

Office of River Protection

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Tri-Party Agreement  
Manager Milestone Review Meeting  
September 23, 2008

**Office of River Protection**

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

August 2008

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## Agenda

Office of River Protection  
Tri-Party Agreement  
Manager Milestone Review Meeting  
2440 Stevens Center, Conference Room 1200  
September 23, 2008  
9:00 a.m. – 11:30 a.m.

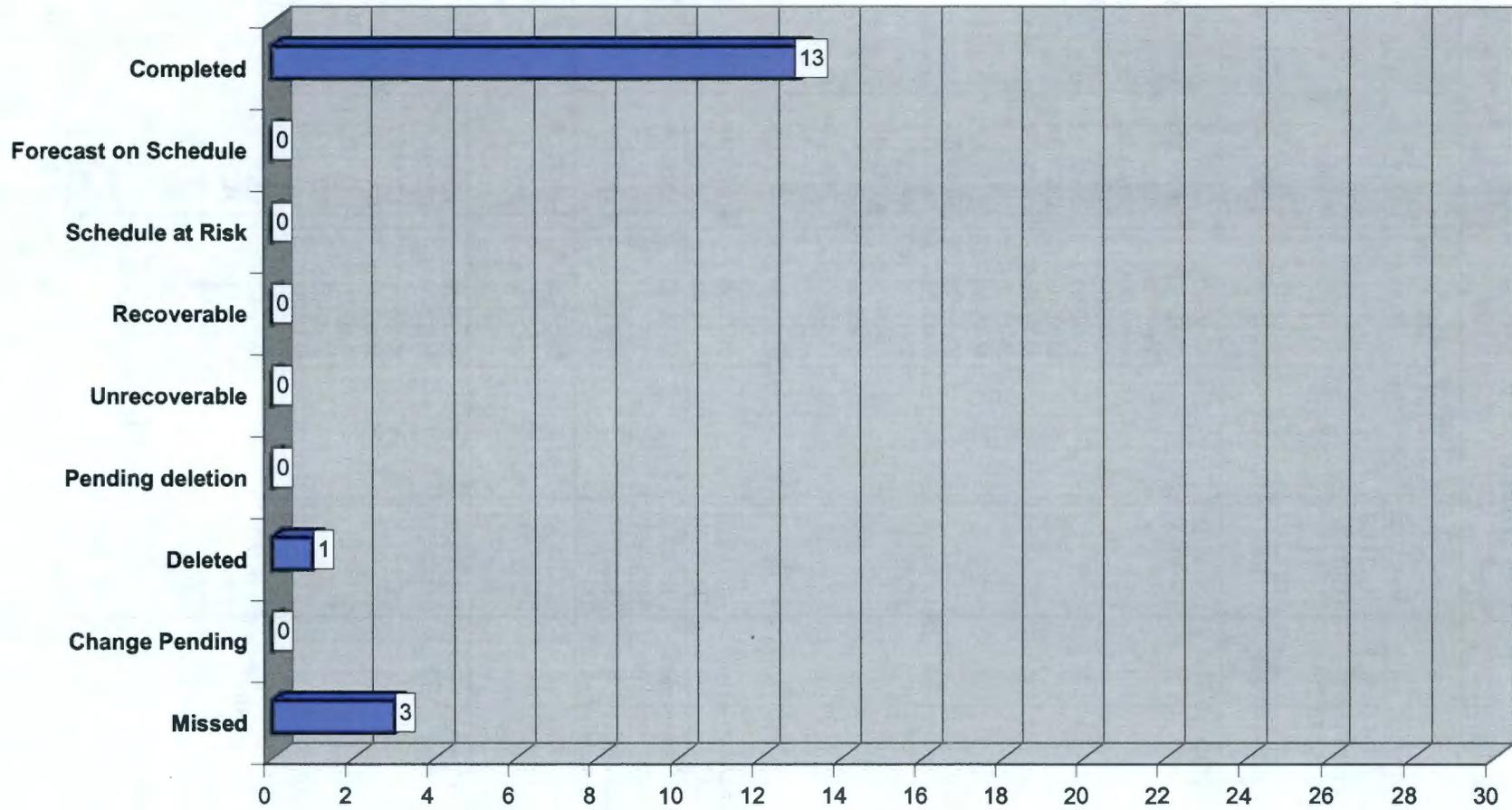
Page	Topic	Leads	Time
3	TPA Milestone Statistics	Woody Russell Suzanne Dahl / Jeff Lyon	9:00
50	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	9:05
52	M-45-00, Complete Closure of All Single-Shell Tank Farms	Chris Kemp / Jeff Lyon	9:15
61	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	9:30
62	In Tank Characterization and Summary	John Long / Michael Barnes	9:35
63	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Ben Harp / Les Fort	9:40
65	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/ Disposal of ILAW and M-20, Part B Permits	Ben Harp / Bud Derrick	9:45
66	M-62-08, M-62-11 Bulk Vitrification/Supplemental Technologies	Ben Harp / Ed Fredenburg	9:50
	<b>BREAK</b>		
17	FY 2007 ORP TPA Cost & Schedule Performance (CHG)	Janet Diediker Ed Fredenburg / Jeff Lyon	10:00
68	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bruce Nicoll / Pete Furlong / Wahed Abdul / Gary Olsen/ Howard Budweg / Ed Fredenburg	10:05

## TPA Milestone Statistics

(Including target milestones)

Milestone	Due Date	Total Active as of 02/21/08	Milestone Number	Due Date	Milestone Number	Due Date
<b>M-20-00</b> , Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	12/31/08 (M-20-00)	0				
<b>M-42-00</b> , Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
<b>M-45-00</b> , 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
<b>M-47-00</b> , 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
<b>M-50-00</b> , Complete Pretreatment Processing of Hanford Tank Waste	12/31/28 (M-50-00)	1	M-50-00	12/31/28		
<b>M-51-00</b> , Complete Vitrification of Hanford High Level Tank Waste	12/31/28 (M-51-00)	1	M-51-00	12/31/28		
<b>M-61-00*</b> (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/28 (M-61-00)	1	M-61-00	12/31/28		
<b>M-62-00</b> , 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
<b>M-90-00</b> , 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		
<b>Interim Stabilization Consent Decree</b>	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 rollout documentation due in 1/08.	4/30/06								X	

