vendors have also experienced the funding reductions, fabrication deferrals and changes in the specifications. Vendors have other business opportunities that are more stable than BNI.

When fabricators are awarded contracts their ability to comply with their schedule is challenging BNI's schedule. The Glass Former Storage Facility silos were to be fabricated and delivered in a three month timeframe. The fabrication is now in its seventh month. Competition from the ethanol industry has reduced the silo fabricator's desire to comply with BNI's requirements and extended the schedule. There is more money completing ethanol industry silos than BNI's silos.

	Contract Budget Base			DOE Base		Total Project Cost (\$ Millions)
	Distributed Budget (\$ Millions)	Undistributed Budget (\$ Millions)	Remaining Management Reserve (\$ Millions)	DOE Contingency (\$ Millions)	TPRA Contingency (\$ Millions) ^a	
May 2006 Total Project Cost^b	\$8,787.241	\$0.000	\$1,350.203	\$300.000	\$1,116.000	\$11,553.445
Previous Cumulative Implemented BCPs	\$212.973	\$0.000	-\$212.973	\$0.000	\$0.000	\$0.000
Previous Cumulative BNI Contract Scope Change	\$348.819	\$7.248	\$38.533	-\$300.000	-\$94.601	\$0.000
Previous Month Total Allocated Budget (OTB)	\$9,349.034	\$7.248	\$1,175.763	\$0.000	\$1,021.400	\$11,553.445
Current Month Implemented BCPs	\$12.234	\$0.000	-\$12.234	\$0.000	\$0.000	\$0.000
Current Month BNI Contract Scope Change ^c	\$0.000	\$0.531	\$0.000	\$0.000	\$0.000	\$0.531
Subtotals:	\$9,361.268	\$7.779	\$1,163.529			
November 2007 Total Allocated Budget (OTB)	\$10,532.576			\$0.000	\$1,021.400	\$11,553.976
Other DOE Costs ^d						
TOTAL DOE WTP COST						

a The use of TPRA Contingency dollars is not planned in the schedule.

b May 2006 Total Project Cost includes contract changes before May 2006.

c The cumulative contract scope change additions referenced herein do not include all known scope changes, but only those identified and presented to the BNI and DOE Joint Change Control Board during the reporting period.

d Contract fee, other support costs, etc. (Intentionally left blank. To be completed by DOE.)

Cumulative Life of the Project Cost Variance against OTB

Summary Cumulative Variance Description			
WTP	Cost Variance		Description
Engineering Design	(\$24.0)	(\$7.0)	Equipment/line list development and calc revisions
		(\$3.2)	Additional documentation in response to quality initiatives
		(\$3.4)	Vendor support, including documentation reviews
		(\$2.6)	Trend support, management assessments and oversight
		(\$1.5)	Additional procurement support
		(\$4.4)	P&ID jobhour performance – committed design inefficiencies
		(\$1.9)	HPAV, vessels, pipe supports, and RGM requalification
Engineering Design LOE	(\$9.8)	(\$6.8)	Training
		(\$2.3)	Discipline support
		(\$0.7)	Additional tasks
Engineering Management	\$2.7	\$2.4	Relocation and temporary assignments
		\$1.8	Subcontracts and consultants
		(\$1.6)	Support of May EAC and EFRT
		\$0.1	Misc. other
Plant Equipment	\$24.8	\$24.8	Award value less than budget
Plant Materials	(\$6.1)	(\$6.1)	Steel unit prices
Acquisition Services Management	\$8.0	\$4.6	Understaffing
		\$3.4	Travel, relocation, freight, and expenses
E&NS	\$2.0	\$2.0	Safety Analysis support
R&T	\$0.5	\$2.1	M1 Pipe Plugging at PNNL under budget
		(\$1.6)	M12 Undemonstrated Leaching
Construction Field Nonmanual	\$2.5	\$4.5	Prior year rebill
		(\$2.0)	Labor overrun
TC Crafts (Construction)	\$6.5	\$5.7	Civil commodity installation in PT and HLW
		\$0.8	BOF underground

Pretreatment (PT) Facility

The PT Facility will separate the 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. Facility construction began November 2002 and the construction completion date is October 2014. Currently, the design is 68% complete and construction is 24% complete.

Construction on the PT Facility resumed during the month and resolution of major technical issues relating to caustic leaching, vessel mixing, vessel erosion, hydrogen in piping and ancillary vessels (HPAV), and capacity modifications have been a major focus.

One the major technical activities involves the design and fabrication of the Pretreatment Engineering Platform (PEP). The PEP is a test platform designed to test the caustic leaching and ultrafiltration processes. The PEP will be assembled on 16 skids; however, fabrication of the skids has slipped significantly this month. The PEP plan was to ship the first of the skids from New Mexico to Richland early in December. Because the skids were not fabricated as quickly as anticipated, the shipment encountered shipping restrictions associated with the holiday season, and a decision was made to delay shipment until January. Five skids out of a total of 16 skids are ready or nearly ready for shipment. Installation of all the skids is expected to be complete in the Process Development Laboratory – West (PDL-W) facility by late March 2008. Modifications to the PDL-W facility where the PEP will be assembled and tested were completed in December. Both interior and exterior modifications to this facility are complete and will be ready when the skids arrive at the site. A power vent for the roof of the facility that is not needed until mid-2008 is well ahead of schedule and will have no impact on the installation and testing of the PEP.

