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JUL 23 2008  
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Office of River Protection  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
May 15, 2008

Approval:

*J. Hedges for.*

Date:

*7/17/08*

**J. Hedges** (H0-57)  
*Ecology IAMIT Representative, Chairperson*

Approval:

*Wood Russell for*

Date:

*7/18/08*

**J. R. Eschenberg/D. Noyes** (H6-60)  
*DOE IAMIT Representative*

Approval:

*N. Ceto*

Date:

*7/17/08*

**N. Ceto** (B1-46)  
*EPA IAMIT Representative*

Minutes Prepared by:

*T. W. Noland*

Date:

*7/18/08*

**T. W. Noland** (H8-12)  
*Fluor Federal Services, Inc.*

Abdul, Wahed*	ORP	H6-60	Luke, J.J.*	CH2M	H6-03
Babel, C.A.	ORP	H6-60	Lyon, J.J.	Ecology	H0-57
Bohnee, G.	NPT		Miera, F.R.*	CH2M	H6-03
Caggiano, J.A.*	Ecology	H0-57	Morrison R.D.*	YAH	A5-15
Ceto, N.	EPA	B1-46	Niles, K.	OOE	
Cimon, S.	ODE		Nicoll, B.L.*	ORP	H6-60
Dahl, S.L.*	Ecology	H0-57	Noland, T.W.*	FH	H8-12
Diediker, J.A.	OPR	H6-60	Noyes, D.L.	ORP	H6-60
Eberlein, S.J.*	CH2M	H6-03	Olinger, S.J.	ORP	H6-60
Einan, D.R.*	EPA	B1-46	Olsen, G.B.*	ORP	H6-60
Engelmann, R.H.	FH	H8-12	Pfaff, S.H.*	ORP	H6-60
Eschenberg, J.R.	ORP	H6-60	Piippo, R.	FH	H8-12
Fort, L.A.*	Ecology	H0-57	Rasmussen, J.E.*	YAH	A5-15
Fredenburg, E.A.	Ecology	H0-57	Russell, R.W.*	ORP	H6-60
Harp, B.J.*	ORP	H6-60	Skinnarland, R.R.*	Ecology	H0-57
Harris, S.	CTUIR		Taylor, H.N.	ORP	H6-60
Hedges, J.	Ecology	H0-57	Triplett, M.B.*	PNL	K6-52
Henry, D.	OOE		Uziemblo, N.H.*	Ecology	H0-57
Horst, L.	OOE		Vance, J.G.	FH	H8-12
Huffman, L.A.	ORP	H6-60	Voogd, J.A.	CH2M	H6-03
Jaraysi, M.N.*	CH2M	H6-03	Weil, S.R.*	RL	H5-16
Jim, R.	Yakama		Whalen, C.L.*	Ecology	H0-57
Knox, K.E.*			Wiegman, R.S.*	PAC	H6-60
Lober, R.W.*	ORP	H6-60	Administrative Record		H6-08
Long, J.D.*	ORP	H6-60			

\*Attendees

**Office of River Protection  
Tri-Party Agreement Quarterly Milestone Review  
Meeting Minutes  
May 15, 2008**

**TPA Milestone Statistics**

There were no changes to report on the status tables.

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

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

Construction of the T Farm interim barrier was completed in March 2008, and the monitoring system has been actuated. The monitoring system outside the barrier has been running for approximately 1 ½ years, and a monitoring report was provided to Ecology. A durability test plan is in place to evaluate the overall effectiveness and long-term durability of the barrier.

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

Significant Planned Activities

Retrieval in Tank C-109 resumed on 5-12-08. A problem was encountered with the main valve line on the water skid in the FoldTrak, and some water spilled to the ground. The system was shut down, and the event is being investigated. Approximately 10,000 gallons of waste remain in C-109, so the MRT will be used in combination with the existing sluicers and slurry pump in an attempt to remove the waste.

Ecology stated that conditional approval of the C-110 Tank Waste Retrieval Work Plan (TWRWP) authorizing construction will be sent to ORP this week.

SST Retrieval Sequence Document

ORP stated that the due date for Milestone M-45-02N-A was extended 30 days from May 2, 2008 to June 2, 2008, by agreement of the Tri-Parties. ORP is awaiting comments from Ecology and EPA on the DST Space Evaluation Document, which are due today. Ecology indicated that this milestone may be caught up in the current TPA negotiations. ORP noted the possibility that this milestone may need to be extended. Ecology will have an internal discussion to determine what the path forward will be.

Tank Retrievals With Individual Milestones - M-45-05A, Complete Waste Retrieval from Tank S-102

Spill recovery actions following the July 2007 waste spill are continuing. The cleanup is expected to be completed no later than September 2008. The development of the strategy for resuming retrieval in S-102 in FY09 is ongoing.

**Interim Stabilization Consent Decree**

ORP reported that approximately 60 corrective actions were completed in order to resume retrieval in Tank S-109

**In Tank Characterization and Summary**

A status of accomplishments, planned actions and updates was provided. ORP reported that a video camera was installed in S-102, and once the data is received, it will be forwarded to Ecology.

**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.**

The status was provided on accomplishments and planned actions.

**FY 2007 ORP TPA Cost & Schedule Performance (CHG)**

The status was provided on the cost and schedule performance.

**M-62-08, M-62-11 Bulk Vitrification/Supplemental Technologies**

ORP sent a letter to CH2M Hill yesterday issuing a ramp-down plan of the bulk vitrification system, due to a lack of funding. CH2M Hill has delivered all the CD-3 package materials, and the summary document safety analysis was delivered to ORP yesterday.

Interim Pretreatment System

Scoping statements have been issued for the Interim Pretreatment System (IPT). Testing at Savannah River on fractional dispensation and at Oak Ridge for cesium extraction are expected to be completed by the end of May 2008. ORP is also expecting a secondary waste recommendation from CH2M Hill at the end of May 2008.

**BNI Cost & Schedule Performance; and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes**

ORP reported that construction on the High-Level Waste Facility is on schedule and slightly under cost. Engineering is affecting performance on the negative side, which has a direct affect on procurement. Testing on the Autosampling System (ASX) is ongoing for leakage and plugging in the sampler needle, and whether the use of stainless steel instead of PVC can support the overall system. The Defense Nuclear Facilities Safety Board accepted ORP's proposed methodology for an overall bounding analysis instead of individual calculation for the concrete in the wall from the -21 foot level to zero and the zero foot slab.

Cost growth and delays in major procurements are the main challenges to completing Low-Activity Waste Facility. In an effort to reduce delays in major procurements, the LAW is identifying every part and component and tying them to a material requisition, which will produce purchase orders for constructing LAW, Lab and Phase I Balance of Facilities.

The Lab has an issue with a flammable combustibile environment and the corresponding electrical code associated with that in one of the glass former silos. The vendor has indicated it won't ship the silo because they were told they may be backcharged if the electrical code isn't met. A meeting is planned next with the president of the company. This issue is affecting the two gatepost milestones for completing the tanks.







**Agenda**  
**May 15, 2008**

**Office of River Protection**  
**Quarterly Milestone Review Meeting**  
 Ecology Conference Room 3A/B, 3100 Port of Benton Blvd., Richland

**Chairperson: Delmar Noyes**

9:00 a.m. – 11:30 a.m.

Page	Topic	Leads	Time
3	TPA Milestone Statistics	Woody Russell Suzanne Dahl / Jeff Lyon	9:00
50	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	9:10
52	M-45-00, Complete Closure of All Single-Shell Tank Farms	Roger Quintero / Jeff Lyon	9:25
62	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	9:40
63	In Tank Characterization and Summary	John Long / Michael Barnes	9:50
65	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Corbun Babel / Les Fort	10:00
67	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/ Disposal of ILAW and M-20, Part B Permits	Ben Harp / Bud Derrick	10:10
	<b>BREAK</b>		
17	FY 2008 ORP TPA Cost & Schedule Performance (CHG)	Janet Diediker Suzanne Dahl / Jeff Lyon	10:20
68	M-62-08, M-62-11 Bulk Vitrification/Supplemental Technologies	Ben Harp / Suzanne Dahl	10:40
70	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bruce Nicoll / Pete Furlong / Wahed Abdul / Gary Olsen/ Suzanne Dahl/Ed Fredenburg	11:00

**Office of River Protection**

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**Tri-Party Agreement  
Quarterly Milestone Review Meeting  
May 15, 2008**



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

Second Quarter 2008

## Agenda

Office of River Protection  
Tri-Party Agreement  
Quarterly Milestone Review Meeting  
Ecology Offices  
May 15, 2008  
9:00 a.m. – 11:30 a.m.

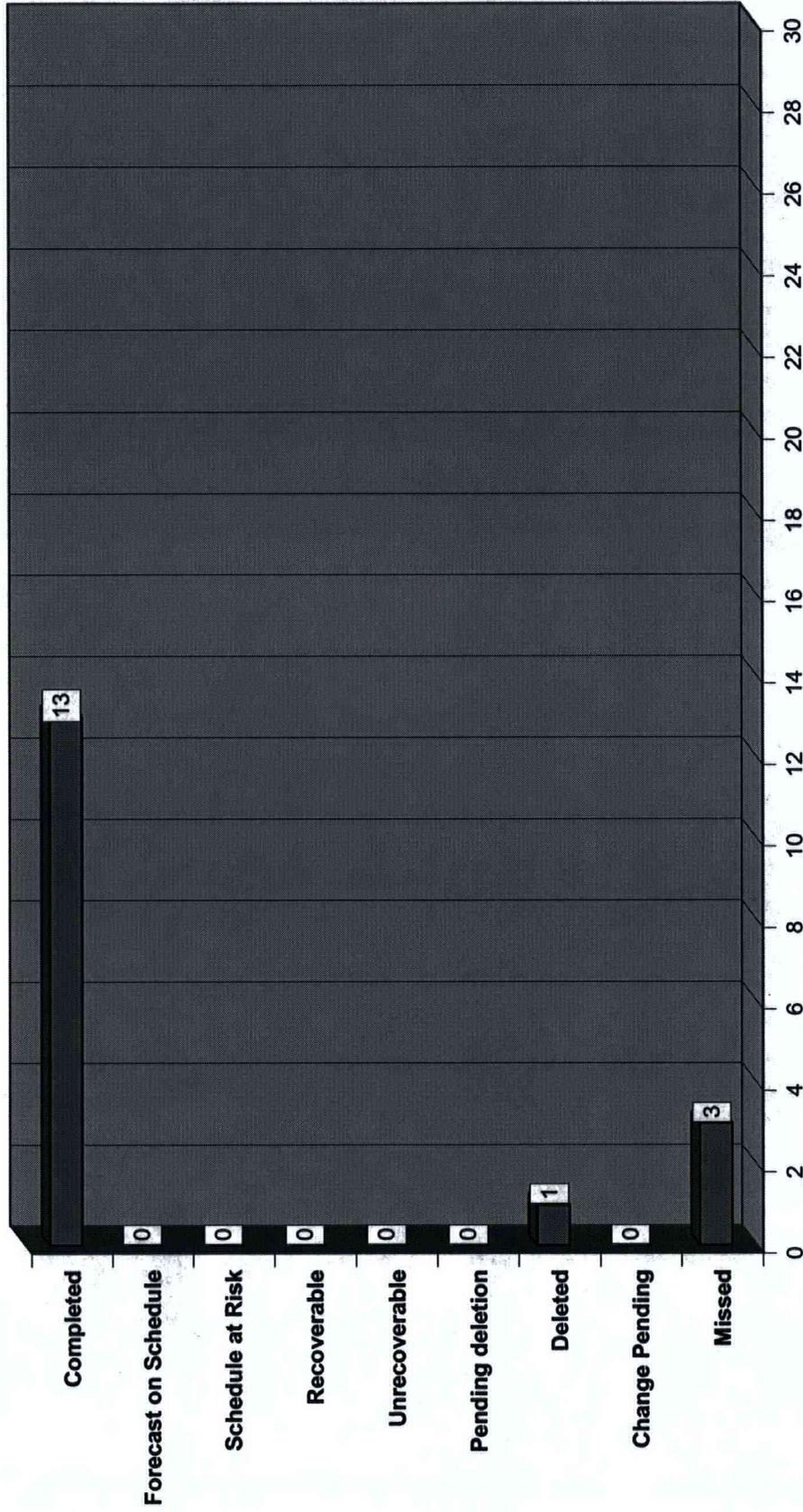
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71	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bruce Nicoll / Pete Furlong / Wahed Abdul / Gary Olsen/ Suzanne Dahl/Ed Fredenburg	11:00

## TPA Milestone Statistics

(Including target milestones)

Milestone	Due Date	Total Active as of 02/21/08	Milestone Number	Due Date	Milestone Number	Due Date
M-20-00, Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	12/31/08 (M-20-00)	0				
M-42-00, Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-45-00, Complete Closure of all SST Farms	09/30/24 (M-45-00)	35	M-45-00 M-45-00B M-45-00C M-45-00D M-45-02 M-45-02O M-45-05 M-45-05A M-45-05-T05 M-45-05-T06 M-45-05-T07 M-45-05-T08 M-45-05-T09 M-45-02P M-45-05-T10 M-45-05-T11 M-45-02Q M-45-05-T12	09/30/24 09/30/06 09/30/06 01/31/08 TBD 03/01/10 09/30/18 03/31/07 09/30/07 09/30/08 09/30/09 09/30/10 09/30/11 03/01/12 09/30/12 09/30/13 03/01/14 09/30/14	M-45-05-T13 M-45-02R M-45-05-T14 M-45-05-T15 M45-02S M-45-06 M-45-06-T03 M-45-06-T04 M-45-13 M-45-15 M-45-56 M-45-58 M-45-59 M-45-60 M-45-61 M-45-62	09/30/15 03/01/16 09/30/16 09/30/17 03/01/18 09/30/24 03/31/12 03/31/14 06/30/11 06/30/11 TBD 12/31/08 TBD 12/31/08 12/31/10 07/31/12
M-47-00, Complete All Work for Phase 1 Operations	02/28/18 (M-47-00)	3	M-47-00 M-47-03A	02/28/18 03/31/09	M-47-06	06/30/10
M-50-00, Complete Pretreatment Processing of Hanford Tank Waste	12/31/28 (M-50-00)	1	M-50-00	12/31/28		
M-51-00, Complete Vitrification of Hanford High Level Tank Waste	12/31/28 (M-51-00)	1	M-51-00	12/31/28		
M-61-00* (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/28 (M-61-00)	1	M-61-00	12/31/28		
M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	12/31/28 (M-62-00)	14	M-62-00 M-62-00A M-62-07B M-62-01Q M-62-01R M-62-01S M-62-01T	12/31/28 02/28/18 12/31/07 07/31/08 01/31/09 07/31/09 01/31/10	M-62-08 M-62-09 M-62-01U M-62-01V M-62-10 M-62-01W M-62-11	06/30/06 02/28/09 07/31/10 01/31/11 01/31/11 07/31/11 06/30/07
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	2	M-90-00 M-90-11	TBD 08/31/10		
Interim Stabilization Consent Decree	09/30/04 (D-001-00)	1	D-001-00			
<b>Total Active Milestones:</b>		<b>59</b>				