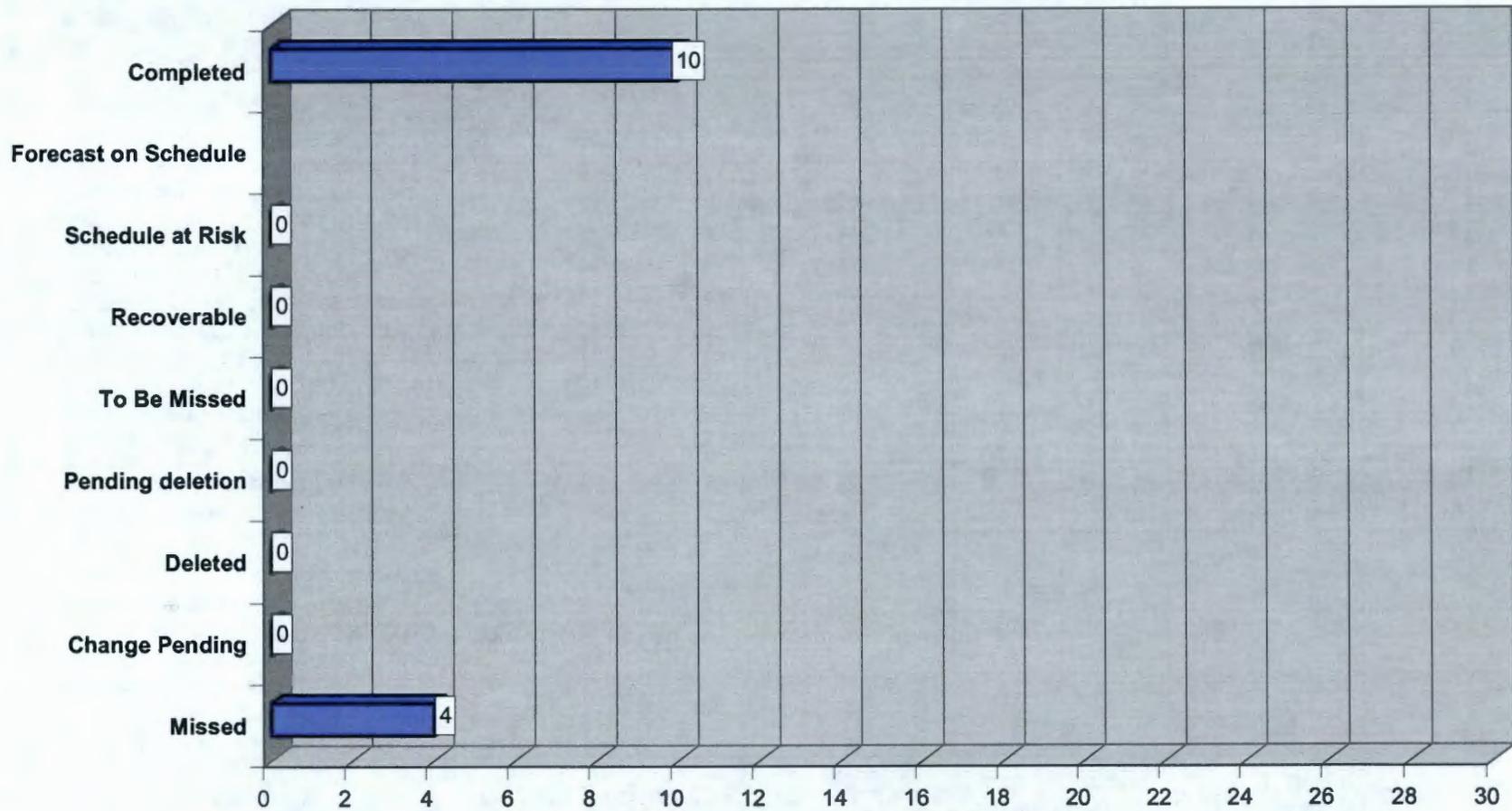
## Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-048-07A	Complete construction of the AZ-301 condensate return system and pit upgrades. This includes: 1) Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service [see M 45-07A-A]; 2) Complete construction of AP-106A Central Pump upgrade [M-48-07A-B]; and 3) complete construction of SY-B Valve Pit upgrade [see M 48-07A-C].	06/30/06	06/28/06								
M-048-07A-C	Completion of construction for the 241-SY-B valve pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-C.	06/30/06	06/08/06								
M-048-07B	The Disposition of all Double-Shell Tank Transfer System Components that will not remain in use beyond June 30, 2005.	06/30/06	6/27/06								
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			

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

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-56B	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/01/06	09/05/06								
M-062-01M	Submit Semi-Annual Project Compliance Report.	07/31/06	07/31/06								
M-045-00B	Complete specified "near term" SST waste retrieval and interim closure activities, to result in the retrieval of all tank wastes in WMA-C SSTs pursuant to the agreement criteria in milestone M-45-00.	09/30/06						X			
M-045-00C	Initiate negotiation of SST waste 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								
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								

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

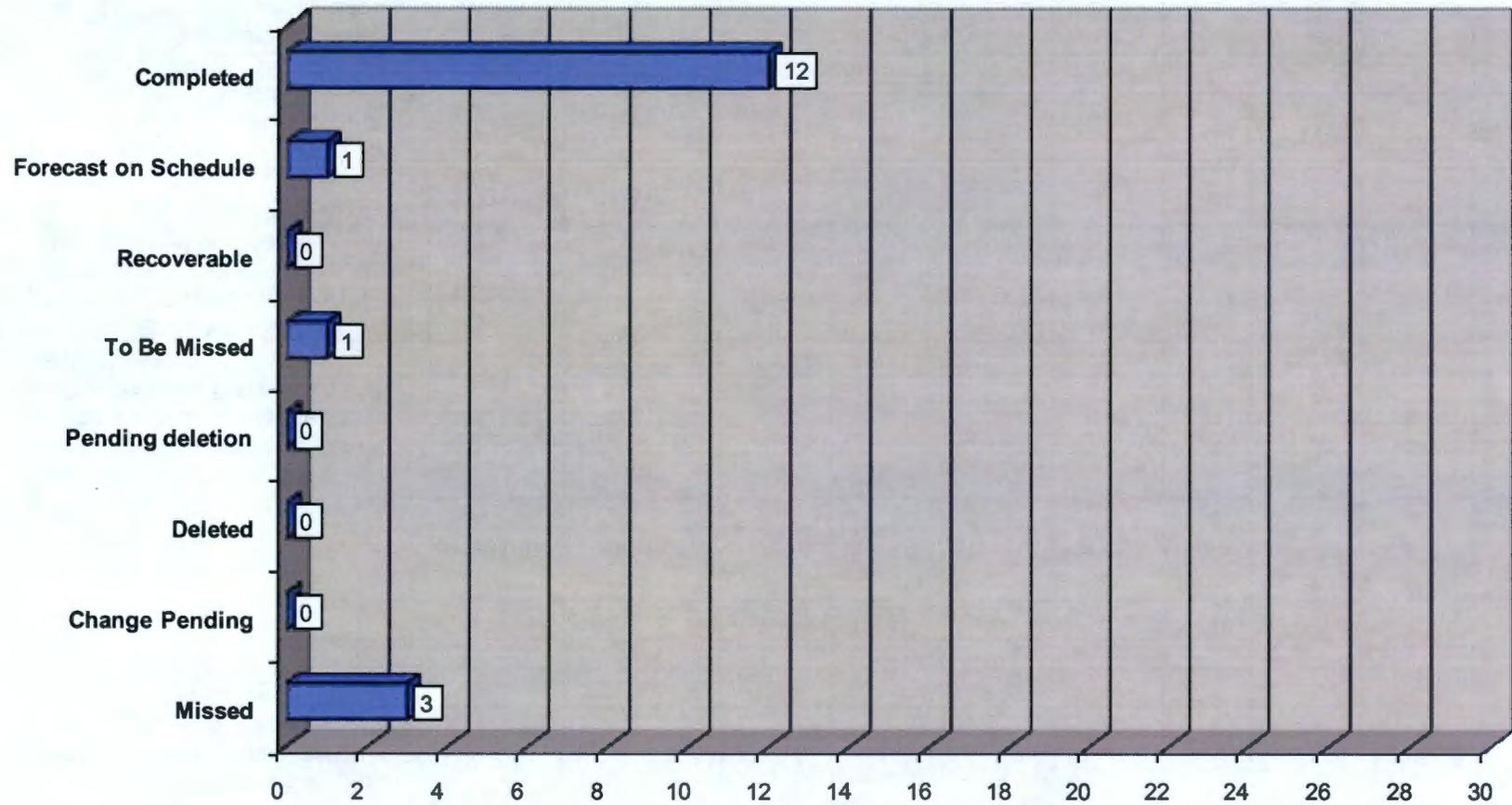
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-05A	Complete Waste Retrieval from S-102.	3/31/07						X			
D-001-00-R32	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/07	04/27/07								
M-062-11	Submit a Final Hanford Tank Waste Treatment Baseline. Following completion of negotiations required by M-62-08, DOE will modify its draft baseline as required and submit its revised, agreed-to baseline for treating all Hanford Tank Waste (HLW, LAW, and TRU) by 12/31/2028.	06/30/07						X			
M-045-56C	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	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	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 has been adequately characterized, and a risk assessment completed for S-112 residuals that remain in the tank.	12/31/07	12/21/07								
M-062-07B	Complete Assembly of LAW 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 period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/08	01/31/08								