In March 2006, the External Flowsheet Review Team (EFRT) completed a critical review of the WTP process flowsheet for Bechtel National, Inc. (BNI). The team identified 17 major issues that, if not corrected, will prevent the WTP from meeting contract rates with commissioning and future feeds and 11 other potential issues that could prevent meeting contract rates with commissioning and future feeds. BNI developed Issue Response Plans (IRP) for resolving all 28 issues. The plans included the actions required for issue resolution, schedules for completion, integration with other issues, and integration with the overall project schedule. ORP review and approval of all the IRPs was completed in January 2007. Examples of the major identified issues include inadequate ultrafiltration area and flux, undemonstrated leaching process, plugging of process piping, mixing vessels erosion, inadequate mixing systems, instability of baseline ion exchange resin, PT Facility availability, lack of comprehensive feed testing in commissioning, and limited remotability demonstration. Closure records describing the actions completed to resolve 9 of the 17 major EFRT issues and 7 of the 11 potential issues were recommended for approval by the Technical Steering Group (TSG) and approved by the WTP Project Manager. A PEP is being built to resolve potential issues with the leaching and filtration system in the PT Facility. Additional

testing will also be done in other laboratory and pilot-scale systems to resolve the remaining issues related to sampling, line plugging, erosion, and vessel mixing.

In response to the EFRT recommendations, BNI has been evaluating line plugging and mixing in the various systems within the PT Facility. In doing so, BNI has re-evaluated the capabilities of the plant as designed and found that between 1% and 3% of the waste could cause mixing or line plugging difficulties. Modification to the facility to accommodate these larger particles may prove to be more difficult and costly than establishing waste acceptance criteria that will exclude these particles from the plant. The Interface Control Document for Waste Feed (ICD-19) integration team (BNI, CHG, and DOE) has completed a draft engineering study that provides alternative ways of dealing with this issue. Preliminary results of the study suggest that the issue may not be as serious as originally thought. The team is on track to brief the joint management team on the results early next calendar year on the results of engineering study.

Preparation and approval of the erosion test specification and plan have been the major activities associated with testing to determine the adequacy of the vessels to withstand the erosive effects of the waste during their design life time. BNI completed the test specification, which was reviewed and commented upon by DOE and Ecology. The comments are being incorporated and will be provided for review in January. The testing subcontractor has completed a series of four 1/27-scale tests to evaluate the performance of the simulant that will be used in the actual 1/4-scale erosion tests and the relative performance of a hard-facing material that may be used to coat the wear plates. The results of these tests have not been received by BNI at this time. The subcontractor is expected to start the first 1/4-scale test by mid-February.

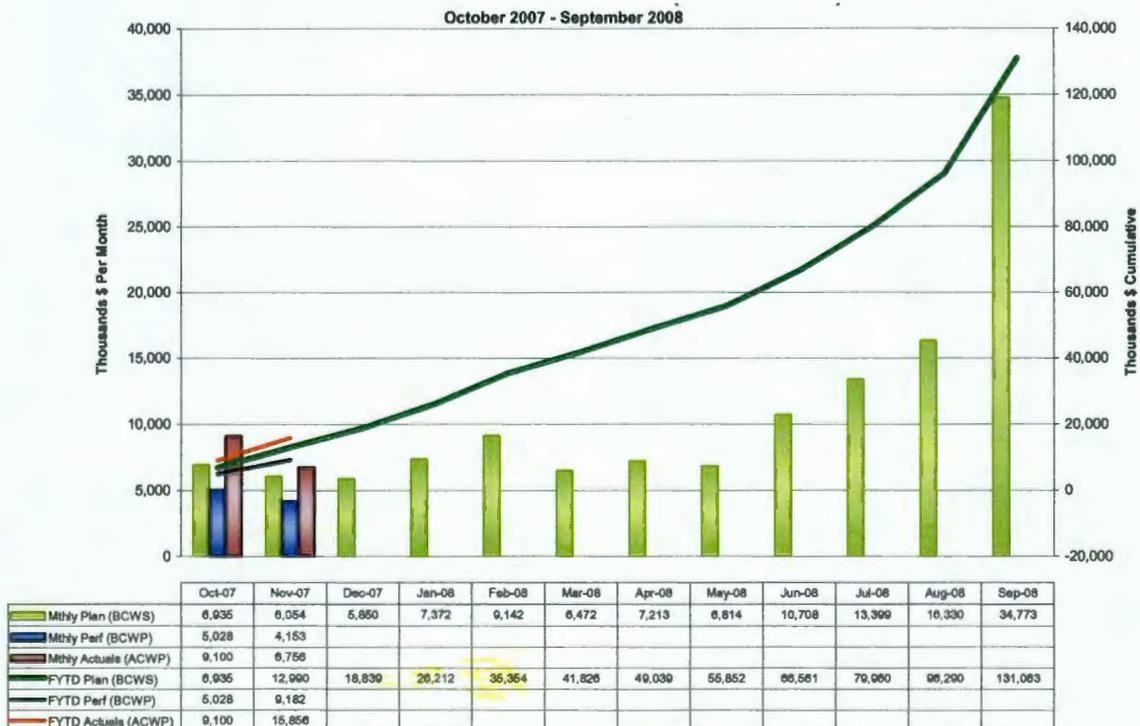
BNI's assessment program identified recurring problems with the lack of non-destructive examination (NDE), material test reports (MTR), and configuration management of both commercial material (CM) and "Q" piping spools to be installed in black cells at the WTP. Over 95% of the piping spools in question are for the PT Facility, with the remainder for the HLW Facility. These issues require the inspection of approximately 17,000 piping spools before the pipe spools can be cleared for installation in the black cells. BNI has completed review of all the CM piping and has developed a team that will review the Q piping spools to determine if the correct NDE requirements were observed for those pipe spools. The team will initiate work in January and expects to take several weeks to complete the review. BNI is also changing their method of designating which pipes are in black cells so the individual fabricating the spools can readily make this determination.