### 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	06/30/06	06/28/06								

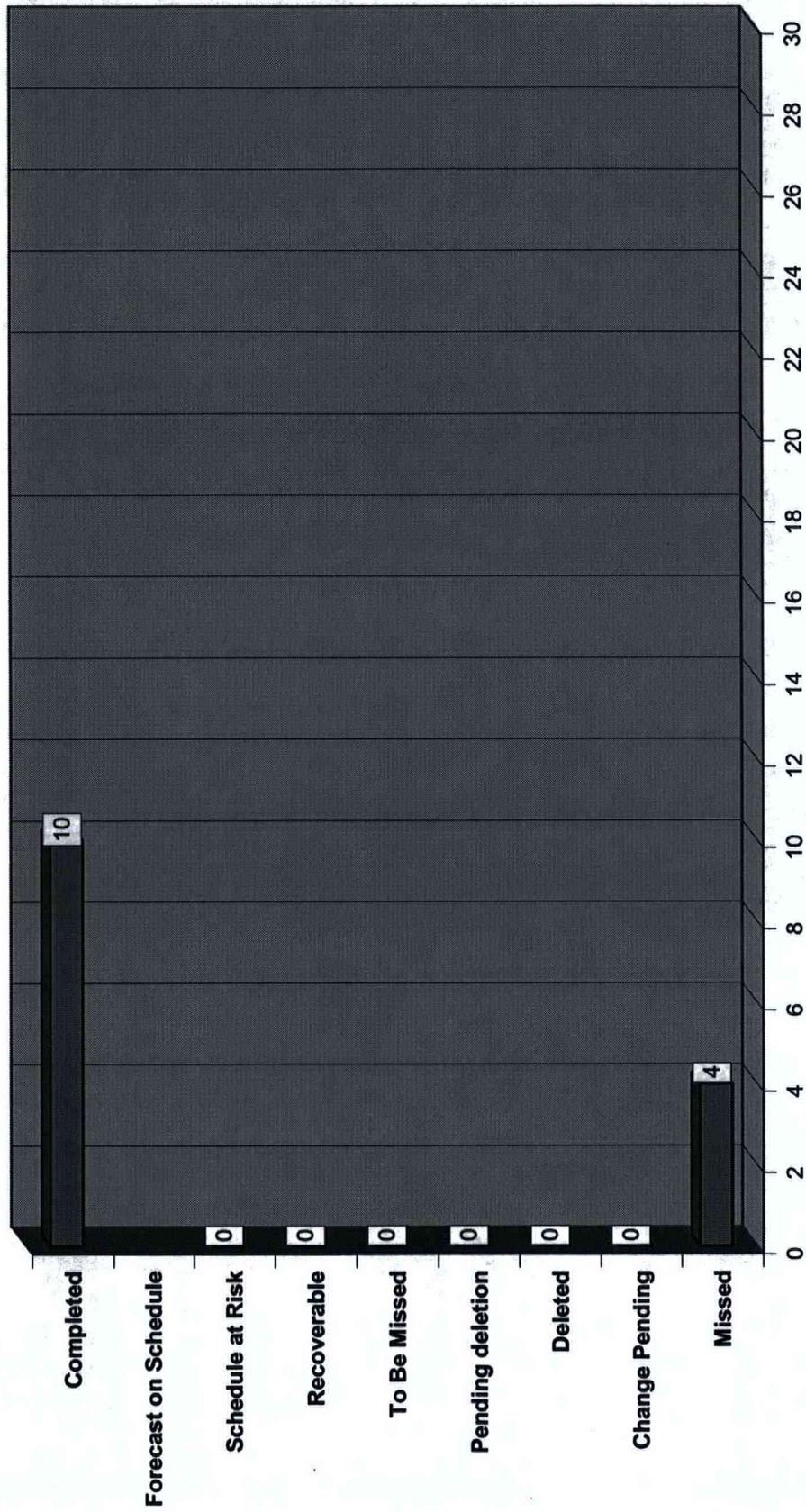
### Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-048-07A-C	construction of SY-B Valve Pit upgrade [see M 48-07A-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 WMAC SSTs pursuant to the agreement criteria in milestone M-45-00.	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						
M-045-00C	Initiate negotiation of SST waste retrieval and closure activities and associated schedules (for the period February 07 through August 08).	09/30/06						X			

### FY 2007 MILESTONE PERFORMANCE



### Fiscal Year 2007 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R30	DOE Shall, On A Quarterly Basis, Submit To Ecology A Written Report Documenting Tank Stabilization Activities That Occurred During The Period Covered By The Report. This Written Report Shall Provide The Status Of Progress Made During The Reporting Period.	10/31/06	10/31/06								
M-062-03	Submit DOE Petition for RCRA Delisting of Vitrified HLW	12/31/06	12/31/06								
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

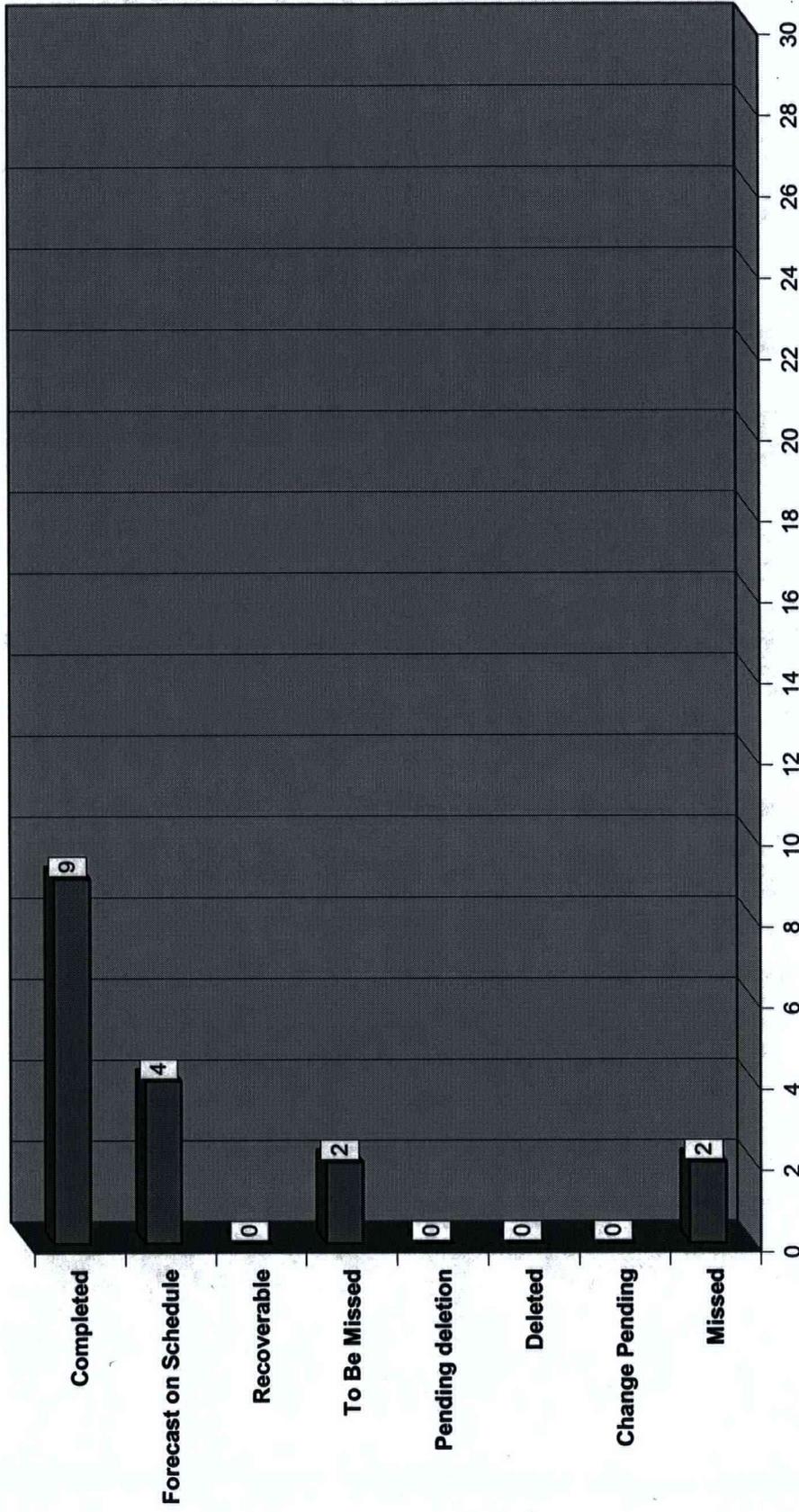
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R31	DOE Shall, On A Quarterly Basis, Submit To Ecology A Written Report Documenting Tank Stabilization Activities That Occurred 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	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						
D-001-00-R33	information, and the need for the establishment of additional agreement interim measures. 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	01/31/08								
M-045-55	Submit to Ecology a Phase 1 RFI report integrating results of data gathering activities and evaluations for all SST WMAs	01/31/08	01/30/08								
D-001-00-R35	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the	01/31/08	01/31/08								

### Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
	period covered by the report. This written report shall provide the status of progress made during the 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	02/29/08								
M-045-02N-A	Three Parties shall meet to establish new milestones within 60 days, if required, for acquisition of additional tanks	06/02/08		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	04/30/08								
M-045-00D-A	Negotiations shall be complete within 150 days	06/29/08					X				
M-045-56D	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/01/08						X			
D-001-00-R37	DOE shall, on a quarterly basis, submit to ecology a written report	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						
M-062-01Q	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. Submit Semi-Annual Project Compliance Report	07/31/08		X							
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				

**EXECUTIVE SUMMARY**  
**ON**  
**TANK FARMS EARNED VALUE REPORTING**

This Executive Summary reports the cost and schedule performance for the Tank Farms Contractor (TFC), CH2M HILL Hanford Group, Inc., for the month of March 2008.

The company's current month (CM) schedule variance (SV) was a positive \$2.8M, which increased the cost-to-date (CTD) favorable SV from \$48.7M to \$51.5M (SPI 1.07). The CM cost variance (CV) was a positive \$1.6M, which increased the favorable CTD CV from \$43.0M to \$44.5M (CPI 1.06).

The CM favorable SV of \$2.8M is due to: (1) accelerated work performed for Tanks C-104 and C-110 retrieval (design, procurement, and construction), C Farm infrastructure (construction and procurement to support Tank C-104/AN-101 Retrieval), AY/AZ upgrades (AZ-102 pump installation to support AZ-102 blending transfers), double-shell tank (DST)-to-DST transfers (two performed in March 2008 to support future 242-A Evaporator campaigns and AZ-102 blending) and Project W-314 (AW and AN Farm upgrades for heating, ventilation, and air-conditioning [HVAC] exhausters construction and Phase 2 Startup, Testing, and Turnover); (2) work performed ahead of schedule for the 242-A Evaporator upgrades (Monitoring Control System [MCS] and HVAC), Tank C-109 retrieval (hard heel removal) and vadose zone direct push sampling and surface geophysical exploration (SGE); and (3) Tank Chemistry Control earned value adjustment as a result of implementation of BCR RPP-08-002, "Double-Shell Tank Integrity Project and Tank Chemistry Control Project Additions/Deletions and Deferrals." The favorable CM SV is partially offset by unfavorable variances related to: (1) 242-A Evaporator operation and maintenance (budget in February 2008 for campaign [08-01] that was completed early); (2) behind schedule on liquid mitigation of catch tanks/double-contained receiver tanks (DCRT) (S-302 due to delays for required alternate pump replacements); (3) behind schedule on DST Integrity Project (DST system structural analysis on J-bolts); (4) S-102 Retrieval (operations and maintenance shutdown pending spill recovery actions); and (5) variance for DBVS Project Engineering During Construction (late performance of auger testing by the vendor with actual material from IDMT [completed in April 2008]).

The CTD positive SV is due to: (1) C-100 tanks 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) Low-Activity Waste (LAW) treatment accelerated work for DBVS technology development and design to address External Review Panel (ERP) issues including the Integrated Dryer and Melt Test (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 (MPS)/MCS; (5) base operations accelerated work for cross-site transfers, the SY Farm prefabricated pump pit (PPP) line replacement, and DST-to-DST transfers as well as work completed ahead of schedule for a 242-A Evaporator campaign and the 242-A Evaporator upgrades (MCS and supply side HVAC), all in support of single-shell tank (SST) retrievals; (6) accelerated work for AY/AZ Farm upgrades (AZ-102 pump replacement and installation); and (7) accelerated work on Environmental Health Program tank farm characterization for vapor mitigation. These favorable CTD SVs are partially offset by unfavorable variances for the (1) Retrieval/Closure Program due to delays in the Hose-in-Hose Transfer Line (HIHTL) Disposition Project (pending completion of 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/DCRTs (S-302; due to required alternate pump replacements) and (2) Waste Feed Operations (WFO) projects due to DST infrastructure upgrades (delays in the repair of line SLL-3160, specifically initiating work on SL-3160 encasement leak check [low priority, potential deferral] and delays in DST valve assembly upgrades; behind schedule on the AP Farm upgrades (AP-101 jumper installation and AP-103 in-process leak check/level rise [potential deferral]); and Waste Compatibility Program (delay in buoyant displacement gas release event [BDGRE] work not needed due to delay in Tank C-110 retrieval).

The CM CV of \$1.6M is due to: (1) favorable variances in the TFC Program for Miscellaneous Services (Business and Occupational [B&O] tax credit), a favorable mid-year pass back from Fluor Hanford, Inc. (FH) for Site Services, lower than planned allocation from FH for Site-Wide and Shared Services, and favorable labor liquidation (more employees worked for others than planned); (2) favorable variances in the DST Integrity Project and Tank Chemistry Control Project due to approval and implementation of BCR RPP-08-002, "Double-Shell Tank Integrity Project and Tank Chemistry Control Project Additions/Deletions and Deferrals" (March 2008 point adjustment for addition of new activities and performance earned to date); (3) efficiencies on AY/AZ upgrades (use of spare pump for AZ-102 replacement instead of new procurement resulting in cost savings for fabrication, modifications, design, and installation); (4) C Farm retrieval of Tank C-110 (accrual for procured items delayed until April 2008) and progress on C Farm infrastructure procurements; (5) cost efficiencies on tank waste sampling (less than planned labor and crane and rigging costs for planned sampling events); (6) efficiencies on DST-to-DST transfers (minimization of overtime by use of shift personnel and same planning package for back-to-back transfers); and (7) miscellaneous cost efficiencies and savings in DST and SST Essential Services (less labor than planned), WFO safe storage surveillance/monitoring and Waste Management Program/Administration (partially offset by SST and DST technical safety requirement [TSR]/Basic Maintenance labor assigned to the SST preventative maintenance [PM]/corrective maintenance [CM] backlog reduction); strategic planning and project controls (SP&PC) and

analytical technical services (ATS) (Advanced Technologies and Laboratories International, Inc.[ATL] costs).

The favorable CVs are partially offset by unfavorable variances for: (1) unplanned costs for the Tank S-102 leak event cleanup and investigation and Tank S-102 retrieval (engineering analysis and alternative evaluation for retrieval path forward; CTD, this retrieval has a positive CV); (2) C Farm retrievals related to C-104 construction (additional training costs and delays and costs associated with the impacts of S-102 corrective action implementation [compensatory measures and engineering requirements]) and C-104 design and engineering (design review added changes); C-108 hard heel retrieval (contract costs and accruals with minimal progress); and C-109 retrieval hard heel removal (cost impacts and overtime associated with riser gauging issue and aforementioned corrective action implementation) and unplanned costs of readiness assessment (RA); (3) T Farm Interim Surface Barrier construction cost overruns (additional scope including transportation, grading, and transportation of soil; infiltration area for water runoff; interior trench and anchor supports for material and material costs); construction was completed in March 2008; (4) 242-A Evaporator upgrades (HVAC system costs due to complexity, corrective maintenance and emergent work, and resolution of relay failure issue for the MCS upgrade); (5) 242-A Evaporator operations and maintenance (overtime support for the MCS upgrade operational acceptance testing [OAT], materials and subcontract support for the unplanned PB-1 pump refurbishment, and higher than expected crane and rigging costs); (6) DBVS Engineering During Construction final design and review costs (additional costs to modify the facility design to incorporate lessons learned from the FY 2007 IDMT and design changes identified in the Process Hazards and Operational Analysis [PRHOA] sessions); (7) Project W-314 upgrades and turnover (troubleshooting, as-builting, and emergent work related to AW exhausters and Phase 2 Startup, Testing, and Turnover); (8) manage Facilities and Property Services (unplanned costs for 3109 Building move, 2440 Building move, and respective renovations of each); and (9) costs associated with the Environmental Health Program (ATL sample analysis) and WFO/SST Basic Maintenance.