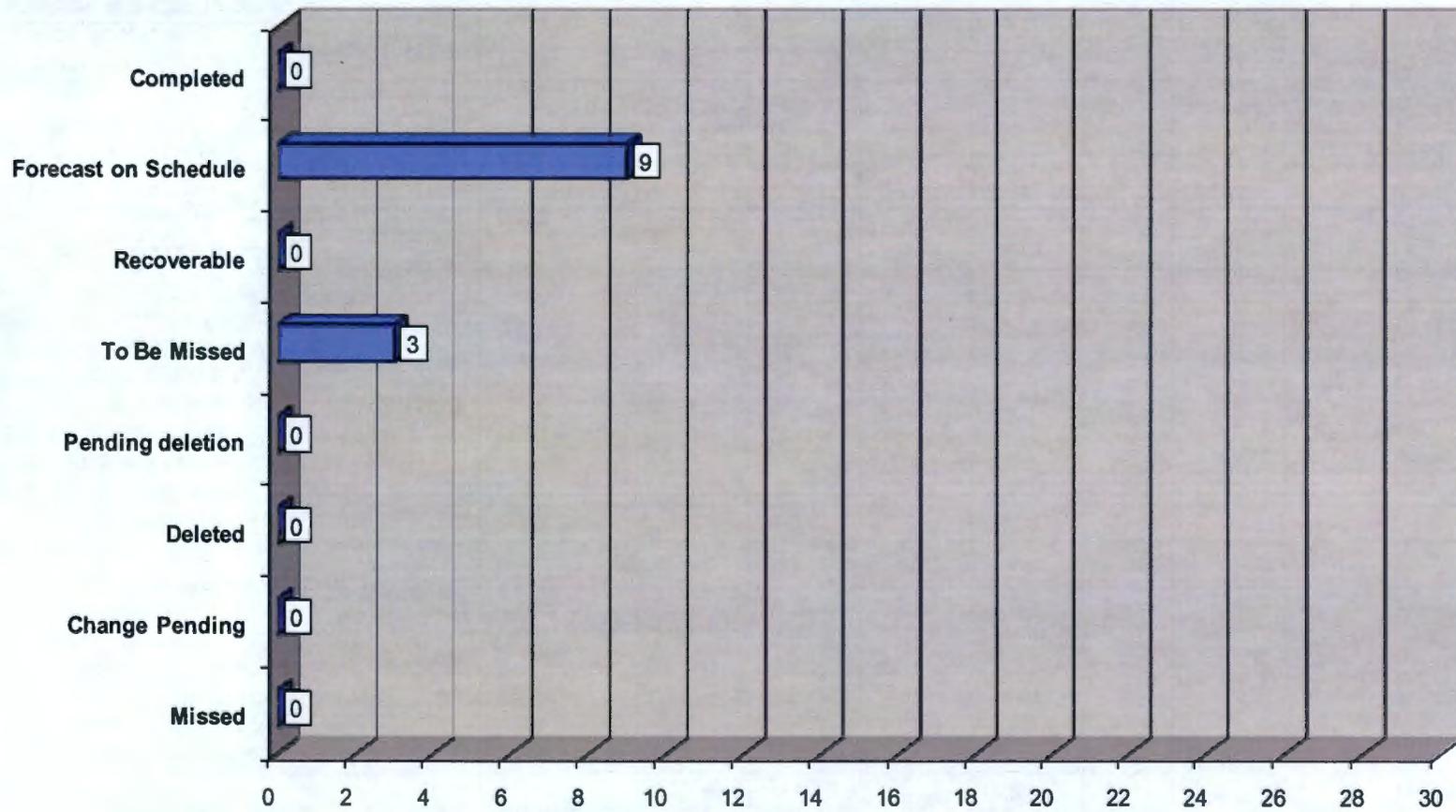
## Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-00D	Initiate negotiations of SST waste retrieval and closure for 2008-2013.	01/31/08						X			
M-045-02N	Submit Biennial Update.	03/01/08	02/29/08								
M-045-02N-A	Three Parties shall meet to establish new milestones within 60 days, if required, for acquisition of additional tanks.	06/02/08		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.	07/31/08	07/22/08								
D-001-00-R37	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/08	07/31/08								
M-062-01Q	Submit Semi-Annual Project Compliance Report.	07/31/08	07/30/08								

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

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

### FY 2009 MILESTONE PERFORMANCE



### Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R38	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/08		X							
M-045-58	Submit to Ecology for Review and Approval as an Agreement Primary Document Phase 2 Master Work Plan that describes the proposed approach for the completion of Corrective Action to meet final closure requirements in the Waste Management Areas as described in Appendix I, Section 2.3	12/31/08		X							
M-045-60	Submit to Ecology for review and approval as an agreement primary document, DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C.	12/31/08		X							
M-062-01R	Submit Semi-Annual Project Compliance Report	01/31/09		X							
D-001-00-R39	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/09		X							

### Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-062-09	Start Cold Commissioning – Waste Treatment Plant	02/28/09					X				
M-47-03A	Complete startup/turnover for waste retrieval mobilization systems for selected initial tank high-level waste feed tank	03/31/09					X				
D-001-00-R40	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/09		X							
M-045-56E	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/09		X							
D-001-00-R41	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/09		X							
M-062-01S	Submit Semi-Annual Project Compliance Report	07/31/09		X							
M-045-05-T07	Initiate tank retrieval from 7 additional SSTs	09/30/09					X				

## EXECUTIVE SUMMARY ON TANK FARMS EARNED VALUE REPORTING

In July 2008, there was a favorable Schedule Variance (SV) of \$5.1M with a schedule performance index (SPI) of 1.21 and a favorable Cost Variance (CV) of \$6.5M with a cost performance index (CPI) of 1.28.