Construction resumed on the PT Facility on December 11, 2007 and erection of structural steel on the south side of the building was the first work undertaken. The steel structure constructed thus far is between the basemat and the 28' elevation but will ultimately reach the 56' elevation. Installation of this steel will allow floor slabs to be placed which will serve as a work platform for the placement of concrete wall above the

56' elevation. One small wall segment below the 56' elevation was also placed. This wall was started prior to suspension of construction in 2005 and was completed with this placement.

Commodity	Unit of Measure	Installed during this period	Installed to date	Percentage installed to date
Concrete	1000 CY	0	77.13	68.76%
Structural Steel	1 Ton	0	3,010.00	18.36%
Pipe	1000 LF	0	36.95	7.01%
Cable Tray	1000 LF	0	0.34	0.94%
Conduit	1000 LF	0	17.13	8.64%
Cable & Wire	1000 LF	0	0.00	0.00%

Facility	Milestone	Scheduled	Projected
PT	Approve PJM Multiple Overblow Final Report	6/07	4/08
	EFRT Recommendation M2, Perform Submerged Jet Test	6/07	8/08
	Deliver the Filter Cave shield door to Richland	12/07	12/07A



High-Level Waste Vitrification Facility – Nov 2007

HLW facility is continuing with construction and detailed design. Construction crews working mostly on slab and wall placements at 0-ft elevation. It involves installing rebars, embedded plates, embedded conduit, embedded joggle piping and associated formworks. Winterization activities are continuing throughout the facility. Construction forces finished setting shield windows 176 and 177 on walls 1114 and 1115 at the 0 elevation, and finished placing concrete for wall 1105 (124 cy). Drum Transfer Tunnel walls have been prepared for special protective coatings. Planning for installation of multi-commodity support steel structures at -21' elevations are ongoing, as part of the plan to accelerate HLW construction.

BNI completed internal reviews of the specifications for HLW Melter Handling System bogies, and the canister cooling rack design proposal drawings. Five mechanical handling diagrams for the HLW Radioactive Solid Waste Handling System were completed. Vendor submittals for the HLW Filter Cave Handling System crane/power manipulator have been completed. The Summary Structural Report incorporating Revised Ground Motion criteria have been issued to DNFSB, completing one of the key deliverables towards closing DNFSB issues with the facility structural design. BNI formally submitted the updated IHLW Waste Form Compliance Plan incorporating ORP comments. This revision brings it into compliance with the expectations of the Office of Environmental Management (EM-12). This document sets forth the strategies for compliance with statutory, regulatory, and Department requirements. This document is being sent to EM and the Office of Civilian Radioactive Waste Management for their concurrence.