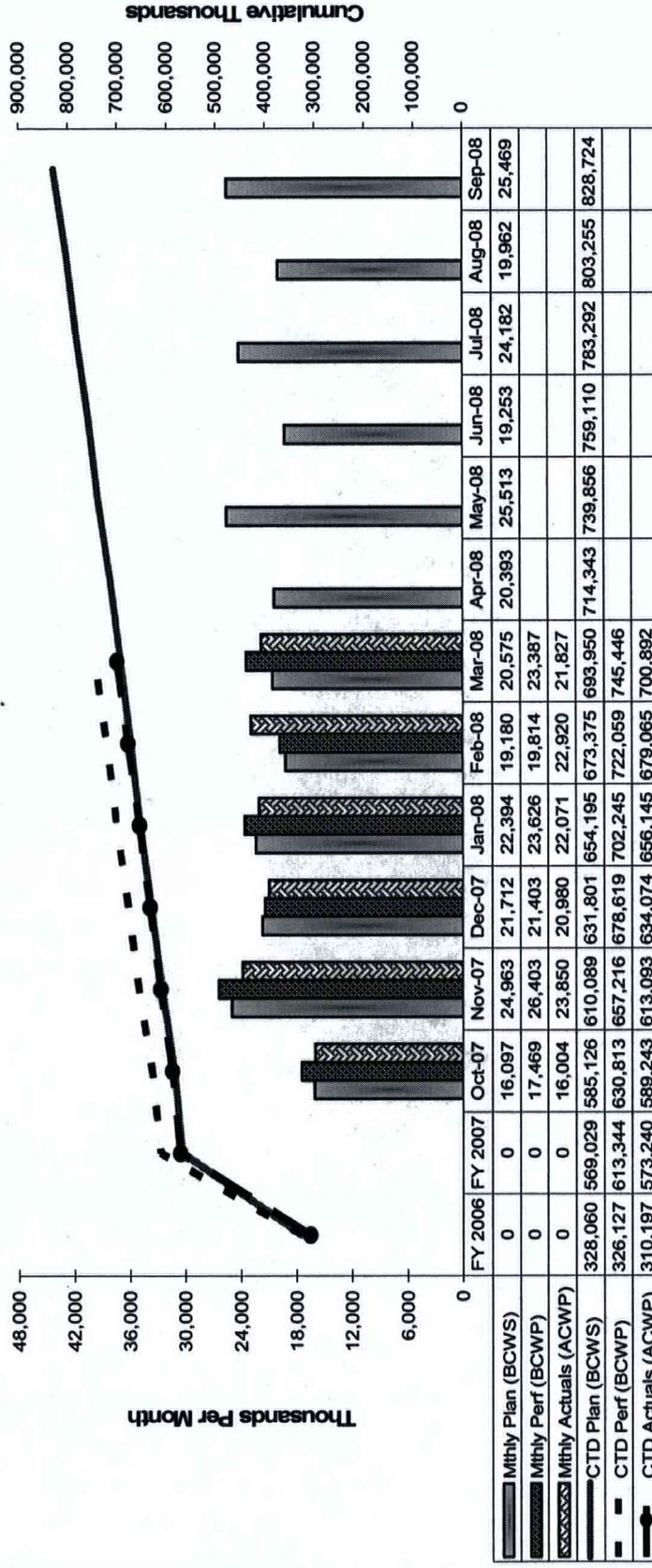
The CTD CV of \$44.5M is due to variances for: (1) efficiencies in preparation and retrieval work for C-100 Tank retrievals (Tanks C-109, C-108, and C-110); 2) efficiencies in S Farm retrievals (Tank S-102 and S-112); (3) cost savings and efficiencies in Tank Farms project and program management, support, and Essential Services (Information Resource Management [IRM], Executive Management, Legal Counsel, Manage Facilities and Property Services, Work Force Realignment and Restructure, Liquidations, Shared Services, Miscellaneous Services, and Site-Wide Services); (4) WFO savings and efficiencies in surveillance and monitoring, isolation of transfer system components, project controls, DST-to-DST transfers, Essential Services, AY/AZ upgrades (use of spare pump for AZ-102 replacement instead of new

procurement), cross-site transfers, tank waste database management and miscellaneous other accounts; (5) Closure Operations Base Operations efficiencies in the Essential Services infrastructure, Facility Upgrades Project Management, and Liquid Level and Video Assessment; (6) 222-S Laboratory Services under-runs in base services due to less than planned dedicated and matrixed staff for maintenance, production control and technology development, planned labor rates greater than actual costs, and revised waste volume projections for 222-S base services less than originally planned; and under-runs in tank sampling due to greater than planned resources directed to support FH core sampling of U-361, and less than planned sampling/analysis (core and grab) for chemistry control due to ongoing support to retrieval and base operations; and (7) labor efficiencies and cost savings in other support functions including Safety, Health and Quality Assurance (SH&QA) (Industrial Health and Safety, assessments, Quality Assurance [QA], Radiation Protection, and *Price-Anderson Amendment Act of 1988*), SP&PC (baseline integration, infrastructure services, and strategic planning), SWE/personnel readiness (standards and compliance), and Engineering.

These favorable CTD CVs are partially offset by unfavorable variances for: (1) SST and WFO TSR/Basic Maintenance (to reduce and maintain the PM and CM backlog and support acceleration of retrievals); (2) unplanned costs for the S-102 spill event cleanup, investigation, and corrective action plan; (3) vadose zone due to T Farm interim barrier costs higher than baseline estimates (design, procurement, construction scope, and weather issues); construction was completed in March 2008; (4) LAW treatment due to DBVS design labor and subcontract costs incurred in FY 2006, retroactive subcontractor rate adjustments resulting from a Defense Contract Audit Agency (DCAA) audit, cost overruns on DBVS Engineering During Construction (see above), and cost overruns on DBVS procurement (for unplanned storage and maintenance of equipment awaiting restart of construction); (5) C-100 and C-200 Tanks due to prior year overruns on C-103 and C-201 to C-204 retrievals due to technical difficulties; (6) Office of the Vice President (VP) Project Delivery due to additional resources necessary to manage unplanned work for the DBVS ERP issues resolution, molten ionic salt issue resolution, the IDMT, and a cost correction for exhauster fabrication (work completed); (7) DST Integrity Project (Tank AY-101UT, DST system structural analysis, and AP Valve Pit/Evaporator integrity assessment costs); (8) Project W-314 upgrades and turnover (troubleshooting, as-building, and emergent work); and (9) 242-A Evaporator upgrades (HVAC system costs due to complexity, corrective maintenance and emergent work, and resolution of relay failure issue for the MCS upgrade).

### CURRENT MONTH/CONTRACT-TO-DATE PERFORMANCE - GRAPH

CH2M HILL Contract-to-Date Performance (\$000)  
10/2005 - 03/2008



## CURRENT MONTH PERFORMANCE - CHART

CH2M HILL Hanford Group, Inc.

CURRENT MONTH PERFORMANCE MEASUREMENT - 03/2008

BY WORK BREAKDOWN STRUCTURE

Dollars in Thousands

WBS	TITLE	Budgeted Cost			Current Month			Variance		
		Work Scheduled	Work Performed	Actual Cost Work Performed	Schedule	SV %	Cost	CV %		
5.07	BASE OPERATIONS - Excluding 5.07.02	10,464.9	12,058.8	9,511.1	1,593.8	15.2%	2,547.6	21.1%		
5.07.02	Env/TPA Milestone Achievement	1,863.5	1,791.6	1,338.8	(71.9)	-3.9%	452.8	25.3%		
	<b>TOTAL BASE OPERATIONS</b>	<u>12,328.4</u>	<u>13,850.4</u>	<u>10,849.9</u>	<u>1,522.0</u>	<u>12.3%</u>	<u>3,000.5</u>	<u>21.7%</u>		
5.08	RETRIEVE AND CLOSE - Excluding foll. WBS Elements	0.0	0.0	0.8	0.0	0.0%	(0.8)	-0.8%		
5.08.02	WTP Feed Delivery Program	585.6	585.8	476.1	0.1	0.0%	109.7	18.7%		
5.08.03	DST Retrieval Program	0.0	0.0	5.4	0.0	0.0%	(5.4)	-5.4%		
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	0.0	150.0	423.8	150.0	150.0%	(273.8)	-182.6%		
5.08.04.02	Upgrade Transfer System (E-525)	0.0	0.0	(78.2)	0.0	0.0%	78.2	78.2%		
5.08.05	Retrieval / Closure Program	3,802.7	3,839.6	4,096.1	36.8	1.0%	(256.5)	-6.7%		
5.08.06/07	SST Retrieval East / West Area	816.8	2,049.1	3,335.2	1,232.3	150.9%	(1,286.1)	-62.8%		
5.08.12/13	SST Closure	25.7	25.7	36.9	0.0	0.0%	(11.1)	-43.3%		
	<b>TOTAL RETRIEVE AND CLOSE</b>	<u>5,230.8</u>	<u>6,650.1</u>	<u>8,296.1</u>	<u>1,419.3</u>	<u>27.1%</u>	<u>(1,646.0)</u>	<u>-24.8%</u>		
5.09	TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements	526.6	505.4	367.3	(21.2)	-4.0%	138.1	27.3%		
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	57.4	57.5	26.7	0.1	0.2%	30.8	53.6%		
5.09.02.05/11	Bulk Vitrification System (BVS) Project	268.0	145.6	252.2	(122.5)	-45.7%	(106.7)	-73.3%		
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)	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%		
	<b>TOTAL TREAT AND DISPOSE WASTE</b>	<u>852.0</u>	<u>708.5</u>	<u>646.2</u>	<u>(143.6)</u>	<u>-16.8%</u>	<u>62.3</u>	<u>8.8%</u>		
5.10	ANALYTICAL/TECHNICAL SERVICES	2,163.4	2,178.3	2,034.7	14.9	0.7%	143.6	6.6%		
<b>TFC TOTAL</b>		<u>20,574.7</u>	<u>23,387.2</u>	<u>21,826.9</u>	<u>2,812.6</u>	<u>13.7%</u>	<u>1,560.4</u>	<u>6.7%</u>		

# CONTRACT-TO-DATE PERFORMANCE - CHART

CH2M HILL Hanford Group, Inc.  
 CONTRACT-TO-DATE PERFORMANCE MEASUREMENT - 10/2005 - 03/2008  
 BY WORK BREAKDOWN STRUCTURE  
 Dollars in Thousands

WBS	TITLE	Budgeted Cost		Actual Cost		Cumulative Contract-To-Date				Variance		Budget at Completion		Estimate at Completion	
		Work Scheduled	Work Performed	Work Performed	Work Performed	Schedule	SV %	Cost	CV %	Completion (BAC)*	Accelerated Scope**	Completion (EAC)***	Completion (EAC)***		
5.07	BASE OPERATIONS - Excluding 5.07.02	340,211.4	343,294.4	313,360.9	3,083.0	0.9%	29,933.5	8.7%	414,644.9	3,399.2	383,617.7	3,399.2	383,617.7		
5.07.02	Env/TPA Milestone Achievement	43,485.3	46,233.1	45,091.6	2,747.8	6.3%	1,141.5	2.5%	49,951.8	6,166.3	53,939.7	6,166.3	53,939.7		
	TOTAL BASE OPERATIONS	383,696.7	389,527.5	358,452.5	5,830.8	1.5%	31,075.0	8.0%	464,596.6	9,565.5	437,557.4	9,565.5	437,557.4		
5.08	RETRIEVE AND CLOSE - Excluding foil. WBS Elements	0.0	283.3	214.8	283.3	283.3%	68.5	24.2%	0.0	298.2	210.5	298.2	210.5		
5.08.02	WTP Feed Delivery Program	18,096.2	18,096.4	16,100.6	0.1	0.0%	1,995.8	11.0%	22,019.8	0.0	19,137.8	0.0	19,137.8		
5.08.03	DST Retrieval Program	1,676.3	1,984.2	2,220.9	307.9	18.4%	(236.7)	-11.9%	1,676.3	1,338.9	2,838.9	1,338.9	2,838.9		
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	2,865.8	7,862.4	9,050.5	4,996.6	174.4%	(1,188.1)	-15.1%	2,865.8	7,892.0	10,233.0	7,892.0	10,233.0		
5.08.04.02	Upgrade Transfer System (E-525)	2,712.4	2,712.4	2,981.8	0.0	0.0%	(269.4)	-9.9%	2,712.4	0.0	2,981.8	0.0	2,981.8		
5.08.05	Retrieval / Closure Program	124,996.9	121,491.0	116,974.4	(3,506.0)	-2.8%	4,516.6	3.7%	148,974.5	0.0	141,708.9	0.0	141,708.9		
5.08.06/07	SST Retrieval East / West Area	48,578.7	78,533.9	76,450.8	29,955.2	61.7%	2,083.1	2.7%	52,897.3	60,277.1	92,428.0	60,277.1	92,428.0		
5.08.12/13	SST Closure	929.5	929.5	929.6	0.0	0.0%	(0.1)	0.0%	1,101.8	0.0	1,156.1	0.0	1,156.1		
	TOTAL RETRIEVE AND CLOSE	199,855.7	231,893.0	224,923.4	32,037.2	16.0%	6,969.6	3.0%	232,247.8	69,806.1	270,695.0	69,806.1	270,695.0		
5.09	TREAT AND DISPOSE WASTE - Excl. foil. WBS Elements	11,284.2	11,224.0	9,137.5	(60.2)	-0.5%	2,086.5	18.6%	17,602.7	0.0	15,429.8	0.0	15,429.8		
5.09.02.02	TRU / LLW Packaging	0.0	0.0	65.6	0.0	0.0%	(65.6)	-85.6%	0.0	0.0	65.6	0.0	65.6		
5.09.02.03/08	LAW Treatment	1,765.6	1,765.7	1,697.4	0.1	0.0%	68.3	3.9%	2,150.2	0.0	2,055.8	0.0	2,055.8		
5.09.02.05/11	Bulk Vitrification System (BVS) Project	28,151.0	41,878.7	45,259.5	13,727.7	48.8%	(3,380.8)	-8.1%	28,231.4	13,841.7	45,819.1	13,841.7	45,819.1		
5.09.03.01	Integrated Disposal Facility	7,132.9	7,132.9	5,351.5	0.0	0.0%	1,781.4	25.0%	7,132.9	0.0	5,351.5	0.0	5,351.5		
5.09.03.04	Initial IHLW Storage Facility (W-464)	109.4	109.4	35.1	0.0	0.0%	74.3	67.9%	109.4	0.0	35.1	0.0	35.1		
	TOTAL TREAT AND DISPOSE WASTE	48,443.0	62,110.6	61,546.5	13,667.6	28.2%	564.1	0.9%	55,226.6	13,841.7	68,756.9	13,841.7	68,756.9		
5.10	ANALYTICAL/TECHNICAL SERVICES	61,954.3	61,914.6	55,969.5	(39.6)	-0.1%	5,945.2	9.6%	76,652.5	0.0	69,162.8	0.0	69,162.8		
TFC TOTAL		693,949.7	745,445.8	700,891.9	51,496.1	7.4%	44,553.9	6.0%	828,723.5	93,213.4	846,174.1	93,213.4	846,174.1		
	BAC								828,723.5		828,723.5		828,723.5		
	Adjusted Total with Accelerated Scope												921,937.0		

\* 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).

## EARNED VALUE PERFORMANCE

### 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	10,464.9	12,058.8	9,511.1	1,593.8 15.2%	2,547.6 21.1%	
CTD	340,211.4	343,294.4	313,360.9	3,083.0 0.9%	29,933.5 8.7%	414,644.9

Note (All tables): Dollars in thousands.

### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is due to: (1) accelerated work performed on the AY/AZ upgrades projects (installation of the AZ-102 supernatant pump); (2) Tank Chemistry Control due to March point adjustment for implementation of BCR RPP-08-002, "Double-Shell Tank Integrity Project and Tank Chemistry Control Project Additions/Deletions and Deferrals" (AY-102 Chemistry/Corrosion Probe) and BCR RPP-08-008, "AN-107 Corrosion Probe"; (3) 242-A Evaporator upgrades performed early (HVAC and MCS); and (4) Information Resource Management for progress made on implementation of Office Use Only (OUO) requirements.

The CTD SV is due to (1) accelerated work completed on AY/AZ upgrades (AZ-102 supernatant pump replacement required to support AZ-102 blending transfers) and characterization for vapors solutions (T and U Farms) and (2) work completed early (ahead of schedule) on 242-A Evaporator upgrades (MCS and supply side HVAC upgrades).

These favorable variances are partially offset by unfavorable variances for: (1) DST infrastructure upgrades due to delays in DST valve assembly upgrades (due to a change in scope from the AWA for DST valve replacement) and delays in the repair of line SLL-3160, specifically initiating work on SL-3160 encasement leak check (low priority; potential deferral); (2) WFO Waste Compatibility Program (deferral of BDGRE work not needed due to delay in Tank C-110 retrieval);

and (3) AP Farm upgrades (AP-101 jumper installation [behind schedule] and AP-103 in-process leak check/level rise [potential deferral]).

**Impact:** Re-prioritization of work has been addressed and re-planning of some work is underway via change action.

**Corrective Action:** The SV will continue for accelerated work and, in the short term, for work performed early. The repair of line SLL-3160 will be deferred to FY 2009 as it is low priority work. BCR RPP-08-001 was prepared to address the change in scope for the DST valve replacement and was approved and will be implemented in April 2008. The AP Farm upgrade AP-101 jumper installation will be completed in the Spring 2008 as it is required prior to the AP-101 to AW-102 transfers, which are pre-requisites for the second FY 2008 242-A Evaporator campaign. The AP-103 in-process leak check is being evaluated for potential deferral. BCRs RPP-08-002 and RPP-08-008 were approved and implemented in March to address the AY-102 chemistry corrosion probe and AN-107 corrosion issues. Completion of the Tank C-110 BDGRE work will be deferred to FY 2009.

#### **COST VARIANCE**

**Description and Cause:** The CM CV is due to: (1) favorable variances in the Essential Services for miscellaneous services (B&O tax credit), a favorable mid-year pass back from FH for site services, lower than planned allocation from FH for Site-Wide and Shared Services, and favorable labor liquidation (more employees worked for others than planned); (2) efficiencies on AY/AZ upgrades (use of spare pump for AZ-102 replacement instead of new procurement resulting in cost savings for fabrication, modifications, design and installation); (3) cost efficiencies on tank waste sampling (less than planned labor and crane and rigging costs for planned sampling events); (4) favorable variances in Tank Chemistry Control Project due to approval and implementation of BCR RPP-08-002, "Double-Shell Tank Integrity Project and Tank Chemistry Control Project Additions/Deletions and Deferrals" and BCR RPP-08-008, "AN-107 Corrosion Probe" (March point adjustment for addition of new activity and performance earned to date related to AN-102 laboratory testing); (5) Information Resource Management progress earned on OOU implementation of new requirements; (6) efficiencies on the WFO Waste Compatibility Program (use of few subcontracted resources) and (7) miscellaneous cost efficiencies in project support (RPP Baseline Integration Support, Legal Counsel, Finance, and Standards and Compliance).

CM favorable CVs are partially offset by unfavorable variances for: (1) other mission support for evaporator upgrades (HVAC system costs due to complexity, corrective maintenance and emergent work, and resolution of relay failure issue for the MCS upgrade); (2) project support for Manage Facilities and Property Services (unplanned costs for 3109 Building move, 2440 Building move, and respective renovations of each); 3) Base Operations Environmental Health Program

costs higher than expected (ATL sample analysis); and 4) Base Operations costs for WFO TSR/Basic Maintenance to reduce PMs/CMs and support acceleration of retrievals.