The contract-to-date (CTD) cost and schedule performance remains outstanding. The CTD SV is a favorable \$64.1M with an SPI of 1.08. The CTD CV is a favorable \$53.3M with a CPI of 1.07.

### Schedule Variance Analysis

The CM favorable SV of \$5.1M is primarily due to 1) significant progress earned on accelerated work for Tank C-110 Retrieval (design and engineering, procurement, system installation construction, and startup and readiness) and Tank C-109 Retrieval (hard heel removal was completed ahead of schedule); and 2) progress earned on the Hose-in Hose Transfer Line (HIHTL) Project (work completed in July 2008 on the S-B to S-D Hose-in-Pipe Stabilization); 3) Liquid Mitigation of Catch Tanks/Double-Contained Receiver Tanks (DCRT) (completion of procurement and fabrication for Phase 2 testing of the alternative pumping system at the Cold Test Facility), and 4) early start on the additional interim barrier scope and progress on the BX Borehole.

The favorable CM SV is partially offset by an unfavorable variance related to Evaporator Upgrades (budget in the current month for work performed early on the 242-A Evaporator heating, ventilation, and air conditioning [HVAC] and monitoring control system [MCS] upgrades).

The CTD positive SV of \$64.1M is due to 1) 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) accelerated work on DBVS Technology Development and Design to address External Review Panel (ERP) issues including the Integrated Dryer and Melt Test (IDMT); 3) accelerated work on the Tank S-102 Retrieval; 4) Project W-314 accelerated work on completion and turnover of AN, AP, AW, and SY Farms electrical and ventilation exhauster upgrades, and the Master Pump Shutdown (MPS)/Monitoring Control System (MCS); 5) accelerated work on cross-site transfers, the SY Farm prefabricated pump pit (PPP) line replacement, and double-shell tank-to-double-shell tank (DST-to-DST) transfers; and 6) work completed ahead of schedule on the 242-A Evaporator Upgrades (MCS and supply side HVAC), and accelerated work on the AY/AZ Farm Upgrades (AZ-102 pump replacement and installation).

These favorable CTD SVs are partially offset by unfavorable variances for 1) delays in the S-302 pumping to required alternate pump replacement; 2) HIHTL Disposition Project (engineering design and work packages were delayed due to availability of engineering and craft support for field work); and 3) delay in buoyant displacement gas release event [BDGRE] work not needed due to delay in Tank C-110 Retrieval.

**Action:** The favorable SV will continue for accelerated and, in the short term, ahead of schedule work. The HIHTL and S-302 pumping is in progress and expected to recover by the end of fiscal year (FY) 2008. Completion of the Tank C-110 BDGRE work will be deferred to the outyears.

### **Cost Variance Analysis**

The favorable CM CV of \$6.5M is driven by 1) significant progress earned and cost efficiencies on accelerated work for Tank C-110 Retrieval (design and engineering, procurement, system installation construction, and startup and readiness) and Tank C-109 Retrieval (hard heel removal); 2) progress earned and cost efficiencies on the BX Borehole, HIHTL Project (progress earned and cost efficiencies on the S-B to S-D Hose-in-Pipe Stabilization, which was completed in July 2008); 3) less labor than planned for Single-Shell Tank (SST) Operations Essential Services, which is 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; 4) cost savings on infrastructure due to lower than projected costs for support from Fluor Hanford, Inc. (FH) and Lockheed Martin Services, Inc. (LMSI); 5) Base Operations cost less than planned in labor and crane and rigging to support planned Tank Waste Sampling events, Surveillance/Monitoring efficiencies support to field activities, WFO Essential Services resources assigned to support higher priority work; 6) Information Resource Management desktop support costs less than planned, efficiencies in Standards and Compliance [reallocation of manpower to core training and core procedures]; 7) costs less than planned for Shared Services and Miscellaneous Services; 8) ATL Readiness to Serve costs less than planned; 9) cost savings in IPS Project Support and technology development and labor efficiencies in Strategic Planning; and 10) cost reductions in the Office of Vice President Project Delivery due to transition of staff from the DBVS Project, cost efficiencies for WFO Project Controls, and efficiencies in Tank Waste Database Management due to staff reductions resulting from assignment to higher priority work).

The current month favorable CVs are partially offset by 1) 242-A Evaporator Operation and Maintenance labor and materials associated with emergent work activities for critical path equipment repairs and testing, including the PB-1 recirculation pump refurbishment, decontamination of the pump and evaporator rooms and repair of leaks in the pump room; 2) adjustment to correct June 2008 overstatement of performance on the SST Integrity Project work; 3) Evaporator Upgrades HVAC Upgrade costs due to complexity, emergent work, accelerated schedule and concurrent facility project upgrades, and corrective/maintenance activities; MCS Upgrade costs for engineering to develop software documentation, resolution of relay failure issue and rework of heater and control cabinet design and installations); 4) Project W-314 costs for Startup, Testing and Turnover Phase 2 for troubleshooting and repair of test deficiencies discovered during performance of the Cold Operational Acceptance Tests (OAT) for the AN and AW exhausters, including resolution of communication issues, rework of failed pressure transmitters, communication modules and miscellaneous instruments, and development and download of software upgrades); 5) unplanned costs for the Tank S-102 leak event cleanup and evaluation of retrieval path forward; and 6) C-104 Retrieval costs incurred for shutdown and safe standby work once the decision was made to focus resources on retrieval of Tank C-110.