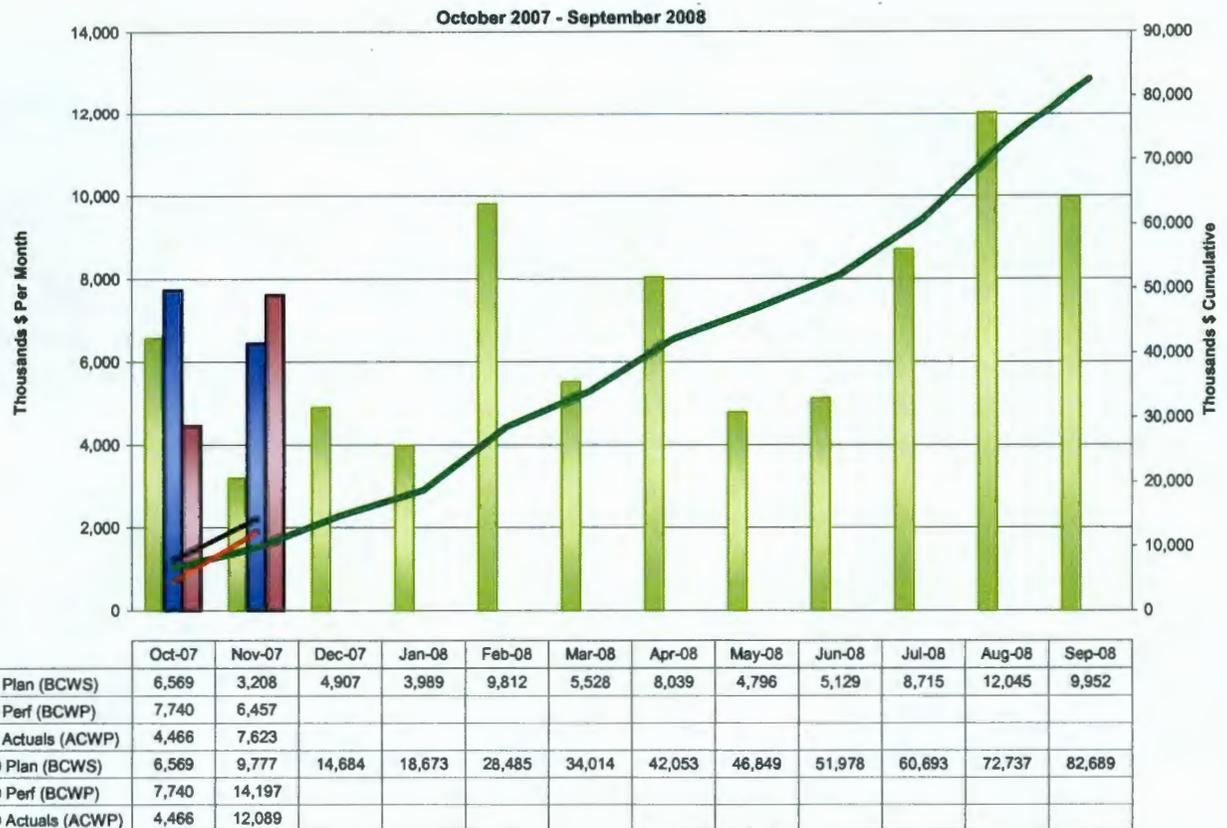
Two concrete drawings, a material requisition quote for the joggles, specification for the mercury monitors, supplemental instrumentation diagrams for the Radiological Personnel Monitoring Systems, and instrumentation datasheets for 16 pressure-reducing valves have been completed. Environmental Qualification (EQ) calculations for accident temperatures have been completed and the database has been populated. Equipment datasheets are being updated with this data, and will be forwarded to vendors in the next few months.

The last four load centers (HLW and PT) have been released for shipment. Review of vendor seismic report/analysis for the discharge and startup heater power supply, vendor drawings for the filter cave crane, vendor submittals for the elevation 58 ft C1V air handling units and vendor drawings for the elevation -21 ft fan coil unit have been completed. A complete revision of the -21' elevation ventilation and instrumentation diagrams was issued. This revision brings the form in line with the newly released waste acceptance impacting (WAI) procedure.

A number of issues are currently being evaluated for closure: high combustible loadings in hot cells due to crane cable insulation and crane paint beyond the Authorization basis limit; higher temperature at the canister bogie based on CFD analysis; and Autosampling system (ASX) issues with sampler plugging and piping material testing and selection.

Melter fabrication is progressing with delivery anticipated by Summer 2008. RGM evaluations of vessels are ongoing. A number of issues have been identified with the

Commercial Grade Dedication (CGD) of the HEME to the sub-supplier which has been delaying the scheduled delivery date of December 2007. Melter shield doors fabricated by currently bankrupt Unidynamics Inc were evaluated for acceptance by the new vendor Oregon Iron Works (OIW) and determined to have some of the weld and material traceability documentation have been missing. BNI and OIW has developed a plan to salvage these doors these doors by adding new welds, performing supplemental testing, including material testing, and load testing.



Low Activity Waste (LAW) Vitrification Facility

Construction forces have started to install shield plates on the north side of melter cell #2. The shield plates eliminate the radioactive shine from the containers on personnel in the aisle way north of the melter cell. Crews also continue to install siding and roofing on the LAW annex, and hangers to support the pour cave stainless steel liner and insulation. Wet process cell vessels are being shimmed to their foundation to provide support to the foundation embeds. The following installation activities are also progressing: piping and hanger on the -21', 3', 28', and 48' elevations; cable tray at the -21' and 48' elevations; permanent lighting on the 3' and 28' elevations; conduit on the 28' elevation; ventilation ducting, insulation, crane rail clips, and workshop cranes on

the 48' elevation; and lightning protection components at the 68' elevation. Crews continue to make fireproofing repairs at the -21', 3', 28', and 48' elevations, and paint structural steel and decking on the -21', 3', and 48' elevations.