Significant contributors to the CTD favorable CV include efficiencies and cost savings in:

(1) Essential Services (FH allocation for general Site-Wide Services, Shared Services, and Miscellaneous Services [AdvancedMed Hanford Services, Technical Library, DOE, Richland Operations Office [RL] service assessment pool allocation, and miscellaneous services) and liquidation of Continuity of Service (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, WFO Essential Services Industrial Health and Safety/Health and Safety Plan [HASP], Engineering Program, assessments, QA Program, Nuclear Operations Program Management, WFO Facilities Operations Management, *Price-Anderson Amendment Act of 1988* [PAAA] Program, WFO BU Training and Radiation Protection Program); (3) ongoing efficiencies in project support (Standards and Compliance, Information Resource Management [IRM], TFC Executive Management, Legal Counsel, RPP Baseline Integration Support, and Manage Facilities and Property Services); and (4) other mission support efficiencies on AY/AZ upgrades (use of spare pump for AZ-102 replacement instead of new procurement) and Work Force Realignment and Restructure (fewer employees impacted than anticipated by 2006 Involuntary Reduction of Force).

The favorable CTD variances are partially offset by: (1) unfavorable Base Operations variances related to WFO TSR/Basic Maintenance (efforts to reduce and maintain the PM/CM backlog and support to tank retrieval acceleration including DST-to-DST transfers and cross-site transfers, electrical outages, and cathodic protection); WFO parts/materials/tools (fabrication costs for jumpers and parts, purchase of cameras, parts and materials for PMs/CMs, and materials to support additional DST-to-DST and cross-site transfers); WFO RADCON Surveys (FY 2006 costs for additional surveillances/routines on overtime and additional laboratory costs incurred); Environmental Health Program costs (vapors sampling support and Advanced Technologies and Laboratories International, Inc. (ATL) Readiness to Serve adder) and WFO infrastructure; (2) unfavorable project support variances related to procurement and contracts costs (work performed on the Marshalling Yard and connector road improvements) and labor relations (subcontractor support to Hanford Atomic Metal Trades Council Contract negotiations and ratification); and (3) unfavorable variances related to 242-A Evaporator upgrades (HVAC system costs due to complexity, corrective maintenance and emergent work and resolution of relay failure issue for the MCS upgrade).

**Impact:** None.

**Corrective Action:** The favorable CVs are expected to continue for the ongoing level of effort Base Operations, Support Services, and Essential Services accounts. The unfavorable CVs for completed work are not recoverable. Work has been reprioritized to meet mission objectives for

the remainder of the Contract period. BCRs are being prepared for as-found field conditions (242-A Evaporator upgrades) and deferrals (to support the energy savings initiative and the 2440/3109 Building moves and renovations).

## 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 170 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	1,863.5	1,791.6	1,338.8	-71.9 -3.9%	452.8 25.3%	
CTD	43,485.3	46,233.1	45,091.6	2,747.8 6.3%	1,141.5 2.5%	49,951.8

**SCHEDULE VARIANCE**

**Description and Cause:** The CM SV is within the reporting threshold of +/- 10 percent or \$1.0M.

The CTD favorable SV is due to (1) accelerated work (planned outside the contract period in the baseline) completed for cross-site transfers, the SY Farm prefabricated pump pit (PPP) line replacement and DST-to-DST transfers (supports tank retrievals, 242-A Evaporator and tank level increases) and (2) work completed early ahead of schedule for the 242-A Evaporator Campaign 08-01.

**Impact:** None.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The CM favorable CV is due to (1) DST Integrity Project (March approval and implementation of BCR RPP-08-002, "Double-Shell Tank Integrity Project and Tank Chemistry Control Project Additions/Deletions and Deferrals," resulting in a point adjustment for addition of new activities and performance earned to date [structural analysis and resolution of Expert Panel comments]) and (2) efficiencies on DST-to-DST transfers (minimization of overtime by use of shift personnel and same planning package for back-to-back transfers).

CM favorable variances are partially offset by unfavorable variance for 242-A Evaporator Operations and Maintenance (overtime support for the MCS upgrade OAT, materials and

subcontract support for the unplanned PB-1 pump refurbishment, and higher than expected crane and rigging costs).

The CTD favorable CV is due to: (1) efficiencies on DST-to-DST transfers (minimization of overtime by use of shift personnel and same planning package for back-to-back transfers); (2) efficiencies on cross-site transfers (labor); 3) level-of-effort (LOE) efficiencies on the Environmental Support and Assessment Program; (4) efficiencies on DST Facility Upgrades Project Management; and (5) cost reductions on DST space evaluation (shift to higher priority work and reduction of staff).

The CTD favorable CVs are partially offset by unfavorable variances for: (1) DST Integrity Project (increased cost for completed work on the AP Valve Pit Integrity Assessment, DST Infrastructure Integrity Assessment, 242-A Evaporator Integrity Assessment and Ultrasonic Examination, AY-101 ultrasonic testing (UT) support, and miscellaneous associated Independent Qualified Registered Professional Engineer [IQRPE] support to integrity assessment); (2) catch tank pumping (isolation of Silver List Catch Tanks UX-302-A and ER-311); (3) increase specific gravity (overruns); and (4) 242-A Evaporator upgrades (HVAC system costs due to complexity, corrective maintenance and emergent work, and resolution of relay failure issue for the MCS upgrade).

Impact: None.

**Corrective Action:** BCR RPP-08-002 was approved and implemented in March to address scope and assessment requirements associated with DST System structural analysis. Efficiencies are expected to continue on DST-to-DST transfers.

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 *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) 200-IS-1 Operable Unit Work Plan* and a sampling and analysis plan as directed by the ORP.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.8	0.0	-0.8 -0.8%	
CTD	0.0	283.3	214.8	283.3 283.3%	68.5 24.2%	0.0

#### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is within the reporting threshold of +/-10 percent or \$1.0M.

The CTD favorable SV is due to ORP-directed acceleration of the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 200-IS-1* work plans in support of the RL TPA M-15 Milestones.

**Impact:** None.

**Corrective Action:** None required.

#### COST VARIANCE

**Description and Cause:** The CM CV is within the reporting threshold of +/-10 percent or \$1.0M.

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 and Immobilization 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	585.6	585.8	476.1	0.1 0.0%	109.7 18.7%	
CTD	18,096.2	18,096.4	16,100.6	0.1 0.0%	1,995.8 11.0%	22,019.8

**SCHEDULE VARIANCE**

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

**Impact:** None.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The CM and CTD favorable CV is due to ongoing cost efficiencies in LOE 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 external review 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	0.0	5.4	0.0 0.0%	-5.4 -5.4%	
CTD	1,676.3	1,984.2	2,220.9	307.9 18.4%	-236.7 -11.9%	1,676.3

**SCHEDULE VARIANCE**

**Description and Cause:** The CM SV is within the reporting threshold of +/- 10 percent or \$1.0M.

The CTD favorable SV is due to acceleration of the Tank 241-AN-101 Retrieval System 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 CM CV is within the reporting threshold of +/- 10 percent or \$1.0M.

The CTD unfavorable CV is due to previous cost overruns on the AN-101 mixer pump procurement, which is partially offset by cost efficiencies on accelerated work for the AN-101 Retrieval System and LOE 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/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	150.0	423.8	150.0 150.0%	-273.8 -182.6%	
CTD	2,865.8	7,862.4	9,050.5	4,996.6 174.4%	-1,188.1 -15.1%	2,865.8

**SCHEDULE VARIANCE**

**Description and Cause:** The CM SV is due to acceleration of the Project W-314 AW Farm Upgrades (HVAC exhausters) and Phase 2 Startup, Testing, and Turnover.

The CTD favorable SV is due to the acceleration of Project W-314 work including all farm electrical upgrades, the MPS/MCS, AN and AW HVAC exhausters, and Phases 1 and 2 Startup, Testing, Readiness, and Turnover.

**Impact:** None.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The CM unfavorable CV is due to: (1) cost overruns on the AW Farm upgrades (AW exhauster modifications and tie-ins impacts from emergent construction activities, engineering change notices (ECN), and construction acceptance tests resulting from walkdowns, testing, HAZOP evaluations, and as-building; (2) Phase 2 Startup, Testing, and Turnover (troubleshooting continuous air monitors (CAM) and resolving communication issues found during testing of the AN Farm exhausters); and (3) Phase 1 Startup, Testing, and Turnover (increased labor resources to support the MCS startup [engineering support to bring the system on line, debugging of programming and related testing, and test bed set-up; and costs associated with the new CITECT® software license and system upgrades]).

The CTD CV is due to unfavorable variances on the AP upgrades (Construction and Engineering effort for troubleshooting, and Engineering to update and as-built project and facility documents), costs to complete the AN upgrades (emergent ECN construction activities resulting from walkdowns, testing, and the HAZOP evaluations), costs to complete the AW upgrades (FY 2007 costs for emergent construction activities on the encasement leak detectors), SY upgrades (pit

upgrades performed in FY 2006 and increased scope to complete the upgrades [differing field conditions, troubleshooting, and construction acceptance testing (CAT)], and increased cost of the Phase 1 Startup, Testing, and Turnover of the MPS/MCS due to increased labor required for Engineering support to bring the system on-line, debugging of programming and test bed setup.

Unfavorable CV is partially offset by efficiencies in Phase 2 Startup, Testing, and Turnover, and project support.

**Impact:** None.

**Corrective Action:** Work has been reprioritized to support the mission objectives for the remainder of the Contract period. Completion of the Phase 1 MPS/MCS Startup, Testing, and Turnover will be deferred.

## 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	-78.2	0.0 0.0%	78.2 78.2%	
CTD	2,712.4	2,712.4	2,981.8	0.0 0.0%	-269.4 -9.9%	2,712.4

**SCHEDULE VARIANCE**

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

No work has been performed on Project E-525 in the FY 2007 and FY 2008 periods.

**Impact:** None.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The CM CV is due to decrease in the final negotiated cost to close a Fluor Federal Services (FFS) construction subcontract.

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 LOE 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, Cold Test Facility (CTF) management and maintenance, vadose zone support, inactive waste sites administration, Tank Farms 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	3,802.7	3,839.6	4,096.1	36.8 1.0%	-256.5 -6.7%	
CTD	124,996.9	121,491.0	116,974.4	-3,506.0 -2.8%	4,516.6 3.7%	148,974.5

**SCHEDULE VARIANCE**

**Description and Cause:** The CM SV is within the reporting threshold of +/- 10 percent or \$1.0M.

The CTD unfavorable SV is due to behind schedule condition on: (1) HIHTL Disposition Project (work delayed pending completion of a life extension study and agreement with state regulators on a path forward and schedule); (2) 244-CR Vault (work deferred); and (3) liquid mitigation of catch tanks/DCRTs (field work on S-302 pumping delayed pending procurement and installation of an alternate retrieval pump).

Unfavorable CTD SV is partially offset by favorable variance for vadose zone work ahead of schedule (direct push sampling and SGE).

**Impact:** Re-planning of some work is in process.

**Corrective Actions:** The HIHTL Disposition Project and 244-CR Vault work is being re-planned via BCR RPP-08-005, "Realign FY 2007 through FY 2009 HIHTL" (approved and will be implemented in April 2008). The remaining 244-CR Vault work is being deferred to FY 2009. The BCR aligns HIHTL work with the life extension study and provides for completion of S Farm work in FY 2008 and deferral of U Farm work to FY 2009. The work for liquid mitigation of catch tanks has resumed and an alternate pump was delivered in January 2008. Architect/engineer (A/E) design work is expected to be completed in April 2008 with pumping of S-302 in August 2008. The T Farm interim barrier construction work was completed in March 2008 and a Value Engineering (VE) session was conducted on scope, schedule, and cost for planning similar interim surface barriers.

**COST VARIANCE**

**Description and Cause:** The CM CV is within the reporting threshold of +/- 10 percent or \$1.0.M.

The CTD favorable CV is due to: (1) under-runs in SST Operations Essential Services (labor planned in Essential Services being utilized in SST TSR/Basic Maintenance account to complete preventive and corrective maintenance activities); (2) cost savings on isolate transfer system components work (FY 2006 labor and construction); (3) cost efficiencies in infrastructure support from FH and Lockheed Martin Services, Inc. (lower than projected support required); and (4) miscellaneous other cost efficiencies and savings in Grand Junction Gamma Logging (LOE), Waste Management Program/Administration, Liquid Level and Video Assessment (under-runs on completed work), Tank Farms risk assessments (efficient use of in-house staff instead of subcontractors as planned), retrieval technology development, and CTF management and maintenance (lower share of cost as other programs used the facility).

The favorable CTD CVs are partially offset by unfavorable variances for: (1) vadose *Resource Conservation and Recovery Act of 1976* (RCRA) corrective actions T Farm Interim Surface Barrier work exceeding the baseline estimates (design, procurement, weather, and construction scope issues including additional steps to complete the required work such as 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); (2) SST TSR/Basic Maintenance (higher than expected labor costs being incurred to complete basic PMs/CMs and maintain the backlog and support accelerated retrievals); and (3) Closure Operations Office of the VP (unplanned purchase of spare cameras and unplanned costs for vapor sampling for chemicals of concern).

**Impact:** Overall, the Retrieval/Closure Program is maintaining a favorable CTD CV.

**Corrective Action:** Measures were implemented to reduce the costs on the remaining T Farm Interim Surface Barrier construction work (streamlined the management structure, implemented weather enclosure to apply polyurea in bad weather, and optimized staff). Construction work was completed in March 2008. A VE Study was conducted in March to assess issues encountered with this first of a kind barrier. Lessons learned and potential improvements will be utilized for future scope, schedule and cost on similar barriers.

## 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	816.8	2,049.1	3,335.2	1,232.3 150.9%	-1,286.1 -62.8%	
CTD	48,578.7	78,533.9	76,450.8	29,955.2 61.7%	2,083.1 2.7%	52,897.3

**SCHEDULE VARIANCE**

**Description and Cause:** The CM SV is due to (1) accelerated work performed on the Tanks C-104 and C-110 retrievals and C Farm infrastructure design and construction and (2) early work performed on Tank C-109 retrieval.

This CM favorable SV is partially offset by an unfavorable SV for Tank S-102 retrieval (on hold pending recovery actions).

The CTD favorable SV is due to accelerated work performed on retrieval of Tanks S-102, C-104, and C-110, and C Farm infrastructure; and work completed ahead of the contract period baseline schedule on retrieval of Tanks C-108 and C-109 (design, construction, startup, and retrieval).

**Impact:** The favorable SVs will continue for accelerated work. The favorable SVs will zero out by the end of FY 2008 for work ahead of schedule.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The CM unfavorable CV is due to: (1) unplanned costs for the Tank S-102 leak event cleanup; (2) Tank C-109 retrieval hard heel removal (cost impacts and overtime associated with riser gauging issue and additional costs and delays associated with the impacts of S-102 corrective action implementation [compensatory measures and engineering requirements] and unplanned costs of readiness assessment); (3) Tank C-104 construction (additional training costs and delays and costs associated with the impacts of S-102 corrective action implementation [compensatory measures and engineering requirements]) and C-104 design and engineering (design review added changes); (4) Tank C-108 hard heel retrieval (contract costs and accruals with minimal progress); (5) unplanned costs for Tank S-102 retrieval

(engineering analysis and alternative evaluation for retrieval path forward; CTD, this retrieval have a positive CV).

Unfavorable CM CVs are partially offset by favorable CVs for (1) Tank C-110 retrieval (accrual for procured items [leak detector monitor and camera] delayed until April) and (2) progress earned on C Farm infrastructure procurements.

The CTD favorable CV is due to cost efficiencies and savings on retrieval of Tanks C-108, C-109, C-110, S-102, S-112, and S-109 (partial retrieval).

The favorable CTD CV is partially offset by overruns on: (1) Tank C-103 retrieval (equipment problems and increased sampling); (2) Tanks C-201-204 retrievals (equipment issues); (3) Tank C-104 retrieval; (4) C Farm infrastructure; and (5) 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 and impacts on C Farm retrieval due to implementation of compensatory measures, engineering requirements and process improvements (technical evaluations, process hazards analyses and Level 2 readiness assessments).

**Corrective Action:** Installation of the FOLDTRACK® MRT in Tank C-109 was completed on April 10, 2008. Continued acceleration of Tanks C-104 and C-110 hard heel removal using the FOLDTRACK® MRT will help minimize the unfavorable cost impacts from the S-102 spill event and associated recovery actions.

## 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.

	<b>BCWS</b>	<b>BCWP</b>	<b>ACWP</b>	<b>SV</b>	<b>CV</b>	<b>BAC</b>
<b>CM</b>	25.7	25.7	36.9	0.0 0.0%	-11.1 -43.3%	
<b>CTD</b>	929.5	929.5	829.6	0.0 0.0%	-0.1 0.0%	1,101.8

**SCHEDULE VARIANCE**

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

**Impact:** No impact.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The CM CV is due to minor costs incurred for Tank S-112 interim closure. The CTD CV is within the reporting threshold of  $\pm 10$  percent or \$1M.