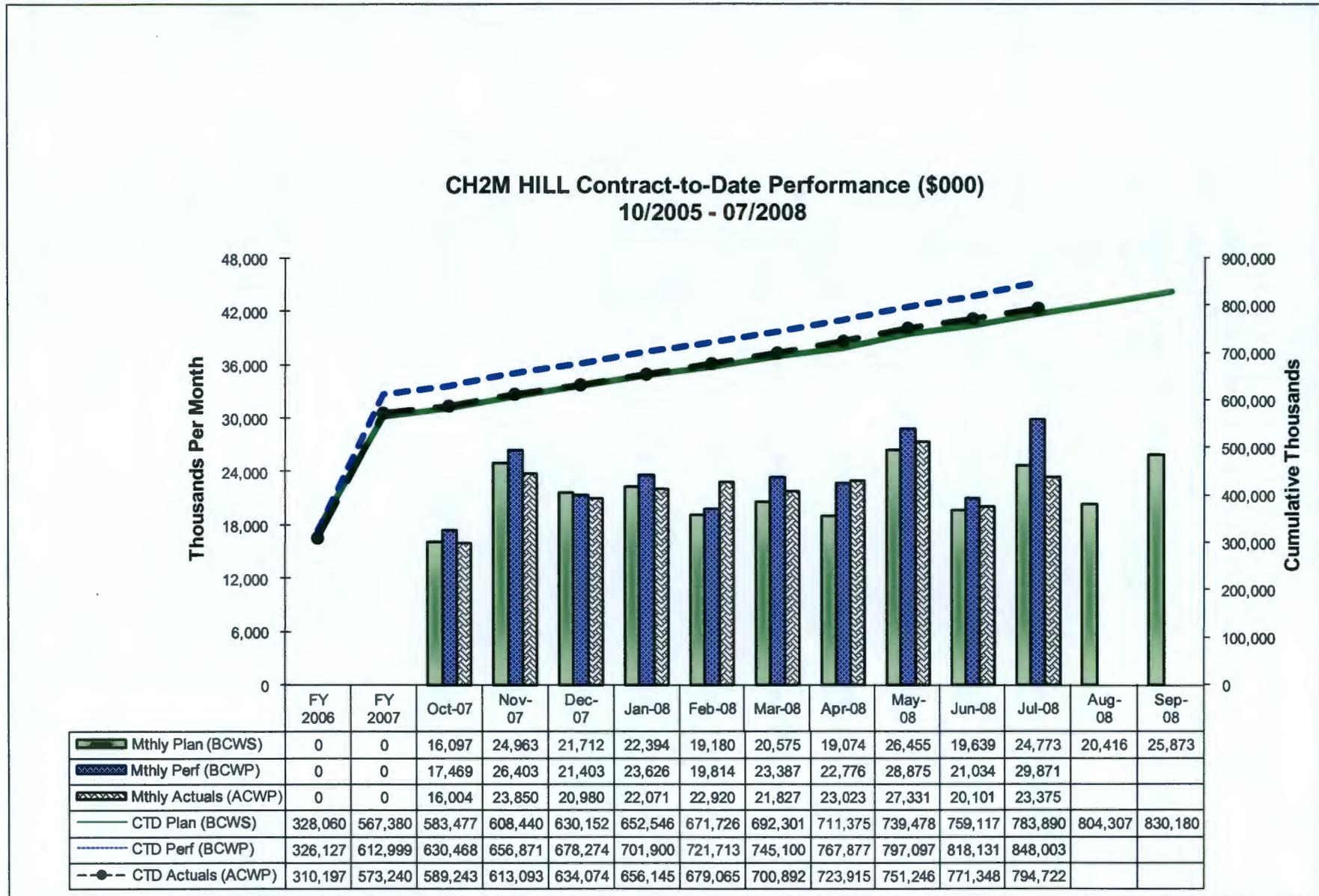
The CTD CV of \$53.3M is due to variances for 1) efficiencies on preparation and retrieval work for Tanks C-109, C-108 and C-110; 2) efficiencies on Tank S-102 and S-112; 3) cost savings and efficiencies in essential services; and Tank Farm project and program management, (IRM, Executive Management, Legal Counsel, Work Force Realignment and Restructure, Manage Facilities and Property Services, Liquidations, Shared Services, Miscellaneous Services and Site-Wide Services); 4) WFO savings and efficiencies Safe Storage Surveillance and Monitoring and Essential Services; DST-to-DST Transfers and Cross Site Transfers; AY/AZ Upgrade Projects (use of spare pump for AZ-102 replacement instead of new procurement); 5) Closure Operations Base Operations efficiencies for Liquid Level and Video Assessment, SST Operations Essential Services and Infrastructure; 6) 222-S Laboratory underruns 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 underruns 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, Price-Anderson Amendment Act of 1988 (PAAA), the Engineering Program; Project Support for RPP Baseline Integration Support and Safe Work Environment (SWE)/Personnel Readiness (Standards and Compliance); and WTP electricity costs less than planned.

These favorable CTD CVs are partially offset by unfavorable variances for 1) reduce and maintain the PM and CM backlog and support acceleration of retrievals; 2) unplanned costs on the S-102 spill event cleanup, investigation and corrective action plan; 3) T Farm Interim Barrier costs higher than baseline estimates (design, procurement, construction scope, and weather issues); 4) DBVS design labor and subcontract costs incurred in FY 2006, retroactive subcontractor rate adjustments resulting from a Defense Contract Audit Agency (DCAA) audit, additional costs for final design and review to modify the facility design incorporating lessons learned from the FY 2007 IDMT and design changes identified in the Process Hazards and Operability Analysis [PRHOA] sessions), and cost overruns for unplanned storage and maintenance of equipment awaiting DOE path forward and potential restart of construction); 5) prior year overruns on C-103 and C-201 to C-204 retrievals due to technical difficulties, and C-104 Retrieval construction and procurement unplanned costs for a second construction crew, delays, costs associated with the impacts of S-102 spill and costs incurred for shutdown and safe standby work once the decision was made to focus resources on retrieval of Tank C-110; 6) 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; 7) Tank AY-101 UT, 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) Evaporator Upgrades (HVAC Upgrade costs due to complexity, emergent work, accelerated schedule and concurrent facility project upgrades, and