Construction forces completed the roofing Q-decking installation for the annex. Annex siding installation has started on the east side and is proceeding along the north and west sides. The partition wall contractor has been mobilized allowing the near-term installation of gypsum wallboard within the facility. The existing concrete walls are structural members that act as room dividers. Wall partition installation will better define the facility's individual areas. Construction forces continue to make progress regarding the installation of piping, cable tray, conduit and HVAC throughout the facility.

BNI has identified that gaskets being installed in the LAW Facility contain unacceptable levels of sulfur. Installation of gaskets has been placed on hold pending resolution of this issue. The initial concern was high temperature piping with the gaskets installed. However, BNI has taken a more conservative approach by ceasing all installation of these gaskets. As such, this issue is adversely impacting the installation of piping in the LAW Facility.

Work is progressing on the preparation of a Baseline Change Proposal (BCP) that moves activities associated with early start (prior to fiscal year FY 2015) of the LAW Facility. The activities are being moved into FY 2009 as an interim measure pending receipt of Tank Farm-based PT Facility conceptual design funding by the Tank Farm Contractor (TFC). BNI is currently experiencing schedule variances for activities intended to support TFC conceptual design work. BNI plans to submit the BCP in time to support its baseline incorporation in the January reporting month.

Analytical Laboratory (LAB)

Construction forces continue to install liner plate in the C3 and C5 cells and permanent roofing on the facility, as well as piping and cable tray supports, permanent conduit and lighting, and ventilation ducting and hanger within the facility. Hot cell wall partition walls and trolley installation is proceeding. Crews are making progress installing transition frames, which are used to secure components to the decking embeds, for the air handling units at the 17' elevation. Fire protection coatings and fire water piping is proceeding. Construction forces are installing fume hoods in the low-activity waste portion of the LAB. F.D. Thomas continues sandblasting and coating structural steel and decking.

Balance of Facilities (BOF)

In early December, a leak was discovered in the propane line that runs underground south of the LAW Facility. BNI excavated sections of the piping system to determine the extent of the leaks, and is in the process of performing additional reviews to address concerns for possible implications to permanent piping installations. BNI Engineering has also been requested to assist in the review and to help address concerns about installations where cathodic protection systems are not yet energized. Of particular concern to ORP is whether the propane line corrosion is indicative of failure in the permanent plant piping. The permanent piping is coated with Fusion Bonded Epoxy and field joints are coated with a high-density polyethylene shrink sleeve. These coatings when combined with cathodic protection provide the permanent piping with a 40-year life. The coating systems are the premier pipeline coating system used in the United States. The temporary propane pipe installed was carbon steel with no additional coatings on pipe other than the standard factory varnish coat. The propane pipe was installed in the summer of 2002.

A leak was discovered in the propane line that runs underground south of the LAW Facility in early December. Construction crews excavated the propane line and found that two adjacent lines were also experiencing corrosion. A third party corrosion expert arrived and examined a cutout section of pipe. Initial findings point to electro-galvanic corrosion. Further excavation of the pipe line is planned in an attempt to determine the extent of the problem. BNI is in the process of performing additional reviews to address concerns for possible implications to permanent piping installations. ORP has requested BNI Engineering review and assistance to address concerns about installations where the cathodic protection systems are not yet energized.