**Impact:** None.

**Corrective Action:** None required.

5.09 - TREAT AND 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, the newly established Interim Pretreatment System (IPS) Project, 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 the Integrated Disposal Facility (IDF). Both are outside of the CTD 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	526.6	505.4	367.3	-21.2 -4.0%	138.1 27.3%	
CTD	11,284.2	11,224.0	9,137.5	-60.2 -0.5%	2,086.5 18.6%	17,602.7

#### SCHEDULE VARIANCE

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

**Impact:** None.

**Corrective Action:** None required.

#### COST VARIANCE

**Description and Cause:** The CM favorable CV is due to: (1) Phase 1 Infrastructure Services (reduced electrical usage at the WTP); (2) labor efficiencies in supplemental treatment strategic planning; (3) progress earned on the IPS (project support and technology development); and (4) efficiencies on immobilized low-activity waste (ILAW) and IHLW baseline management.

The favorable CM CVs are partially offset by minor unfavorable variances on (1) IDF operations (equipment calibrations, procedure development, and habitat mitigation) and (2) ILAW performance assessment.

The CTD favorable CV is due to efficiencies in the aforementioned WTP electrical usage and strategic planning as well as under-runs 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. This includes: (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 reporting threshold of  $\pm 10$  percent or \$1M.

**Impact:** None.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The CM CV is within the reporting threshold of  $\pm 10$  percent or \$1.0M.

The 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.

	<b>BCWS</b>	<b>BCWP</b>	<b>ACWP</b>	<b>SV</b>	<b>CV</b>	<b>BAC</b>
<b>CM</b>	57.4	57.5	26.7	0.1 0.2%	30.8 53.6%	
<b>CTD</b>	1,765.6	1,765.7	1,697.4	0.1 0.0%	68.3 3.9%	2,150.2

**SCHEDULE VARIANCE**

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

**Impact:** None.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The CM CV is due to efficiencies in Pretreatment Project Management at 200 West.

The CTD CV is within the reporting threshold of  $\pm 10$  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	268.0	145.6	252.2	-122.5 -45.7%	-106.7 -73.3%	
CTD	28,151.0	41,878.7	45,259.5	13,727.7 48.8%	-3,380.8 -8.1%	28,231.4

**SCHEDULE VARIANCE**

**Description and Cause:** The CM unfavorable SV is due to DBVS Project Engineering During Construction (late performance of auger testing by the vendor with actual material from IDMT [completed in April]).

CTD, the favorable SV is due to accelerated work performed on the DBVS Project Technology Development and Design to support resolution of the ERP issues/final design (IDMT, molten ionic salts, and CD-2).

**Impact:** None.

**Corrective Action:** None.

**COST VARIANCE**

**Description and Cause:** The CM unfavorable CV is due to DBVS Engineering During Construction final design and review costs (additional costs to modify the facility design to incorporate lessons learned from the FY 2007 IDMT and design changes identified in the Process Hazards and Operational Analysis [PRHOA] sessions).

The CTD unfavorable variance is due to additional subcontractor's effort to complete initial design (in prior years), retroactive subcontractor rate adjustments resulting from a DCAA audit, cost overruns on DBVS Engineering During Construction (see above), and cost overruns on DBVS

procurement (for unplanned storage and maintenance of equipment awaiting restart of construction).

The unfavorable CTD CV is partially offset by cost efficiencies on DBVS project support and the recent DBVS technology development work for the IDMT.

**Impact:** The CTD CV for completed work is not recoverable. Additional funding is required for follow-on testing to optimize mixer/dryer pellet production.

**Corrective Action:** Sources of additional funding are being investigated for modest testing program in FY 2009.

## 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 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	5,351.5	0.0 0.0%	1,781.4 25.0%	7,132.9

**SCHEDULE VARIANCE**

**Description and Cause:** The CM and CTD SV are within the reporting threshold of  $\pm 10$  percent or \$1M. Work on this facility is complete.

**Impact:** None.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** 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 reporting threshold of  $\pm 10$  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  $\pm 10$  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	2,163.4	2,178.3	2,034.7	14.9 0.7%	143.6 6.6%	
CTD	61,954.3	61,914.6	55,969.5	-39.6 -0.1%	5,945.2 9.6%	76,652.5

**SCHEDULE VARIANCE**

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

**Impact:** None.

**Corrective Action:** None.

**COST VARIANCE**

**Description and Cause:** The CM unfavorable CV is within the reporting threshold of  $\pm 10$  percent or \$1M.

The CTD favorable CV is due to: (1) efficiencies in ATS management technical advisors (attrition and transfer to WFO); (2) efficiencies in 222-S Services (less than planned ORP steam allocations); (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 FY 2006 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) ATL readiness to serve costs less than planned (the ATL readiness to serve positive CV is attributed to a re-distribution of costs between readiness to serve and other sampling; the positive CV will diminish as the fiscal year progresses).

Favorable CTD CVs are 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-45-56, 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 Work Plan that describes the proposed approach for the completion of Corrective Action to meet Final Closure Requirements in the Waste Management Areas as described in Appendix I, Section 2.3.**  
Due: 12/31/08  
Status: 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:

- Construction of the T-Farm interim barrier is complete. The monitoring system has been actuated.
- Continuing direct push work at C WMA. The 21 samples from the first unplanned release (UPR) site (UPR-86) are undergoing analysis. Two exploration holes have been completed at the second site (UPR-81) and

a third is underway. Moisture and gamma logging of the first two holes has been completed and will be used to select sample locations.

- The TX and TY geophysics field work is complete: analysis of well-to-well resistivity survey has been completed. Surface-to-surface survey analysis is underway and analysis of the ground-penetrating radar survey has been initiated.
- Construction of a groundwater monitoring and Vadose Zone sampling well in the BX Tank Farm was initiated.

### **III. Significant Planned Actions in the Next Six Months:**

- Complete investigation of UPR-200E-81 using direct push.
- Complete construction of a groundwater monitoring and vadose zone sampling well in the BX Tank Farm.
- Complete the WMA C data quality objectives.
- Complete the Master work Plan.
- Complete analysis and report of TX-TY Geophysics work.
- 

### **IV. Issues**

- None.

## **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: Missed
- **M-45-00E, Initiate Negotiation of SST Waste Retrieval and Closure Activities for the Remainder of the SST Program**  
Due: 10/31/12  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-05, Retrieve Waste from all Remaining Single-Shell Tanks**  
Due: 9/30/18  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-05-T05, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**  
Due: 9/30/07  
Status: Missed.
- **M-45-05-T06, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**  
Due: 9/30/08  
Status: 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 (Based on current DOE Baseline planning)
- **M-45-05-T09, Initiate Tank Retrieval from Ten Additional Single-Shell Tanks**  
Due: 9/30/11  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-05-T10, Initiate Tank Retrieval from 12 Additional Single-Shell Tanks**  
Due: 9/30/12  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-05-T11, Initiate Tank Retrieval from 14 Additional Single-Shell Tanks**  
Due: 9/30/13  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-05-T12, Initiate Tank Retrieval from 17 Additional Single-Shell Tanks**  
Due: 9/30/14  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-05-T13, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**  
Due: 9/30/15  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-05-T14, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**  
Due: 9/30/16  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-05-T15, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**  
Due: 9/30/17  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-06, Complete Closure of all Single-Shell Tank Farms in Accordance with Approved Closure/Post Closure Plan(s)**  
Due: 9/30/24  
Status: To Be Missed (Based on current DOE Baseline planning)
- **M-45-06-T03, Initiate Closure Actions on a WMA Basis**  
Due: 3/31/12  
Status: To Be Missed (Based on current DOE Baseline planning)

- **M-45-06-T04, Complete Closure Actions on one WMA**  
Due: 3/31/14  
Status: To Be Missed (Based on current DOE Baseline planning)

## II. Significant Accomplishments

- Continued design and construction work for the C-104 retrieval system.
- Successfully deployed FoldTrak into C-109.
- Started planning for C-110 retrieval.

## III. Significant Planned Activities in the Next Six Months

- Perform readiness assessment to resume C-Farm retrievals.
- Resume retrieval in C-109 using the FoldTrak (05/12/08).
- Complete construction for the C-104 retrieval system and start retrieval.
- Complete comment resolution on the C-110 TWRWP and obtain Ecology approval.
- Complete construction for the C-110 retrieval system and start retrieval.
- Complete comment resolution on the Mobile Retrieval System (MRS) TWRWP (for tanks C-101, C-105, and C-111) and obtain Ecology approval.

## IV. Issues

- C-108, C-109, and C-104: Draft TWRWP Modification Notices for the TWRWPs supporting these retrievals were provided to Ecology on 3/17/08. These Notices involve a change to the TWRWPs to delete RPP-24576 as a reference for how HRR data are processed and add the new reference RPP-32477. This is needed as part of HRR implementation.
- The C-110 and MRS TWRWPs have not been approved by Ecology. ORP submitted document updates for both TWRWPs on January 15, 2008.
- Milestones M-45-00B (retrieve all C-Farm tanks) and M-45-00C (initiate negotiations on SST retrievals for 2007-2008), and M-45-00D (initiate negotiations on SST retrievals for 2008-2013) were missed. TPA negotiations to address these and other milestones are ongoing.

**C-FARM RETRIEVAL SUMMARY SCHEDULE FORECASTS <sup>a</sup>**

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 <sup>c</sup>	5/08/08	8/27/08	8/1/08	9/15/08	4/28/09	4/1/09	3/12/10
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 <sup>d</sup>	Complete	Complete	Complete	Complete	5/20/09	4/20/09	3/23/10
C-109 <sup>d</sup>	Complete	Complete	Complete	Complete	9/8/08	8/1/08	6/30/09
C-110 <sup>bc</sup>	7/10/08	8/25/08	7/25/08	9/17/08	4/10/09	3/10/09	2/20/09
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 stated April month-end Integrated Mission Execution Schedule (IMES) as of 4/27/08 and are subject to change as efforts continue to identify and implement schedule efficiencies.

b. Projected dates for C-110 are based on utilizing Modified Sluicing technology and availability of acceleration funding.

c. Schedules are being updated for inclusion of S-102 corrective actions and compensatory measures.

d. Restart retrieval.

## SST RETRIEVAL SEQUENCE DOCUMENT

### I. Deliverables

- **M-45-02N, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02N for further details)**  
Due: 3/1/08 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: Complete
- **M-45-02N-A, Embedded Milestone; Within 60 days of receiving the DST Space Evaluation Document, the Three Parties Shall meet to Establish New Milestones, If Required, for Acquisition of Additional Tanks.**  
Due: 06/02/08  
Status: On schedule
- **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
- **M-45-02P-A, Embedded Milestone; Within 60 days of receiving the DST Space Evaluation Document, the Three Parties Shall meet to Establish New Milestones, If Required, for Acquisition of Additional Tanks.**  
Due: 4/30/10  
Status: On schedule

### II. Significant Accomplishments

- Submitted M-45-02N deliverable on February 29, 2008, ORP letter, 08-TPD-010

**III. Significant Planned Activities in the Next Six Months**

- Respond to Ecology comments on the M-45-02N deliverable.

**IV. Issues**

- Ecology requires an additional 15 days to complete review and response of the M-45-02N document. Comments and other information will be provided by May 15, 2008. Part of the milestone requirement is that the Tri-Parties shall meet to establish new milestones, if required, for the acquisition of additional tanks (USDOE M-45-02N-A). If, as a result of the review, a meeting is necessary, the meeting will be delayed until June 2, 2008.

**TANK RETRIEVALS WITH INDIVIDUAL MILESTONES****Tank 241-C-106****I. Deliverables**

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

Due: 2/27/04

Status: Complete

**II. Significant Accomplishments**

- Submitted 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).

**III. Significant Planned Activities in the Next Six Months**

- Complete NRC review of the C-106 exception request.
- Continue Performance Assessment workshops with Ecology.

**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-45-05A, 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.
- **M-45-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**  
Due: 6/30/11  
Status: On schedule
- **M-45-15B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank.**  
Due: 6/30/11  
Status: On schedule
- **M-45-15C, Embedded Milestone, An update to the S-102 Component Closure Activity Plan has been submitted by DOE.**  
Due: 6/30/11  
Status: On schedule
- **M-45-15D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H.**  
Due: 6/30/11  
Status: On schedule

### **II. Significant Accomplishments**

- Completed removal of above grade equipment in preparation for removal of contaminated soil.
- Completed removal of contaminated soil.
- Initiated value engineering study to develop technical approach for completing S-102 retrieval.

### III. Significant Planned Activities in the Next Six Months

- Complete recovery actions for the waste leak of July 27, 2007.
- Resume retrieval in FY 2009.

### 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, recovery actions started immediately and are continuing.

### Tank 241-S-112

#### I. Deliverables

- **M-45-03C, Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Single-Shell Tank S-112**  
Due: 6/30/05  
Status: Complete
- **M-45-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**  
Due: 6/30/11  
Status: On Schedule. Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.
- **M-45-13A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**  
Due: 12/31/07  
Status: Completed (ORP letter, 07-TPD-066, dated 12/21/07). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007
- **M-45-13B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank.**  
Due: 12/31/07  
Status: Complete (ORP letter, 07-TPD-066, dated 12/21/07). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007
- **M-45-13C, Embedded Milestone, An update to the S-112 Component Closure Activity Plan has been submitted by DOE.**  
Due: 6/30/11  
Status: On schedule

- **M-45-13D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H.**  
Due: 6/30/11  
Status: On schedule

**II. Significant Accomplishments**

- None

**III. Significant Planned Activities in the Next Six Months**

- Respond to Ecology comments on the S-112 RDR.

**IV. Issues**

## 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:

None.

### 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.

## In Tank Characterization and Summary

For the period from April 1 – April 30, 2008

### I. Accomplishments:

- Completed TSAP, RPP-PLAN-36630, *Tank 241-AZ-102 Leak Detection Pit Sampling and Analysis Plan* on April 7, 2008.
- Completed TSAP, RPP-PLAN-37304, *Tank 241-C-104B Heal Pit Sampling and Analysis Plan* on April 3, 2008.
- Completed TSAP, RPP-PLAN-36946, Chemistry Control Push-Mode Core Tank Sampling and Analysis Plan for Tank 241-AP-103 on April 15, 2008.
- Completed the analytical data review (RPP-RPT-35991) for the 240-AS-302 grab sampling event conducted November 5, 2007, on April 5, 2008.
- Started core sampling of Tank 241-AY-101 on April 26, 2008 and completed May 1, 2008.

### II. Planned Action within the next Six Months:

#### Tank Sampling

- Tank 241-AP-103 core corrosion samples scheduled for May 2008.
- Tank 241-AZ-102 Leak Detection Pit liquid grab samples scheduled for May 2008.
- Tank 241-AZ-102 liquid grab samples scheduled for June 2008.
- Tank 241-AN-106 post 241-C-109 retrieval sampling scheduled for August 2008.
- Tank 241-AP-107 liquid grab samples scheduled for June 2008.
- Tank 241-AW-106 liquid grab samples scheduled for June 2008.
- Tank 241-C-109 closure solids samples scheduled for August 2008.

#### BBI Updates

- Ten tank updates are planned for the third quarter of FY 2008. All of the updates have been started and four have been completed.

#### DQOs

- Complete Evaporator DQO, Rev. 5 in August 2008.
- Complete SST Component Closure DQO, Rev 4 in June 2008.
- Complete Compatibility DQO, Rev. 13 in July 2008.
- Complete Chemistry Control DQO, Rev. 9 in June 2008.
- Complete Corrosion Probe DQO Rev. 1 in May 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-47-03A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial high-level waste feed tank.**  
Due: 03/31/09  
Status: Will Be Missed. Pending path forward with Ecology for renegotiation of new milestone commitments.
- **M-47-06, Complete negotiation of additional agreement requirements (milestones, target dates, and associated language) governing work necessary to support completion of treatment complex Phase I operations by 2018.**  
Due: 06/30/10  
Status: Negotiations are not yet underway.

### **II. Significant Accomplishments:**

- Completed actions as outlined in closeout 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-CR	None	None	Planning is underway to conduct a Cold Run to complete 242-A monitoring and control system (MCS) upgrades and equipment testing, and personnel training in FY08.
FY08	08-01 (09-01)	AP-101/AP-105	AP-104	Planning is underway to accelerate the FY09 baseline campaign into FY08. The accelerated campaign is to be performed back-to-back with Campaigns 08-CR and 08-02 (acceleration of 10-01).
FY08	08-02 (10-01)	AP-101/AP-105	AP-104/AP-101	Planning is underway to accelerate an FY10 baseline campaign into FY08. The accelerated campaign is to be performed back-to-back with Campaign 08-01 (acceleration of 09-01).
FY09	TBD	TBD	TBD	Detailed planning for FY09 and outyear campaigns subject to retrieval activities and contract requirements.