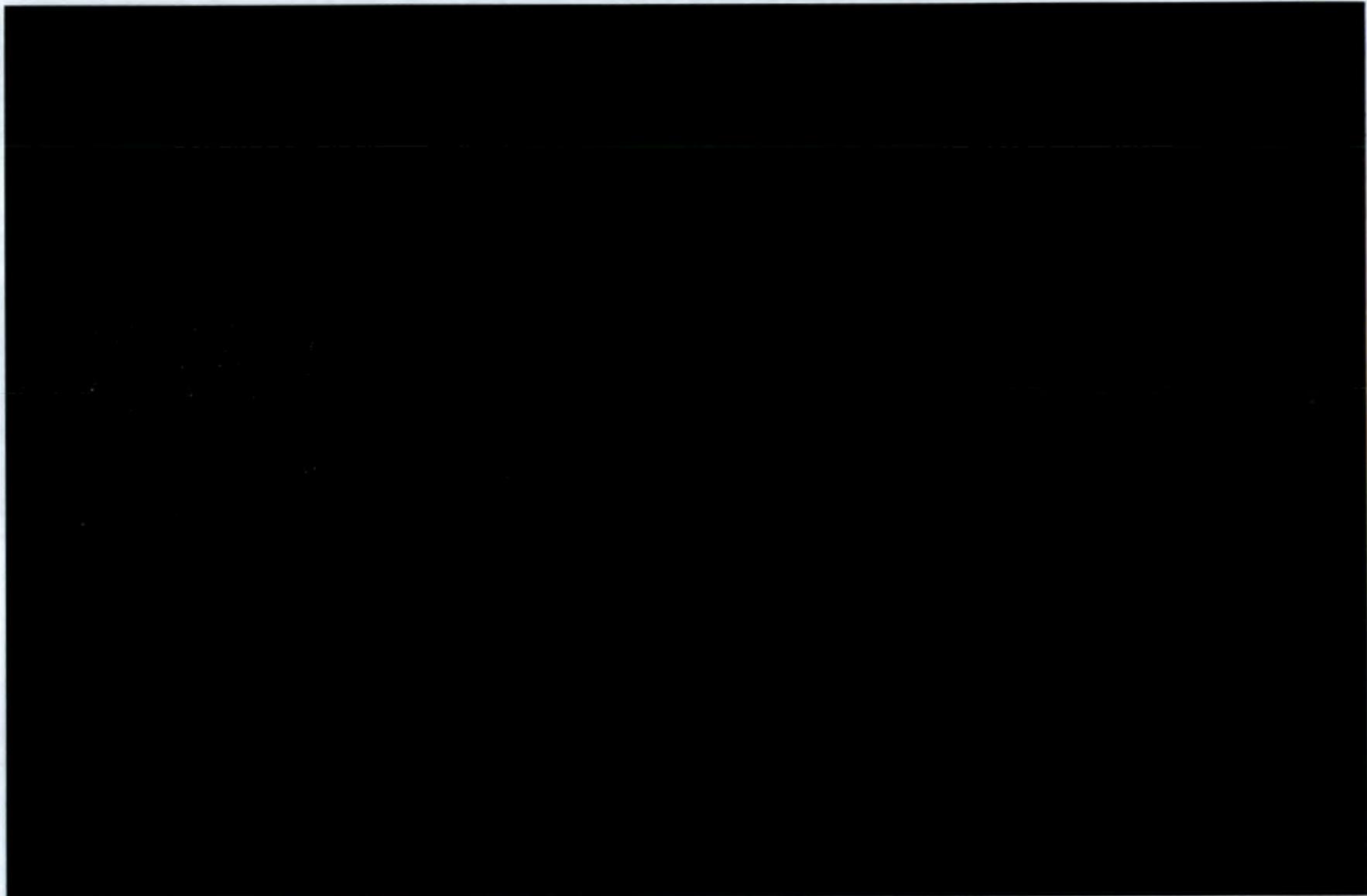
corrective/maintenance activities; MCS Upgrade costs for engineering to develop software documentation and resolution of relay failure issue).

**Action:** Favorable variances are expected to continue in the Essential Services and support functions activities. Unfavorable variances for completed work are not recoverable. Unfavorable variances for the S-102 spill event corrective action plan, investigation, and cleanup are not recoverable as this work is unplanned and no budget is assigned to it. Critical work is being prioritized and performed within available funds.

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



## CURRENT MONTH PERFORMANCE CHART



## CONTRACT-TO-DATE PERFORMANCE - CHART

### CH2M HILL Hanford Group, Inc. CONTRACT-TO-DATE PERFORMANCE MEASUREMENT - 10/2005 - 07/2008 BY WORK BREAKDOWN STRUCTURE Dollars in Thousands

WBS	TITLE	Cumulative Contract-To-Date								Budget at Completion (BAC)*	Accelerated Scope**	Estimate at Completion (EAC)***
		Budgeted Cost		Actual Cost Work Performed	Variance							
		Work Scheduled	Work Performed		Schedule	SV %	Cost	CV %				
<b>5.07</b>	<b>BASE OPERATIONS - Excluding 5.07.02</b>	389,378.4	391,394.5	356,094.0	2,016.1	0.5%	35,300.6	9.0%	415,085.0	2,952.8	379,494.7	
5.07.02	Env/TPA Milestone Achievement	<u>48,387.4</u>	<u>52,159.5</u>	<u>50,325.8</u>	<u>3,772.1</u>	7.8%	<u>1,833.6</u>	3.5%	<u>50,727.1</u>	<u>5,776.9</u>	<u>52,971.1</u>	
	<b>TOTAL BASE OPERATIONS</b>	<u>437,765.8</u>	<u>443,554.0</u>	<u>406,419.8</u>	<u>5,788.2</u>	1.3%	<u>37,134.2</u>	8.4%	<u>465,812.1</u>	<u>8,729.7</u>	<u>432,465.8</u>	
<b>5.8</b>	<b>RETRIEVE AND CLOSE - Excluding foll. WBS Elements</b>	0.0	298.2	217.0	298.2	298.2%	81.2	27.2%	0.0	298.1	219.0	
5.08.02	WTP Feed Delivery Program	20,672.9	20,673.0	17,672.3	0.1	0.0%	3,000.6	14.5%	22,019.8	0.0	<u>18,472.2</u>	
5.08.03	DST Retrieval Program	1,676.3	1,984.2	2,269.9	307.9	18.4%	-285.6	-14.4%	1,676.3	307.9	<u>2,272.3</u>	
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	2,865.8	8,418.8	10,605.1	5,553.0	193.8%	-2,186.3	-26.0%	2,865.8	5,916.9	<u>11,036.2</u>	
5.08.04.02	Upgrade Transfer System (E-525)	2,712.4	2,712.4	3,154.3	0.0	0.0%	-442.0	-16.3%	2,712.4	0.0	<u>3,154.3</u>	
5.08.05	Retrieval / Closure Program	140,666.9	140,699.6	132,759.4	32.7	0.0%	7,940.2	5.6%	151,776.5	0.0	<u>142,397.4</u>	
5.08.06/.07	SST Retrieval East / West Area	51,428.9	90,070.0	91,441.1	38,641.1	75.1%	-1,371.1	-1.5%	52,663.3	42,570.8	<u>96,344.3</u>	
5.08.12/.13	SST Closure	<u>1,252.6</u>	<u>1,118.7</u>	<u>1,043.5</u>	-133.9	-10.7%	<u>75.1</u>	6.7%	1,453.3	<u>0.0</u>	<u>1,109.8</u>	
	<b>TOTAL RETRIEVE AND CLOSE</b>	<u>221,275.7</u>	<u>265,974.8</u>	<u>259,162.7</u>	<u>44,699.1</u>	20.2%	<u>6,812.1</u>	2.6%	<u>235,167.2</u>	<u>49,093.7</u>	<u>275,005.5</u>	
<b>5.9</b>	<b>TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements</b>	15,858.9	15,789.6	11,514.7	-69.3	-0.4%	4,274.9	27.1%	18,002.7	0.0	<u>13,270.2</u>	
5.09.02.02	TRU / LLW Packaging	0.0	0.0	65.6	0.0	0.0%	-65.6	-65.6%	0.0	0.0	<u>65.6</u>	
5.09.02.03/.08	LAW Treatment	2,018.2	2,018.1	2,026.2	-0.1	0.0%	-8.1	-0.4%	2,150.2	0.0	<u>2,074.2</u>	
5.09.02.05/.11	Bulk Vitrification System (BVS) Project	28,255.2	42,097.0	45,618.6	13,841.7	49.0%	-3,521.7	-8.4%	28,283.4	13,841.7	<u>45,684.6</u>	
5.09.03.01	Integrated Disposal Facility	7,132.9	7,132.9	5,352.0	0.0	0.0%	1,781.0	25.0%	7,132.9	0.0	<u>5,352.0</u>	
5.09.03.04	Initial IHLW Storage Facility (W-464)	<u>109.4</u>	<u>109.4</u>	<u>35.1</u>	0.0	0.0%	<u>74.3</u>	67.9%	<u>109.4</u>	<u>0.0</u>	<u>35.1</u>	
	<b>TOTAL TREAT AND DISPOSE WASTE</b>	<u>53,374.6</u>	<u>67,147.0</u>	<u>64,612.2</u>	<u>13,772.4</u>	25.8%	<u>2,534.8</u>	3.8%	<u>55,678.6</u>	<u>13,841.7</u>	<u>66,481.7</u>	
<b>5.10</b>	<b>ANALYTICAL/TECHNICAL SERVICES</b>	<u>71,474.2</u>	<u>71,326.7</u>	<u>64,527.5</u>	-147.5	-0.2%	<u>6,799.2</u>	9.5%	<u>76,397.0</u>	<u>0.0</u>	<u>68,942.2</u>	
<b>TFC TOTAL</b>		<u>783,890.4</u>	<u>848,002.5</u>	<u>794,722.2</u>	<u>64,112.1</u>	<u>8.2%</u>	<u>53,280.3</u>	<u>6.3%</u>	<u>833,054.9</u>	<u>71,665.2</u>	<u>842,895.2</u>	