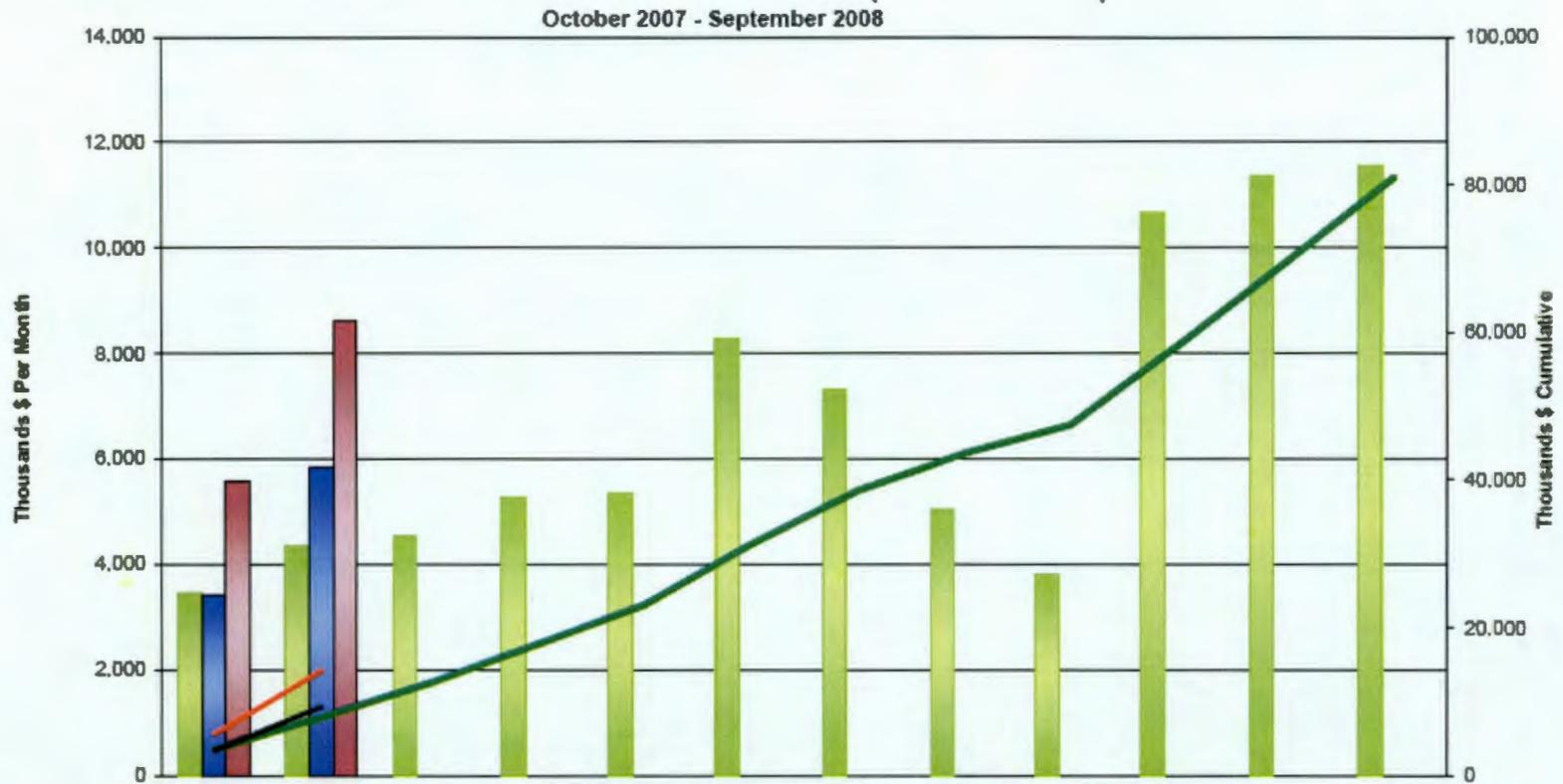
The second placement (317 cubic yards) has been completed for the melter assembly pad. Power conduit and concrete pads are being installed to support cathodic protection system rectifier installation. The cathodic protection system is a portion of the three part corrosion resistance systems for the underground waste transfer piping. Process service water and domestic water installation is underway north of the PT Facility. Installation of Commodity Racks (for the transfer of waste samples, glass formers and steam between the facilities) continues. Crews are also continuing with installation of electric motor starters and small bore piping in the Chiller Compressor Plant. Coatings are being applied on hangers and supports. Waste-transfer line carbon steel containment piping between the PT, LAW, and HLW Facilities is being painted and shrink sleeves are being installed as part of the overall piping corrosion prevention system. Excavations for installation of fire service water hydrants are ongoing.

Boreholes are being drilled and piers are being installed to support the installation and placement of additional commodity rack piers. To date, 72 piers have been installed; these piers will allow the commodity rack to be installed between the steam plant and LAB. Commodity rack steam and condensate piping are being installed.

BOF Engineering, Construction, and Start-Up groups have been working several months to complete the Fire Service Water System (FSW) turnover from construction to startup. Initial plans called for the turnover to be complete a month ago. However, due to several technical issues (completion of wiring for the pump house and a number of

open items) and unforeseen component failures (a major crack in a system isolation valve), there is a low probability that the system will be turned over this year. Turning over the FSW was a BNI internal commitment that had been taken very seriously by all BOF parties.