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

**I. Near-Term Deliverables:**

- **M-90-10, Ready to Accept Placement of ILAW Waste in ILAW Disposal Facility.**  
Due: 8/31/08  
Status: **Complete**
- **M-90-11, Complete Canister Storage Facility Construction**  
Due: 8/31/10  
Status: To Be Missed. To be renegotiated to align with WTP schedule.

**II. Significant Accomplishments:**

- "Pre-active life" surveillance and monitoring has been implemented in accordance with the IDF Permit modification. Results to date indicate the IDF is performing in accordance with the approved design.

**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 – June 2008.

**IV. Issues**

- None.

## **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-62-01P, Submit Semi-Annual Project Compliance Report.**  
Due: 01/31/2008  
Status: Complete
- **M-62-01Q, Submit Semi-Annual Project Compliance Report.**  
Due: 07/31/2008  
Status: On schedule
- **M-62-07B, Complete Assembly of Low Activity Waste Vitrification Facility Melter #1 So That It Is Ready for Transport and Installation in the LAW Vitrification Building (BNI Baseline Schedule Activity 4DL321A200 as Part of DOE Contract No. DEAC27-01RV14136), and Complete Schedule Activity ID 4DH46102A2 – Move #1 Melter into the High Level Waste Vitrification Facility.**  
Due: 12/31/2007  
Status: Missed

### **M-62-08, Submittal of Hanford Tank Waste Supplement Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline and Draft Negotiations Agreement in Principle.**

Due: 06/30/2006

Status: Missed – 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 DBVS facility final design was completed on April 29, 2008. Preparation of the revised PDSA continues.

**III. Significant Planned Actions in the Next Six Months:**

- Issued final design package and PDSA to ORP.

**IV. Issues:**

None.

## Hanford Waste Treatment and Immobilization Plant (WTP) Project

### Waste Treatment Plant

The project is 44% complete. There are 1,599 employees assigned to the WTP construction site (all facilities) of which 994 are manual and 605 non-manual. Total cost-to-date from inception is \$4B, with cost for fiscal year to-date for 2008 of \$341 million. Forecast for the fiscal year 2008 spend is \$730 million. The Office of River Protection (ORP) and Bechtel National, Inc. (BNI) track the expenditures to understand the overall progress BNI is making in completing the contract work scope. The spend plan is a management indicator beyond project performance indicators (BCWS, BCWP, and ACWP) due to the wider picture it provides regarding project progress.

	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08
BCWS	48,396	93,184	135,015	178,633	259,849	315,441
BCWP	48,645	95,247	134,615	177,802	255,241	303,880
ACWP	54,226	111,143	160,591	208,495	283,264	341,823

The WTP has a cumulative unfavorable cost variance (CV) of \$11.7 million, a decline of \$9.9 million from February 2008; total schedule variance (SV) is unfavorable \$42 million, a \$7 million decline from February. Overall cost and schedule performance is trending downward.

Performance continues to be dominated by emergent unplanned work scope attributed to technical issues that is driving inefficiencies in scheduled work. Engineering delays are impacting procurement deliveries and subsequent construction installations. Some of the technical issues include resolution of External Flowsheet Review Team (EFRT) issues such as development of the Pretreatment Engineering Platform (PEP) to address questions associated with the system's caustic and oxidative leaching processes, equipment performance, and system capacity.

Design actions related to hydrogen piping in ancillary vessels (HPAV), increased vessel seismic work, additional standard pipe support details, and seismic re-qualification efforts have also contributed to poor costs and schedule trends.

Causal analysis of engineering delays is ongoing and is expected to be complete in May 2008. Improved collaboration with and oversight of equipment vendors and suppliers also continues. Critical procurements have been assigned special project managers to aid on on-time delivery. The Technology Steering Group (TSG) is on course to expedite closure of open technical issues and schedule integration; analysis improvements are underway.

Beginning in FY 2008, ORP also implemented quarterly evaluations of project performance utilizing the Construction Industry Institute (CII) Project Health Indicator (PHI) tool. This tool assigns numerical values to 43 leading indicators (cost, schedule, quality/operability, safety, stakeholder satisfaction, etc.) to identify and assess project outcomes, practices, and the overall health of the project.

The Office of Engineering and Construction Management (OECM) has scheduled their follow-on review of BNI's Earned Value Management System (EVMS) for mid-June 2008. OECM will evaluate the WTP Project's current risk profile, management reserve calculation, and project controls capabilities, as well as the May 2006 Estimate at Completion, EFRT issue resolution status, and BNI's EVMS processes.

The Broad Based Review team is also conducting a comprehensive, six-month review of the WTP design and action tracking process. This review stemmed from the issue of vendor misunderstanding of the black cell piping requirement due to unclear flowdown of requirements. The scope of the engineering review is to examine upper-tier requirements from the Design Criteria Database, such as contract and Authorization Basis requirements, and verify that they have cascaded down to lower-level procurement documents and construction drawings, and have been implemented in the design. The review examines seven systems and four component classes in vertical and horizontal slices. There is also a Quality Assurance review that is examining action tracking to determine if actions are tracked to completion. The team is comprised of approximately 45 engineers and quality professionals with previous nuclear experience, including 2 DOE personnel. The requirements verification phase of the review is complete, and the execution phase is approximately 10% complete. Currently, the review is behind schedule and is attributed to the team's desire for thorough reviews and responses. As such, an interim report is expected to be issued sometime in June 2008. The issuance date of the final report as not yet been confirmed.

The revised Waste Form Compliance Plan (WCP) has been submitted to DOE Headquarters for review and submittal to the DOE Office of Civilian Radioactive Waste Management organization for acceptance.

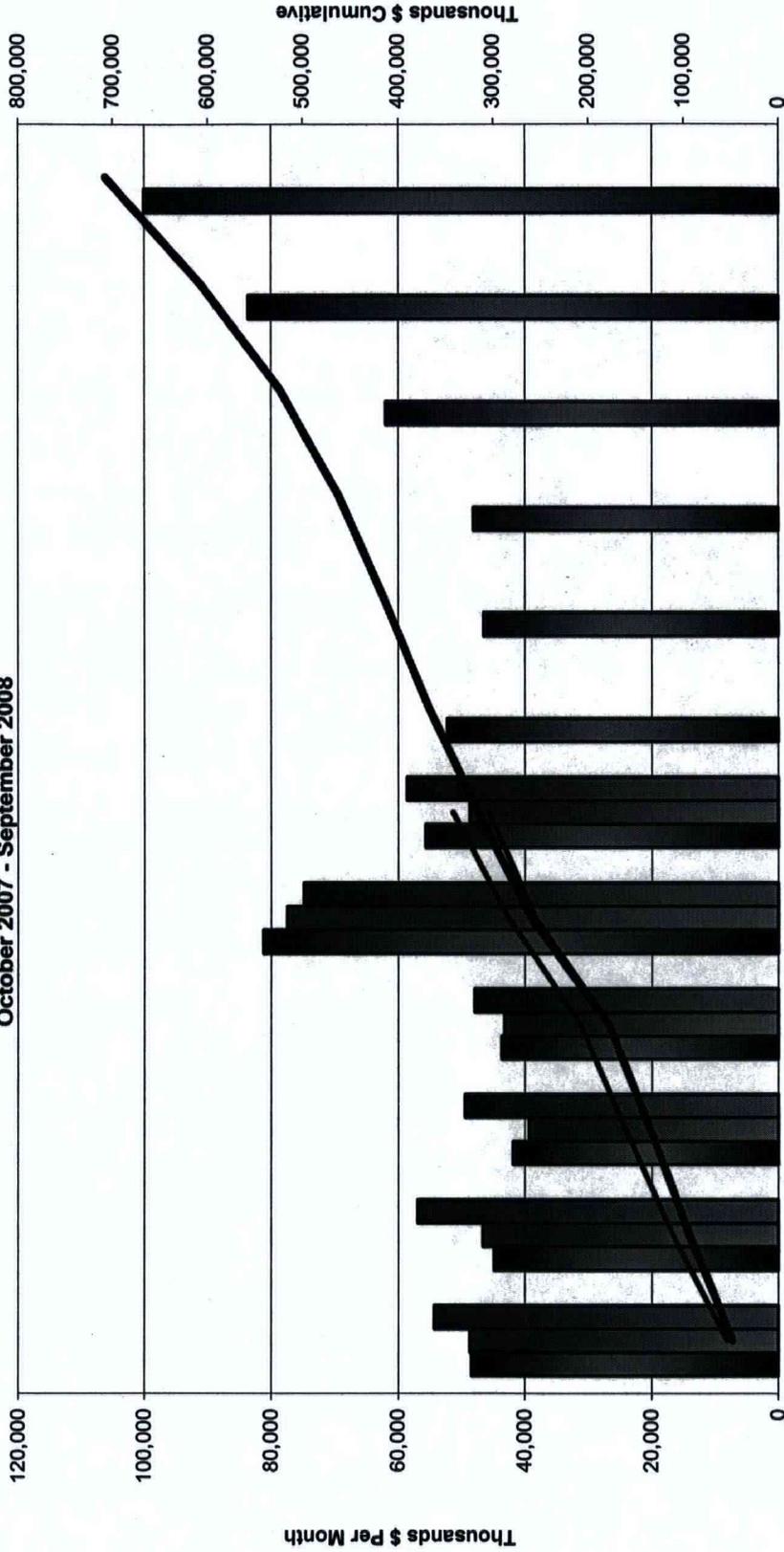
ORP kicked off an assessment of BNI Computational Fluid Dynamics analyses to ensure adequacy of the process and assumptions.

The structural integrity of WTP facilities must be sustained during and following fire events, and a design approach has been implemented that provides fire protection for selected structural steel members based on structural importance. In October 2005, the Defense Nuclear Facilities Safety Board (DNFSB) agreed this strategy was acceptable provided it can be reasonably demonstrated that unprotected structural members with reduced material properties due to a fire would not be relied upon to support the building. On March 20, 2008, a discussion with DNFSB staff was held on the approach and one issue remained open, the qualification of the structural frame primary members to resist loads resulting from the

secondary members subjected to the effects of fire. A white paper is being developed to address this remaining issue and will be provided to the DNFSB staff in May 2008.

DNFSB and BNI met to resolve comments on the HLW Summary Structural Report (SSR). Over 80% of the comments were resolved during the meetings. No technical issues remain; the report will be subjected to one final edit by all concerned parties and then published in May 2008. A meeting is also planned in May to resolve comments on the PT Facility SSR and to comments made to the fire protection calculations on the four major WTP structures. A primary objective of these reports is to document facility responses to the seismic spectra and ensure the design is adequate. DNFSB has also noted that they would like to use the WTP SSRs as standards for other DOE facilities. The majority of the issues have been resolved.

### Total Project WTP Fiscal Year to Date Performance (\$ In Thousands) October 2007 - September 2008



## Pretreatment (PT) Facility

The PT Facility will separate radioactive tank waste into high-level waste (HLW) and low-activity waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Facility construction began November 2002 with a scheduled construction completion date of October 2014. Currently, overall percent complete is 37%, design is 69% complete, and construction is 25% complete. Construction and engineering activities are progressing since resumption of full construction activities in December 2007.

The ORP/BNI Technology Steering Group (TSG) continues its review of the remaining testing proposed to resolve issue M-3, "Inadequate Mixing System Design." BNI and ORP have conceptually agreed upon the content of the Issue Response Plan and are moving forward with preparation of the plan. Four of eight planned 1/4-scale Nuclear Quality Assurance-1 (NQA-1) tests to resolve issue M-2, "Mixing Vessel Erosion," are complete, and the results have been presented to the Washington State Department of Ecology.

To resolve issue M-12, "Undemonstrated Leaching Process," all the PEP equipment skids have been received and are being interconnected. Complete installation of the PEP is scheduled for June 2008, with Phase 1 testing to begin in November 2008. The PEP, which consists of 16 skids, provides the equipment needed to perform a 1:4.5 scale test of the WTP ultrafiltration system to address questions associated with the system's caustic and oxidative leaching processes, equipment performance, and system capacity.

BNI and the evaporator fabricator have spent several months performing coupled analysis of the evaporators and concluded that overstress conditions in the evaporator shells cannot be eliminated without increasing the thickness of the vessel walls. At this time, BNI is assessing the cost and schedule impact of re-designing and re-fabricating new vessels. A meeting with DOE to discuss all aspects of this issue will be held in the near future.

BNI convened a Blue Ribbon Panel on corrosion to evaluate the impact on vessels resulting from operating the vessels at 100°C in order to increase the capacity of the process. The Panel expressed concerns with corrosion cracking at 100°C and indicated that some localized corrosion problems could also be expected even if the vessels are operated at 90°C. The next step is to develop data for decision making, which will include developing cost for new vessels from a more corrosion resistant metal, determining the impact from operating at less than 100°C, and evaluating coatings to protect from localized effects.

BNI is moving forward with recovery actions associated with the nondestructive (NDE) testing of black cell piping. BNI Engineering has been released to resume design of black cell piping and Plant Design activities are continuing in accordance with the revised procedures. BNI is working with the second

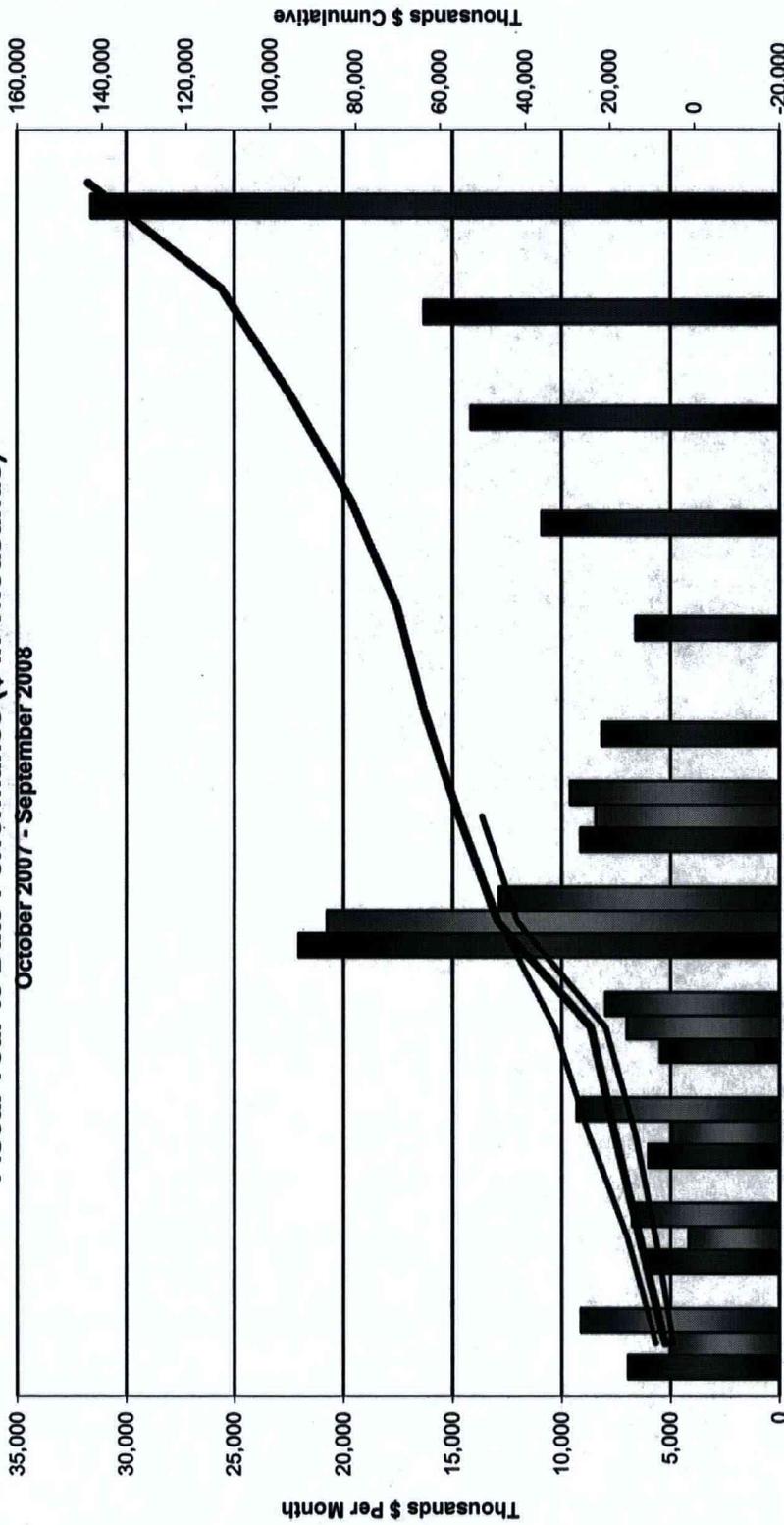
fabrication shop to resolve the pipe wall thickness issue before pipe can be released for production. BNI has issued the revised root cause analysis and provided a copy of the report to DOE. BNI has developed a methodology for reviewing "Q" level black cell piping. This methodology was incorporated into a plan to guide the engineering team to determine the extent of the condition for "Q" black cell piping. Due to changes in inspection requirements, all the beams installed in the PT Facility hot cell will require visual re-inspection. Hot cell crane rail support beams in the PT Facility are fabricated from a standard beam, with a channel welded on the top flange. The beams were designed to the nuclear structural steel design standard (American National Standards Institute/American Institute of Steel Construction [ANSI/AISC]) N690, *Specification for Safety-Related Steel Structures for Nuclear Facilities*. The beams were procured in 2004, when the original requirement required a visual inspection of the welds to be conducted after fabrication at the vendor's facility, which was done. Installation of the beams began in January 2005, but was suspended in May 2005 when BNI became aware of the need to add additional inspection requirements for cyclic loading of the beams and that re-inspection of the welds would be required. This revision resulted in a change to the visual weld inspection requirements. At the time the requirements were changed (May 2005), 16 of the 22 beams had been set in the PT Facility. In October 2005, BNI resumed setting the remaining beams based on an expectation that the beams could be inspected in place. The installed beams are not in a permanent configuration and the crane rails have not been installed. However, because the beams are so close to the wall (1-2 inches), BNI has decided to remove the beams and lower them to the hot cell floor to perform the inspections. BNI anticipates the inspection of these beams will be complete in the next few months.