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

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

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

**BAC**

**Adjusted Total with Accelerated Scope**

833,054.9

904,720.1

## 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 Tank Safety Requirements (TSR), 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	13,569.5	12,791.7	10,767.4	-777.7 -5.7%	2,024.3 15.8%	
CTD	389,378.4	391,394.5	356,094.0	2,016.1 0.5%	35,300.6 9.0%	415,085.0

Note (All tables): Dollars in thousands.

#### SCHEDULE VARIANCE

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

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 Environmental Health Program characterization for vapors solutions (T and U Farms); and 2) Work completed ahead of schedule on Evaporator Upgrades (supply side HVAC Upgrades and MCS Upgrades) and the AN-102 Corrosion Probe system.

These favorable CTD variances are partially offset by unfavorable variances for 1) deferral of BDGRE work not needed due to delay in Tank C-110 Retrieval; 2) behind schedule for the AP-101 jumper installation and AP-103 in-process leak check/level rise; and 3) delays in the repair of line SLL-3160, specifically initiating work on SL-3160 encasement leak check.

**Impact:** Re-prioritization of work has been addressed and re-planning of work implemented via change action or pending changes.

**Corrective Action:** The SV will continue for accelerated work and, in the short term, for work performed early. Completion of the Tank C-110 BDGRE work is expected to be deferred to FY 2009. The Repair of Line SLL-3160 will be deferred to FY 2009 as it is low priority work. The AP Farm Upgrade AP-101 jumper installation will be completed to support the AP-101 to AW-102

transfers, which are prerequisites for the second Evaporator campaign. The AP-103 in-process leak check is being evaluated for potential deferral to the outyears.

### **COST VARIANCE**

**Description and Cause:** The CM CV is due to 1) less than planned labor and crane and rigging to support planned Tank Waste Sampling events and labor costs less than planned rates, surveillance/monitoring efficiencies and support to field activities, cost efficiencies in basic maintenance and essential services [assignment of resources to higher priority work], cost efficiencies in the Engineering Program, Facilities Operations Management, Industrial Health and Safety and Quality Assurance); 2) Information Resource Management costs for desktop support less than planned, efficiencies in Standards and Compliance [reallocation of manpower to Core Training and Core Procedures], cost savings in subcontract and labor support less than planned due to work for others; and 3) costs less than planned for Shared Services and Labor Liquidations [work for others higher than planned]).

These favorable CM variances are partially offset by 1) costs for Contract Transition Planning; and 2) Evaporator Upgrades HVAC Upgrade costs due to complexity, emergent work, concurrent facility project upgrades, and corrective/maintenance activities; MCS Upgrade costs for engineering to develop software documentation, resolution of relay failure issue and rework of heater and control cabinet design and installations.

Significant contributors to the CTD favorable CV include efficiencies and cost savings in 1) Site-Wide Services and Shared Services and Miscellaneous Services [AdvancedMed Hanford Services, Technical Library, DOE, Richland Operations Office 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) 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 Bargaining Unit Training, WFO Waste Compatibility Program and Radiation Protection Program); 3) efficiencies in Project Support (Standards and Compliance, IRM, TFC Executive Management, Legal Counsel, RPP Baseline Integration Support and Manage Facilities and Property Services); and 4) 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 efforts to reduce and maintain the PM/CM backlog and support to Tank Retrieval acceleration including DST-to-DST Transfers and Cross-Site Transfer, electrical outages and

cathodic protection); 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; unplanned expenditures for 274 AW parking lot, Radiological Control Surveys (FY 2006 costs for additional surveillances/routines on overtime and additional laboratory costs incurred); and vapors sampling support and Advanced Technologies and Laboratories International, Inc. [ATL] Readiness to Serve adder; 2) unfavorable variances related to work performed on the Marshalling Yard and Connector Road Improvements, subcontractor support to Hanford Atomic Metal Trades Council (HAMTC) Contract negotiations and ratification; and 3) unfavorable variances related to Evaporator Upgrades (costs due to complexity, emergent work, accelerated schedule and concurrent facility project upgrades, and corrective/maintenance activities; MCS Upgrade costs for engineering to develop software documentation and resolution of relay failure issue and rework of heater and control cabinet design and installations).

**Corrective Action:** The favorable CVs are expected to continue for the ongoing level of effort (LOE) Base Operations, Support, 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.

## 5.07.02 - ENVIRONMENTAL/TRI-PARTY AGREEMENT MILESTONE ACHIEVEMENT

**Scope Description:** The baseline provides for the safe and compliant storage of the Hanford Site tank wastes until waste is retrieved for processing (currently 53 million gallons of waste in 177 SSTs and DSTs and approximately 60 miscellaneous underground storage tanks). This includes monitoring and maintaining activities associated with the Hanford Federal Facility Agreement and Consent Order, commonly referred to as the 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	1,229.6	1,156.2	1,635.6	-73.4 -6.0%	-479.3 -41.5%	
CTD	48,387.4	52,159.5	50,325.8	3,772.1 7.8%	1,833.6 3.5%	50,727.1

### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is within the reporting threshold of +/- 10 percent or \$1M.

The CTD favorable SV is due accelerated work (planned outside the contract period in the baseline) completed for Cross-Site Transfers, the SY Prefabricated Pump Pit (PPP) Line Replacement, and DST-to-DST Transfers (supports tank retrievals, Evaporator campaigns and tank level increases).

### COST VARIANCE

**Description and Cause:** The CM favorable CV is due to 1) 242-A Evaporator Operation and Maintenance labor and materials associated with emergent work activities for critical path equipment repairs and testing, including the PB-1 recirculation pump refurbishment, decontamination of the pump and evaporator rooms and repair of leaks in the pump room; and 2) Adjustment to correct June 2008 overstatement of performance on the SST Integrity Project work.