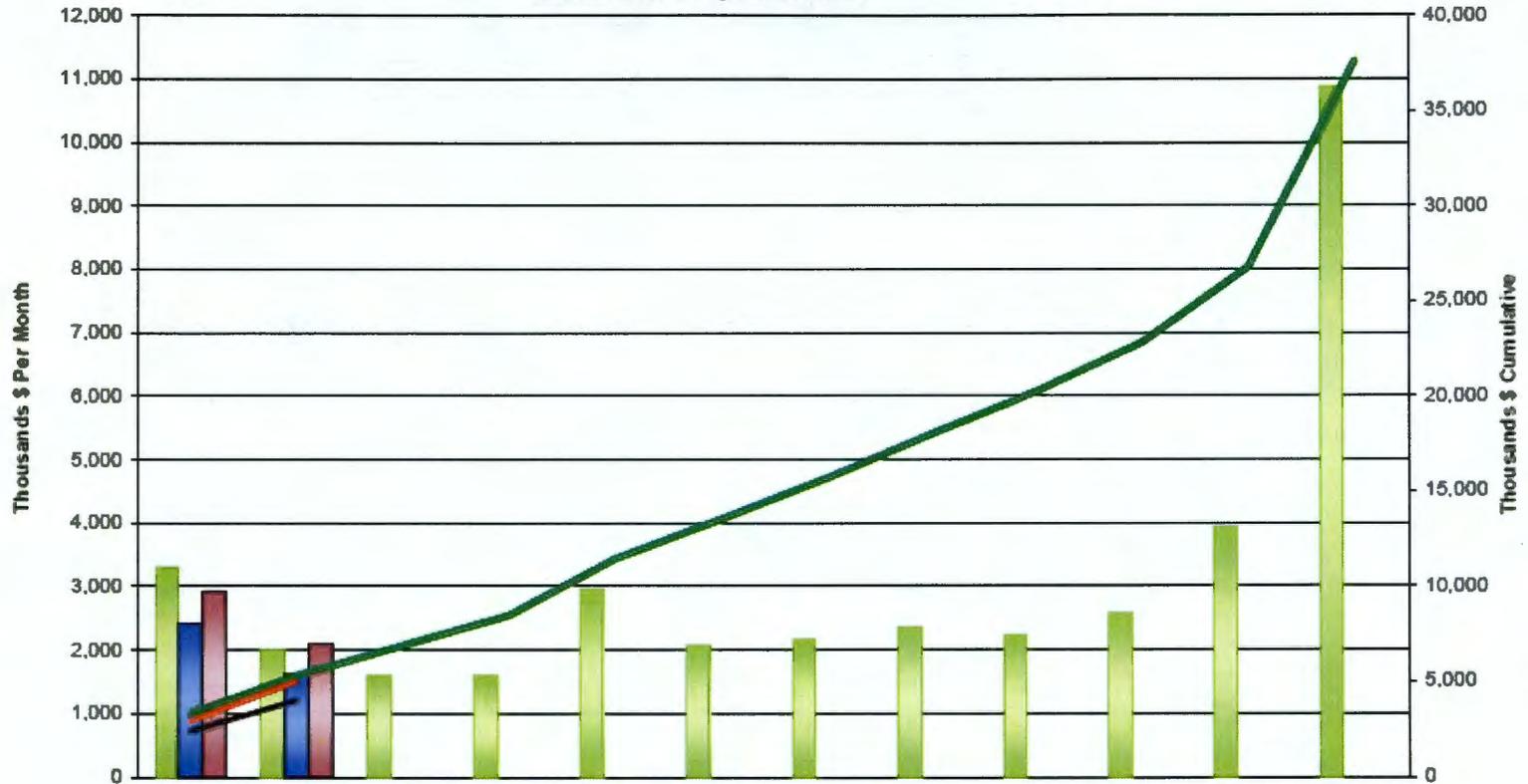
LAW Performance for FY2007



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	3,471	4,358	4,529	5,273	5,343	8,274	7,312	5,041	3,820	10,648	11,380	11,534
Mthly Perf (BCWP)	3,408	5,851										
Mthly Actuals (ACWP)	5,554	8,632										
FYTD Plan (BCWS)	3,471	7,830	12,359	17,632	22,975	31,249	38,561	43,602	47,422	58,070	69,430	80,964
FYTD Perf (BCWP)	3,408	9,259										
FYTD Actuals (ACWP)	5,554	14,186										