Construction forces continue to install vessel rings and liner plate grillage in the south side black cells; installing conduit and rebar in the 28' elevation slab on the facility's south side, and installing floor drain lines. Efforts also continue to install ring beams and grillage in Planning Areas 3 and 4. Crews continue to install sleeves and embeds and to fabricate rebar curtains for the fourth-lift walls on the northwest corner of the facility. The curtains are assembled on the ground outside of the building and lifted into place using tower and cranes. Construction workers are also installing the liner plate angles (grillage) and drain trough for secondary containment in the ultra-filter vessel black cell and preparing for installation of the last tank ring in the ultrafilter feed black cell. Coatings of the fire water pit stair walls have been completed and crews are reviewing existing bottom mat rebar installations in preparation for finishing the rebar installation for 56' elevation slabs on the northeast corner of the facility. The temporary work deck has been installed over Plant Wash and Disposal System (PWD) vessels 15 and 16.

The following table provides a status of near-term gatepost milestones for the PT Facility.

	<b>Milestone</b>	<b>Scheduled</b>	<b>Projected</b>
<b>Pre-Treatment Facility</b>	Approve PJM Multiple Overblow Final Report	6/07	5/08
	EFRT Recommendation M2, Perform Submerged Jet Test	6/07	8/08
	Issue Structural Summary Report	2/08	2/08 A
	Issue Committed Design for Cesium Resin Addition Process System	3/08	3/08A
	Issue Committed Design for Waste Feed Evaporation Process System	3/08	3/08A
	Issue Committed Design for Anti-Foam, Sodium Permanganate and Strontium Nitrate Reagent Systems	4/08	4/08
	Complete Installation of all Major Steel up to 28' elevation	5/08	4/08
	Prepare 2008 Preliminary Safety Analysis Report (PSAR) Update	5/08	3/08A
	Issue Jumper Design for Planning Area 25	7/08	7/08
	Receive Final Multiple Overblow Load Specification	7/08	7/08

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



	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)	6,935	6,054	6,010	5,475	22,025	9,118	8,141	6,599	10,895	14,164	16,290	31,619
Mthly Perf (BCWP)	5,028	4,153	4,908	6,993	20,744	8,410						
Mthly Actuals (ACWP)	9,100	6,756	9,297	7,989	12,875	9,589						
FYTD Plan (BCWS)	6,935	12,990	19,000	24,475	46,500	55,617	63,758	70,357	81,252	95,416	111,706	143,325
FYTD Perf (BCWP)	5,028	9,182	14,090	21,083	41,827	50,237						
FYTD Actuals (ACWP)	9,100	15,856	25,153	33,142	46,017	55,606						

## High-Level Waste Facility

The HLW Facility is 38% complete with design at 85% and construction at 22% complete. Construction is progressing well with more than 150 craft personnel working to place concrete walls and steel beams for slabs and to install other commodities. Concrete placement for FY 2008 is over 1,500 cy of concrete slabs and walls. In addition, 40 tons of structural steel have been erected in the annex area to support slabs at the 14' elevation. At the -21' elevation, construction crews are installing fire water piping, heating, ventilation, and air conditioning ducting, Melter Offgas Treatment Process System pipe, cable tray, and conduit. Rail plinths are being installed in the drum transfer tunnel.

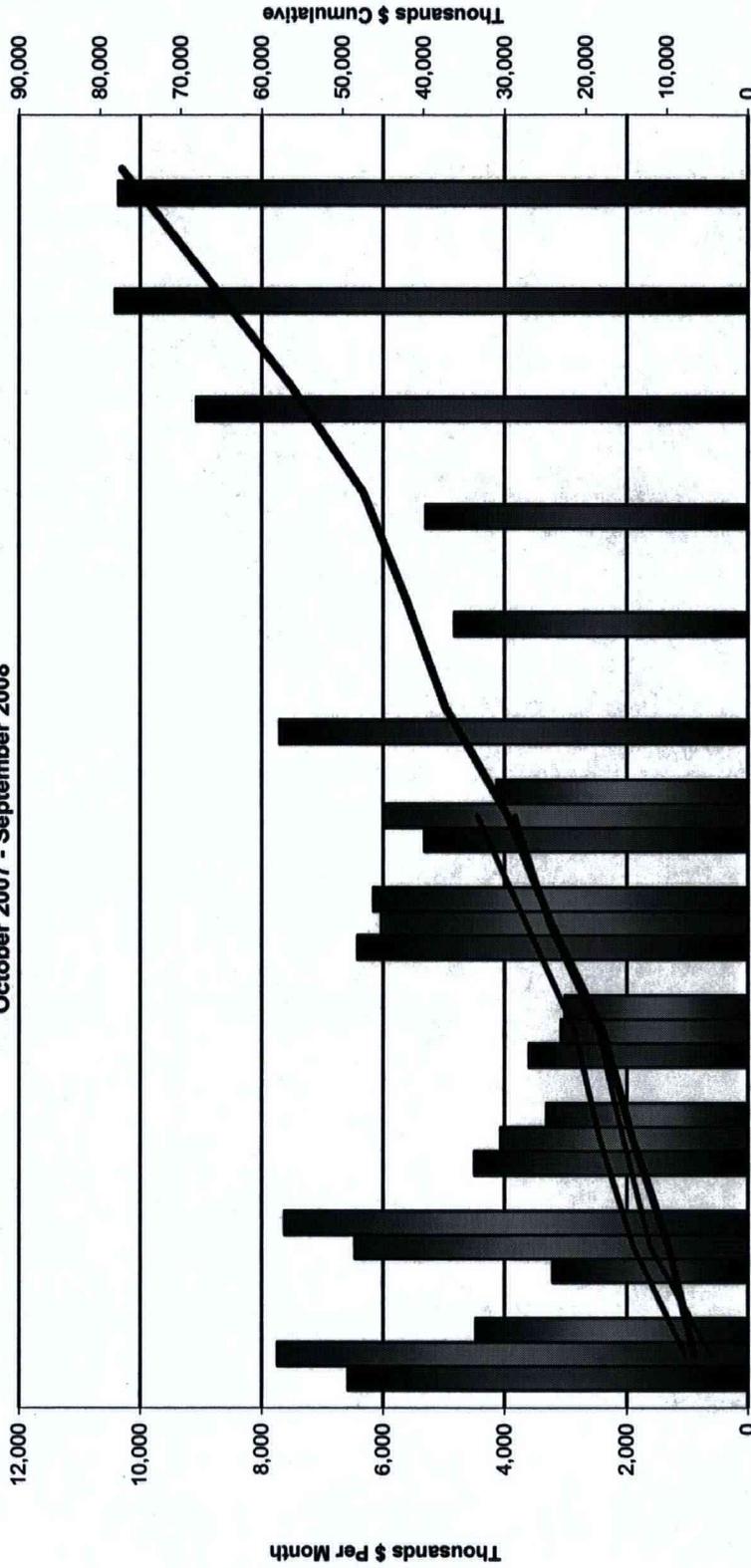
The silver mordenite crane was set on the crane rail and pour tunnel bogies were received on site, meeting DOE gatepost milestones ahead of schedule.

Engineering and procurement activities are also advancing with drawings and calculations issued and purchase orders awarded to vendors. Issued documents include: architectural drawings for exterior elevations +58' and +72', mechanical sequence diagrams for the Radioactive Solid Waste Handling System, and revised vendor proposal drawings for the process canister buffer and cooling racks; eight piping and instrumentation diagrams for pour tunnel bogie rails are also complete. The revised ground motion (RGM) evaluation of melter has been awarded to the subcontractor, AREVA. Vendor design of the Autosampling System (ASX) has resumed. Reviews of vendor submittals were completed for the crane/power manipulator for the HLW Filter Cave Handling System, and the mechanical sequence diagram was completed for the HLW Canister Decontamination System. Walls between the 14' to 37' elevations were released for construction. Verification of existing weld, material thickness, etc. and refurbishing of melter shield doors at the Oregon Ironworks, Inc. vendor shop is going well; load testing of the upgraded door is planned in May 2008. Holds have been placed on vendors for high-efficiency mist eliminators and HLW Melter Feed Process System vessels and agitators due to variety of reasons from quality issue to RGM to environmental qualification to HPAV. BNI continues to evaluate this holds for release by this summer.

The following table provides a status of near-term gatepost milestones for the HLW Facility:

HIGH LEVEL WASTE	Milestone	Scheduled	Projected
	Preliminary RGM Evaluation of Melter	6/08	6/08
	RGM Evaluation of RLD Vessels	8/08	7/08
	Safety Systems Requirement Specification-Interlocks C2/C3 Rev.0	8/08	8/08
	Issued for Construction-Piping Isometrics for Breathing Service Air	11/08	9/08
	Erect Structural Steel & Decking Slab 2002 (+14')	9/08	5/08
	Place Elevated Slab 2001 (+14') Annex	12/08	5/08

**High Level Waste  
Fiscal Year to Date Performance (\$ In Thousands)**  
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
Mithly Plan (BCWS)	6,569	3,208	4,498	3,594	6,415	5,310	7,702	4,822	5,290	9,074	10,414	10,360
Mithly Perf (BCWP)	7,740	6,457	4,060	3,074	6,030	5,991						
Mithly Actuals (ACWP)	4,466	7,623	3,309	3,015	6,156	4,132						
FYTD Plan (BCWS)	6,569	9,777	14,275	17,869	24,284	29,594	37,295	42,118	47,408	56,481	66,895	77,256
FYTD Perf (BCWP)	7,740	14,197	18,257	21,331	27,362	33,353						
FYTD Actuals (ACWP)	4,466	12,089	15,399	18,413	24,569	28,701						

## Low-Activity Waste Facility

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless steel containers that will be disposed onsite in the Integrated Disposal Facility. BNI is developing a conceptual design report (CDR), which identifies requirements in order to be able to support processing of low activity waste in 2014. The other component of this effort is being performed by CH2M HILL Hanford Group, Inc. BNI is evaluating alternatives for an interim pretreatment system that would be able to support early LAW processing in 2014. The CDR will be completed by the end of 2008.

Title II engineering is approximately 99% complete. The baseline change proposal that identifies Title II and Title III activities is under review. Engineering at WTP has been less efficient than planned resulting in significant variances and BNI is performing a re-plan to identify and refine the to-go engineering hours. Once this re-plan is conducted, Title II milestones will be incorporated into the baseline schedule for more accurate tracking. Title II design encompasses the initial release of designs needed that allow construction teams to construction the facility. While there will still be significant field engineering, completion, and review of vendor designs, Title II design complete for the LAW Facility is scheduled for later this year and is a significant project-level milestone.

Crane 8 has been turned over from Construction to Startup for beneficial use. Adjustments to the travel limit switches, lighting circuit, and support girder bolt adjustments were performed on Crane 8 as follow-up items identified during crane testing. Testing of this crane is expected to be complete in late May 2008.

Construction forces achieved the gatepost milestone to complete installation of the partition walls in the C5 filter and exhaust fan rooms to support the release of the area for electrical equipment and raceway installation.

Grout placement was completed under the girders for the export bridge crane. The crane arrived on site and is being prepared for installation on May 2, 2008.

The non-radiological fan room slab was completed. Supplier fabrications of the melter pour cave cooling panels was initiated.

A weather enclosure that was erected around the annex stair penthouse to allow for fireproofing of the structural steel member has now been removed. This will allow crews to complete the installation of siding and to begin roofing

The monorails that support the hoists used to set and remove the canisters from the turntables in the pour caves will require load testing with the Startup group witnessing the tests before the insulation and cooling panels can be installed. Additionally, BNI will load test other permanent plant monorails for construction use.

Crews attached legs to the dampening tanks (piping) for the Atmospheric Reference Ventilation System in preparation of setting tanks.

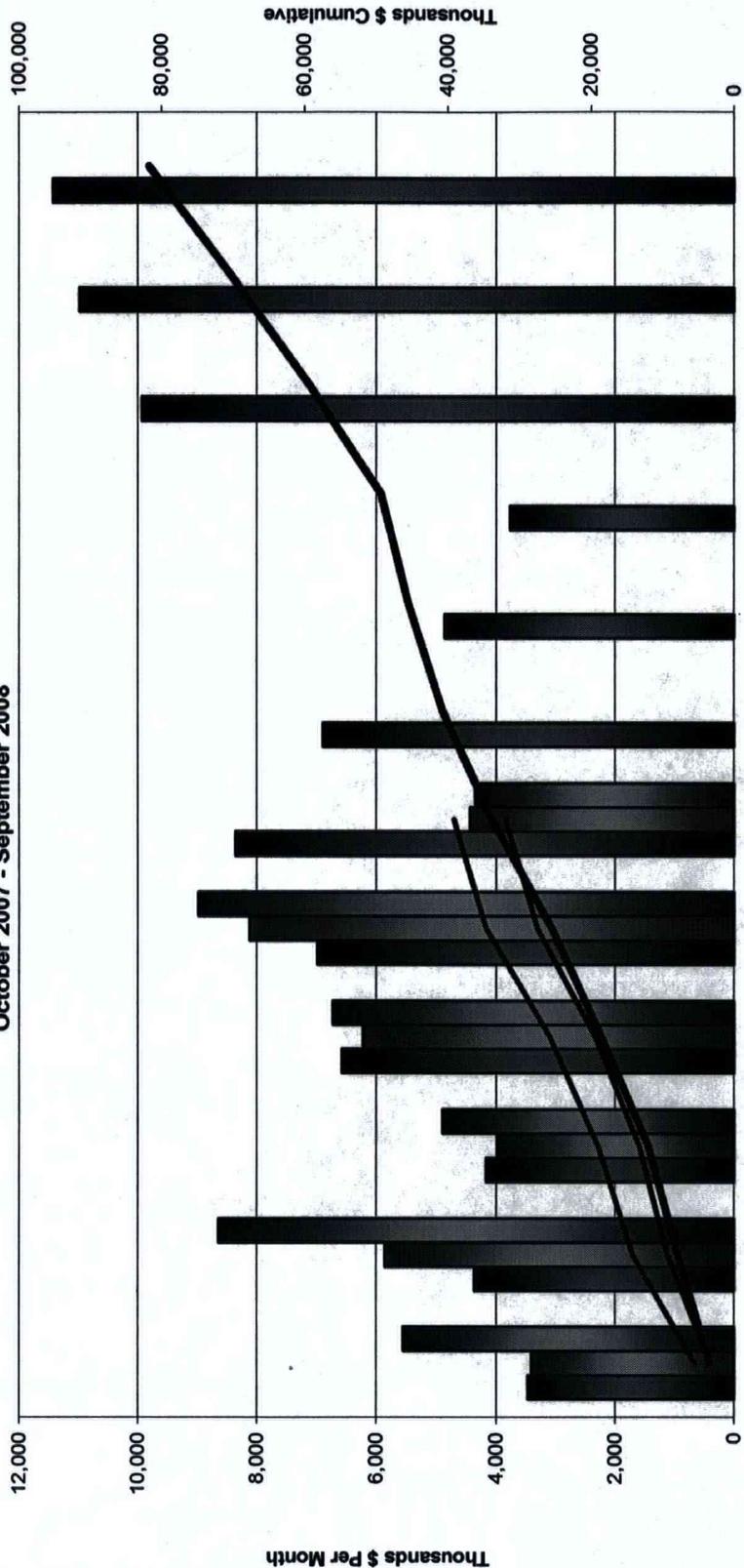
Construction forces also finished installation of the siding for the import bay on the facility's south side; installation continues on the east and west sides. Crews are welding the rail clips on the export bay crane girders. Fan coil units continue to be installed throughout the facility as the units are delivered. Crews also continue to install grillage clips for the attachment of insulation in the pour caves on the -21' elevation and partition walls along the south corridor; piping and coating supports on the -21', +3', +28', and +48' elevations; cable tray and electrical conduit -21', +3', and +48' elevations; and ductwork on the +48' elevation. Fireproofing repairs on the -21', +3', and +28' elevations are proceeding.

The key challenges to completing LAW are cost growth and delays in major procurements. Currently, the critical path for LAW is associated with the procurement and installation of the offgas treatment unit operation components including the Thermal Catalytic Oxidizer. The forecast schedule indicates a potential six-month delay to the construction complete milestone; however, BNI has not initiated all of the mitigation actions at their disposal.

The following table depicts near-term gatepost milestones for the LAW Facility.

	<b>Milestone</b>	<b>Scheduled</b>	<b>Projected</b>
<b>Low Activity Waste</b>	Complete Production Piping Isometric Design	10/07	8/07 A
	Complete Export Bay Concrete Walls	11/07	8/07 A
	Complete Structural Steel in Annex	11/07	8/07 A
	Complete C2 Fan Room Slab	1/08	2/08 A
	Install 22,500 lf of Pipe, All Elevations	2/08	2/08 A
	Install Partition Walls, Elevation -21	4/08	3/08A
	Complete Export Bay Structural Steel	5/08	5/08
	Annex Facility "Closed In"	7/08	5/08

### Low Activity Waste Fiscal Year to Date Performance (\$ In Thousands) 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)	3,471	4,358	4,163	6,565	6,976	8,351	6,884	4,847	3,760	9,926	10,981	11,425
Mthly Perf (BCWP)	3,408	5,851	3,964	6,207	8,115	4,426						
Mthly Actuals (ACWP)	5,554	8,632	4,887	6,713	8,973	4,339						
FYTD Plan (BCWS)	3,471	7,830	11,993	18,558	25,533	33,885	40,768	45,616	49,375	59,301	70,282	81,708
FYTD Perf (BCWP)	3,408	9,259	13,224	19,431	27,546	31,972						
FYTD Actuals (ACWP)	5,554	14,186	19,073	25,786	34,759	39,098						

## Analytical Laboratory

The Analytical Laboratory (LAB) will support WTP operations by analyzing feed, vitrified waste and effluent streams. Several accomplishments were noted for the LAB during the month of April 2008.

Construction forces set the Demag crane in place for the lift of the lower LAB stack structural steel section and, on April 11, finished setting the lower LAB stack structural steel. Crews will continue with plumbing the stack and tightening fasteners.

On April 17, BNI declared complete the gatepost milestone to have the LAB substantially enclosed, with exception of the stack area, exterior trim pieces, and penetrations such as doors, windows, and louvers. WTP staff performed a walkdown and agreed with BNI's declaration. Installation of the south side air-intake louvers is delayed due to the wrong size louver being delivered. Replacements may be available in a minimum of two to three weeks.

The final control and instrumentation conduit design was also declared substantially complete on April 18. The only remaining conduit design is associated with final detail of interfacing with vendor-associated designs for the ASX and the Environmental Monitoring System. This gatepost milestone was completed on time and met the definition requirements. The final conduit design will be completed when the vendor finalizes their designs.

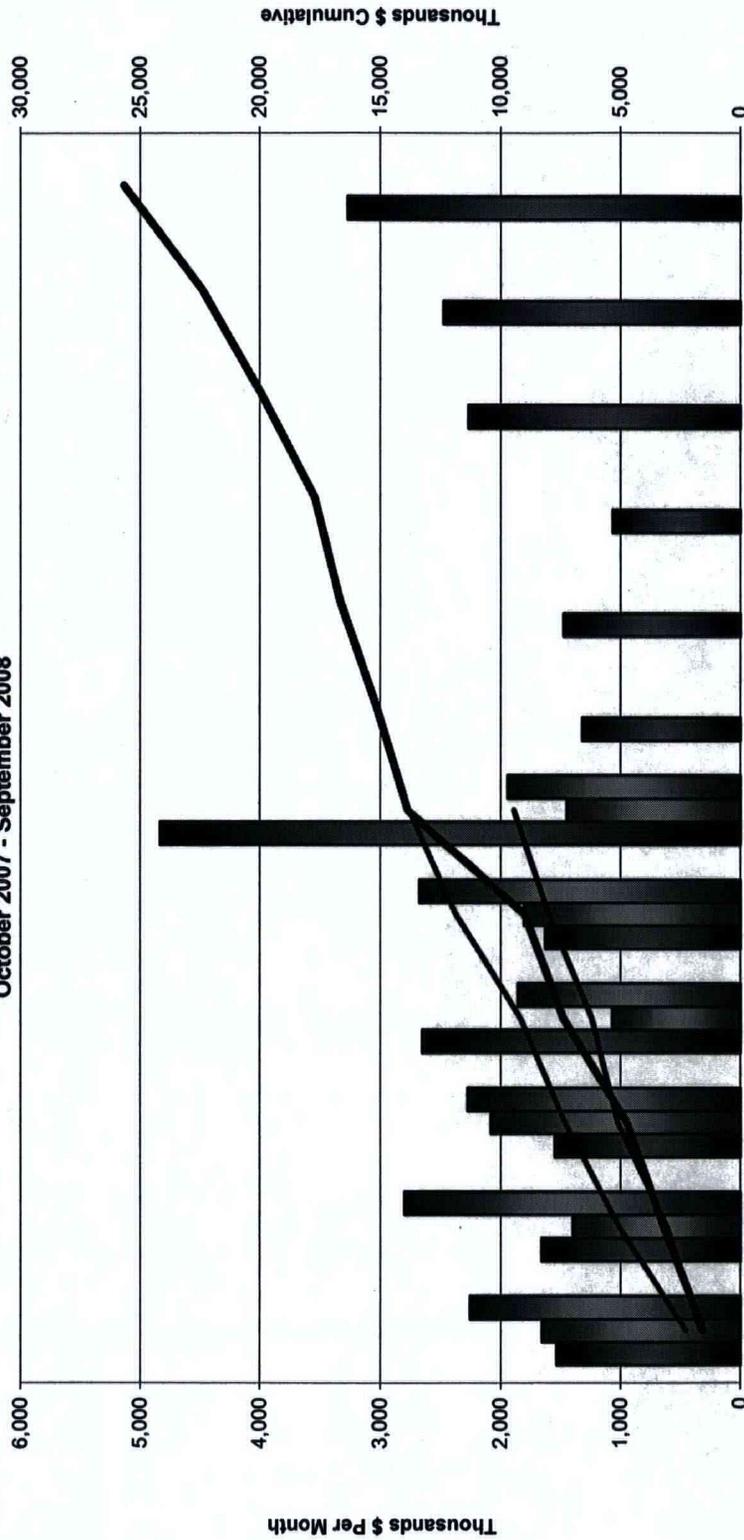
On April 28, pressure testing was completed on the C-5, 3, and 2 exhaust stack ducts. Floor coatings on the 17' elevation were also completed.

Installation of hot cell partition walls and liner plate is ongoing, with the eastside liner plate almost finished. Installation of multi-commodity steel, permanent lighting conduit, ductwork, pipe hangers, and fireproofing is progressing. Installation of gypsum wallboard and interior separation walls at the north end on the 0' elevation continues. This liner plate work is proceeding very well.

The following table depicts near-term gatepost milestones for the LAB.

Analytical Laboratory	Milestone	Scheduled	Projected
	Complete Structural Steel Frame	11/07	10/07 A
	Complete Instrument Database	1/08	4/08
	Issue Final C&I Conduit Design	4/08	4/08A
	Deliver Master Slave Manipulators	4/08	11/08
	Complete Structural Steel Fireproofing	5/08	5/08
	Complete Laser Ablation Site Accept Testing	7/08	7/08

**Analytical Laboratory  
Fiscal Year to Date Performance (\$ In Thousands)**  
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
Mithly Plan (BCWS)	1,534	1,659	1,545	2,643	1,627	4,834	1,315	1,470	1,060	2,261	2,464	3,265
Mithly Perf (BCWP)	1,654	1,395	2,079	1,066	1,804	1,446						
Mithly Actuals (ACWP)	2,253	2,796	2,269	1,854	2,667	1,938						
FYTD Plan (BCWS)	1,534	3,194	4,739	7,381	9,008	13,842	15,156	16,626	17,686	19,947	22,411	25,676
FYTD Perf (BCWP)	1,654	3,049	5,127	6,193	7,997	9,443						
FYTD Actuals (ACWP)	2,253	5,049	7,317	9,171	11,838	13,776						

## Balance of Facilities

The Balance of Facilities (BOF) provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB.

Construction forces installed the fourth silo along with silo #10 (calcium-silicate), #8 (aluminum-silicate) and the seventh (#9 magnesium silicate) at the Glass Former Storage Facility in April 2008. Crews have started erecting frames for the rejecter hoppers and installing silo railings and access ladder. Crews also finished installing the anode wires for the waste transfer piping located between the PT and HLW Facilities. To date, 7 silos have arrived and been installed at the Glass Former Storage Facility; each of the 13 silos will hold a different glass-forming material that will be dispensed to the WTP's vitrification facilities in the proper combinations for each batch of glass.

Construction forces finished installing the final three vertical anodes for the Chiller Water System piping and the Domestic (Potable) Water System line on the north side of the PT Facility.

Backfilling of the Liquid Effluent Retention Facility (LERF) line excavation was resumed and crews continue to install rectifier foundations (five installed to date), temporary power for the cathodic protection system, and backfill associated trenches.

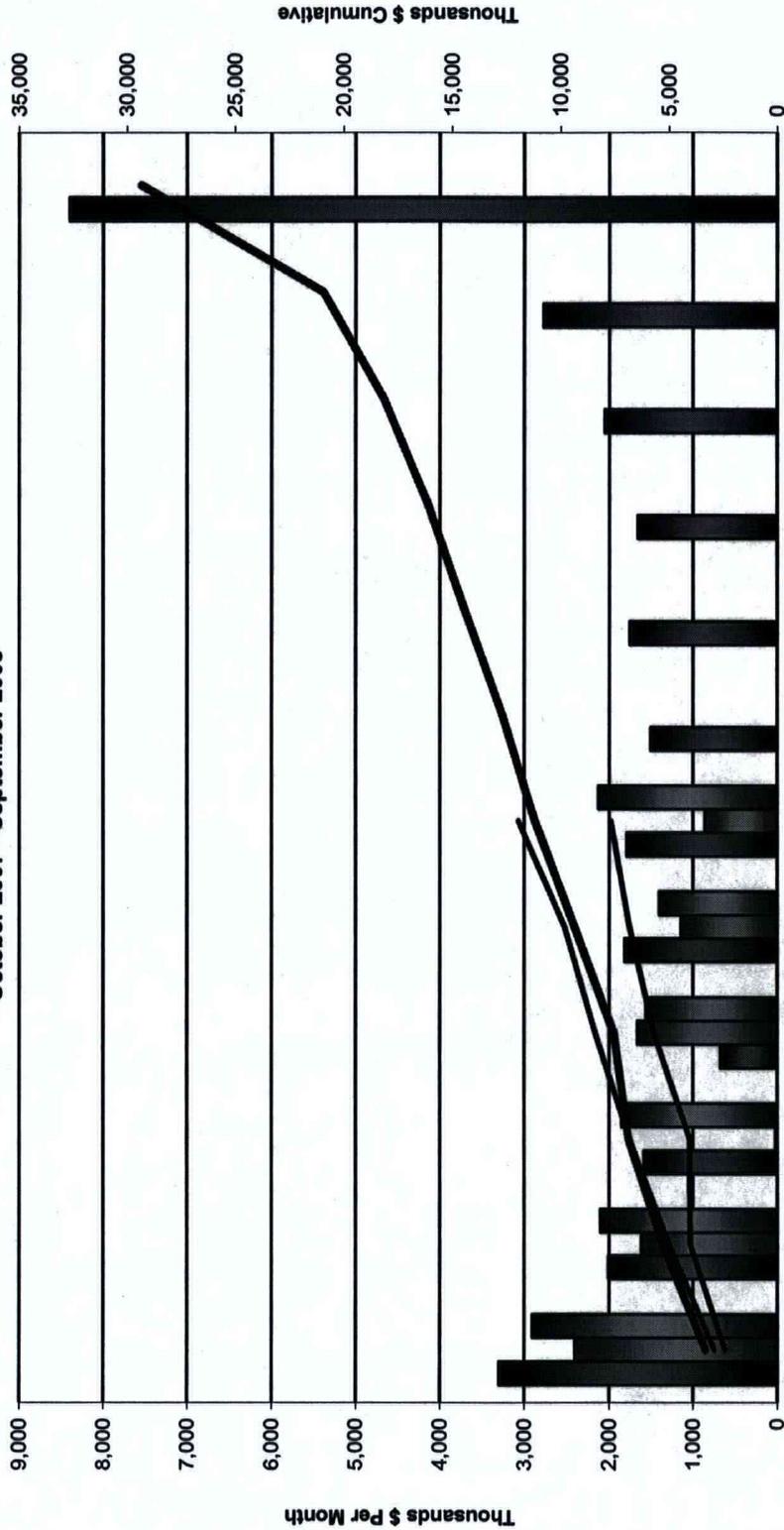
Crews placed the foundation slab and continued to work on the forms, rebar, and embeds for the important-to-safety (ITS) Plant Service Air System (PSA) vault walls. Construction forces also completed installation of the Fire Service Water Storage & Distribution System (FSW) riser at the HLW Facility. Installation continues on the ITS PSA and Fire Service Water Storage & Distribution System piping between the PT and HLW Facilities.

At the Chiller Compressor Plant (CCP), crews finished grouting the air dryer frames. Crews continue to run electrical conduit and install small and large bore piping. Some issues have been identified with the conduit supports in the CCP but these are being resolved.

The following table depicts near-term gatepost milestones for the BOF.

Balance of Facilities	Milestone	Scheduled	Projected
	Deliver GFSF Bins, Silos and Steel	5/07	6/08
	Complete GFSF Silo/Tanks (17) Sets	05/07	9/08
	Issue Rack #5A Pipe Fab Isometrics	5/08	5/08
	Complete LAW Melter Slab	6/08	1/08 A

**Balance of Facilities  
Fiscal Year to Date Performance (\$ In Thousands)  
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
Mithy Plan (BCWS)	3,305	2,005	1,587	676	1,819	1,792	1,506	1,758	1,662	2,053	2,773	8,401
Mithy Perf (BCWP)	2,408	1,619	20	1,663	1,145	861						
Mithy Actuals (ACWP)	2,904	2,102	1,854	1,564	1,406	2,128						
FYTD Plan (BCWS)	3,305	5,311	6,898	7,574	9,393	11,185	12,691	14,449	16,112	18,165	20,938	29,339
FYTD Perf (BCWP)	2,408	4,028	4,048	5,711	6,856	7,717						
FYTD Actuals (ACWP)	2,904	5,006	6,860	8,424	9,830	11,958						

## Waste Treatment Plant Project - Percent Complete Status through March 2008

Facilities (Hrs - Thousands)	Overall Facility Percent Complete			Design/Engineering			Construction		
	Budget at Completion	Budgeted Cost of Work Performed	% Complete	Current Budget	Total Hours Earned to Date	% Complete	Current Budget	Total Hours Earned to Date	% Complete
Low-Activity Waste	5,595	3,137	56%	1,571	1,497	95%	2,280	1,227	54%
Analytical Lab	2,693	890	33%	478	434	91%	632	302	48%
Balance of Facilities	3,858	1,958	51%	775	598	77%	1,835	1,020	56%
High-Level Waste	9,781	3,721	38%	2,533	2,142	85%	5,238	1,177	22%
Pretreatment	15,119	5,653	37%	4,382	3,028	69%	8,160	2,043	25%
Plant Wide/Gen Services	42,559	19,654	46%	6,537	4,658	71%	5,400	2,279	42%
<b>Total WTP</b>	<b>79,605</b>	<b>35,013</b>	<b>44%</b>	<b>16,276</b>	<b>12,357</b>	<b>76%</b>	<b>23,545</b>	<b>8,048</b>	<b>34%</b>

### Calculations and Source Data:

All calculations performed using hours in thousands

Overall Percent Complete - Baseline at Completion (BAC) divided by Budgeted Cost of Work Performed (BCWP); Source: WTP Contract Performance Report  
Design/Engineering Complete - Current Budgeted Hours divided by Actual Earned Hours; Source: Engineering Progress & Performance by Facility/Discipline Report  
Construction Percent Complete - Sum of Performance Budget divided by Hours Earned To Date; Source: Monthly Quantity and Unit Rate Summary Report

WTP COMMODITY SUMMARY BY FACILITY												
Commodity	UOM	PT		HLW		LAW		LAB		BOF		
		Qty	Pct	Qty	Pct	Qty	Pct	Qty	PCT	Qty	Pct	
Concrete	1000 CY	78.41	69.13%	47.26	53.56%	26.28	92.06%	11.64	93.66%	11.92	63.78%	
Structural Steel	1 Ton	3,342	21.80%	650	6.58%	5,464	92.36%	1,688	97.67%	311	19.34%	
Pipe	1000 LF	36.98	6.90%	3.45	2.11%	55.79	53.06%	10.12	27.70%	21.16	40.17%	
Cable Tray	1000 LF	0.35	0.94%	1.20	3.34%	12.56	79.38%	0.41	10.25%	2.63	56.87%	
Conduit	1000 LF	17.95	6.43%	14.70	6.59%	30.6	18.46%	0.96	1.89%	21.00	32.87%	
Cable & Wire	1000 LF	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	196.79	29.16%	