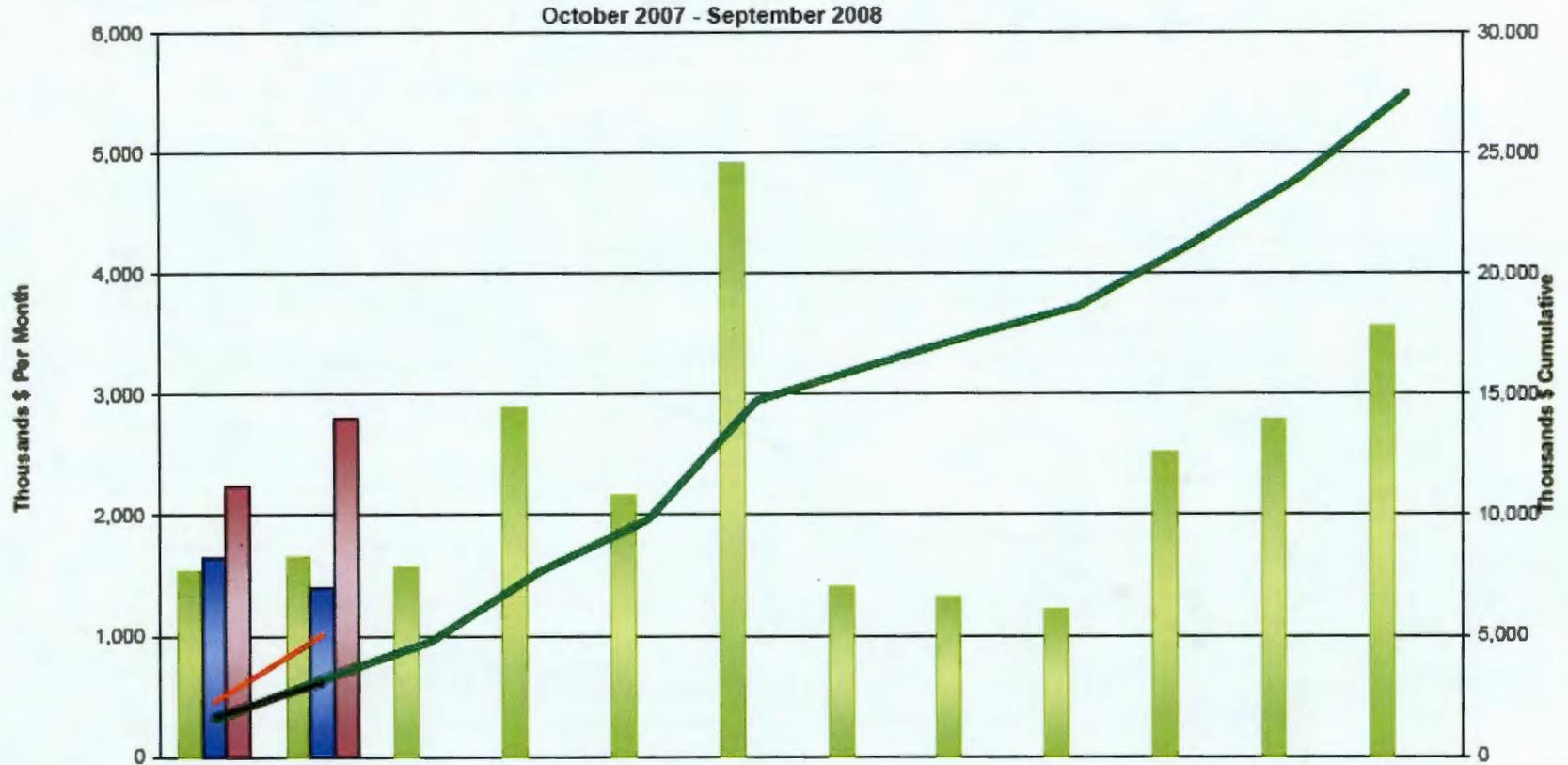
BOF Performance for FY2007

October 2007 - September 2008



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	3,305	2,005	1,587	1,583	2,956	2,079	2,173	2,352	2,235	2,556	3,926	10,854
Mthly Perf (BCWP)	2,408	1,619										
Mthly Actuals (ACWP)	2,904	2,102										
FYTD Plan (BCWS)	3,305	5,311	6,898	8,481	11,438	13,516	15,689	18,041	20,276	22,832	26,758	37,612
FYTD Perf (BCWP)	2,408	4,028										
FYTD Actuals (ACWP)	2,904	5,006										

Lab Performance for FY2007



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	1,534	1,659	1,570	2,887	2,163	4,918	1,396	1,313	1,207	2,508	2,781	3,562
Mthly Perf (BCWP)	1,654	1,395										
Mthly Actuals (ACWP)	2,253	2,796										
FYTD Plan (BCWS)	1,534	3,194	4,764	7,651	9,815	14,732	16,129	17,442	18,648	21,156	23,937	27,499
FYTD Perf (BCWP)	1,654	3,049										
FYTD Actuals (ACWP)	2,253	5,049										

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-62-01M, Submit Semi-Annual Project Compliance Report.**
Due: 07/31/2006
Status: Completed
- **M-62-01N, Submit Semi-Annual Project Compliance Report.**
Due: 01/31/2007
Status: Completed
- **M-62-01O, Submit Semi-Annual Project Compliance Report.**
Due: 07/31/2007
Status: Completed
- **M-62-03, Submit DOE Petition for RCRA Delisting or Vitrified HLW.**
Due: 12/31/2006
Status: Completed.
- **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: To Be 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 – Insufficient information to compare technologies due to delays in constructing the Demonstration Bulk Vitrification System (DBVS) and lack of WTP cost and schedule information.

- **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:

- The Demonstration Bulk Vitrification system (DBVS) Project Integrated Dryer/Full-Scale Melt Test final report was provided to ORP on December 20, 2007.
- A pre-EMAAB briefing was conducted for DBVS Critical Decision (CD)-2 in mid-December with the EMAAB scheduled for January 9, 2008.
- Final design and the PDSA revision required for CD-3 continue.

III. Significant Planned Actions in the Next Six Months:

- Receive Critical Decision 2.
- Complete DBVS final design.

IV. Issues:

- ORP formally informed Ecology that the Milestone M-62-08 due date was not achievable. The Milestone requires submittal of a Supplemental Treatment Technologies Report that provides a recommendation describing the technical and financial alternatives for selection of a technology, or a second WTP ILAW plant, which in combination with the WTP could be implemented to treat all of the Hanford tank waste. In a letter dated December 26, 2006, Ecology requested ORP provide the current state of information on the supplemental low-activity waste treatment options. ORP and CH2M HILL met with Ecology on January 11, 2007, to agree on information to be provided to satisfy the Ecology request. All information requested for the DBVS Project

has been submitted. Information requested on Steam Reforming is still being worked.

- Resolution of the MIS issue was demonstrated during the integrated dryer/38D full-scale melt test. Issue closed.