CM unfavorable variances are partially offset by favorable variances for the Environmental Support and Assessment Program, the DST Integrity Project, DST-to-DST Transfer, and DST Space Evaluation.

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) LOE efficiencies on Environmental Support and Assessment Program; 4) 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 UT Support, and miscellaneous associated IQRPE support to integrity assessment); 2) 242-A Evaporator Operations and Maintenance (increased overtime and regular labor to support additional PMs for the MCS Upgrade OAT, materials and contract support for the PB-1 pump refurbishment, Crane and rigging costs higher than expected; 3) Catch Tank Pumping (isolation of Silver List Catch Tanks UX-302-A and ER-311); and 4) Increase Specific Gravity (FY 2006 overruns).

**Impact:** None.

**Corrective Action:** Cost overruns for completed work are not recoverable. Efficiencies are expected to continue on DST-to-DST Transfers. Work has been prioritized within available funds.

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

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

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	0.0	298.2	217.0	298.2 298.2%	81.2 27.2%	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 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 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 (HTWOS) model.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	702.7	702.8	386.4	0.1 0.0%	316.4 45.0%	
CTD	20,672.9	20,673.0	17,672.3	0.1 0.0%	3,000.6 14.5%	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 favorable CV is due to 1) Cost reductions in the Office of Vice President Project Delivery due to transition of staff from the DBVS Project; 2) Cost efficiencies in Waste Feed Operations Project Controls performance realized by improved systems, organizational realignment and co-location of personnel; 3) Cost efficiencies in Tank Waste Database Management due to staff reductions resulting from assignment to higher priority work; and 4) Startup and Testing (use of direct staff instead of subcontracted labor and reduced material usage).

CTD favorable CVs are due to ongoing cost efficiencies in 1) LOE labor for WFO Project Controls (improved systems, organizational realignment and co-location to improve performance); 2) Tank Waste Database Support (staff reductions); and 3) Startup and Testing (use of direct staff instead of subcontracted labor and reduced material usage).

Favorable CTD CV partially offset by unfavorable CV for 1) Office of VP Project Delivery (additional unplanned DBVS staff assigned to manage external review issue resolution and exhauster fabrication cost correction to support vapors), and 2) DST Research and Technology System Technical Baseline (additional scope and cost for the RPP System Plan and HTWOS model runs for SST sequence and mission modeling).

**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.

#### ACCOMPLISHMENTS

WBS 5.08.03.07.01 – AN-101 Retrieval System

Continued preparation of the Test Plan and Operational Acceptance Test (OAT).

#### ISSUES/CHALLENGES

None to report.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.6	0.0 0.0%	-0.6 0.0%	
CTD	1,676.3	1,984.2	2,269.2	307.9 18.4%	-285.6 -14.4%	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 Systems work (design, construction, and startup) in support of Tank 241-C-104 Retrieval.

**Impact:** None.

**Corrective Action:** None required.

#### COST VARIANCE

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

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 and MCS. Project Management, Project Support and Startup, Testing, Readiness and Turnover to Operations are also included.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	118.4	416.1	118.4 118.4%	-297.8 -251.5%	
CTD	2,865.8	8,418.8	10,605.1	5,553.0 193.8%	-2,186.3 -26.0%	2,865.8

### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is due to acceleration of the Project W-314 Phase 2 Startup, Testing, and Turnover work related to the AN and AW exhausters.

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, and Turnover, and Readiness.

**Impact:** None.

**Corrective Action:** None required.

### COST VARIANCE

**Description and Cause:** The CM unfavorable CV is due to 1) Startup, Testing, and Turnover Phase 2 costs related to troubleshooting and repair of test deficiencies discovered during performance of the Cold OATs for the AN and AW exhausters, including resolution of communication issues found during testing, rework of failed pressure transmitters, communication modules and miscellaneous instruments, and development and download of software upgrades; and 2) Minor cost overruns on Startup, Testing, and Turnover Phase 1 for the MPS/MCS.

The CTD unfavorable CV is due to 1) Increased cost of the Phase 1 Startup, Testing, and Turnover (MPS/MCS due to increased labor required for Engineering support to bring the system on-line, debugging of programming, test bed setup, and new CITECT software license and

system upgrades); 2) Costs to complete the AW Upgrades (FY 2007 costs for emergent construction activities on the encasement leak detectors and emergent construction activities originating from walk downs, testing of the AW exhausters and HAZOP evaluations, overtime to maintain schedule, engineering to update project and facility documents, and costs to develop the construction acceptance tests which were under-estimated); 3) Unfavorable variances on the AP Upgrades (construction and Engineering effort for troubleshooting and Engineering to update and as-built project and facility documents and pit upgrades performed in FY 2006); 4) Startup, Testing, and Turnover Phase 2 costs related to troubleshooting and repair of test deficiencies discovered during performance of the Cold OATs for the AN and AW exhausters, including resolution of communication issues found during testing, rework of failed pressure transmitters, communication modules and miscellaneous instruments, and development and download of software upgrades; and 4) Minor cost overruns to complete the Phase 2 SY Upgrades and Waste Transfer System (WTS).

Unfavorable CV is partially offset by minor efficiencies in 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 to the outyears.

## 5.08.04.02 – PROJECT E-525 (UPGRADE TRANSFER SYSTEMS)

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

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	2,712.4	2,712.4	3,154.3	0.0 0.0%	-442.0 -16.3%	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 period.

**Impact:** None.

**Corrective Action:** None required.

### COST VARIANCE

**Description and Cause:** The CM CV is due to cost adjustments for final closeout of construction subcontracts.

The CTD unfavorable CV is due to cost overruns on construction of Clean-Out Boxes (COB) 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, CTF management and maintenance, Vadose Zone support, inactive waste sites administration, Tank Farm Support Facilities/Transfer Systems. The scope also includes the Closure Project TSR/Basic Maintenance on SSTs, Closure Project Operations Essential Services, Closure Project Field Projects/Upgrades, and the solid waste management programs.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	4,531.8	5,350.8	4,029.4	819.0 18.1%	1,321.4 24.7%	
CTD	140,666.9	140,699.6	132,759.4	32.7 0.0%	7,940.2 5.6%	151,776.5

### SCHEDULE VARIANCE

**Description and Cause:** The CM favorable SV is due to 1) Vadose Zone RCRA Corrective Actions (early start on new scope for additional interim barriers and progress on the BX Borehole); 2) Liquid Mitigation of Catch Tanks/Double-Contained Receiver Tanks (DCRT) (progress earned for completion of procurement and fabrication for Phase 2 testing of the alternative pumping system at the Cold Test Facility); and 3) progress earned on the Hose-in-Hose Transfer Line (HIHTL) Project (work completed in July 2008 on the S-B to S-D Hose-in-Pipe Stabilization).

The CTD favorable SV is within the reporting threshold of +/- 10 percent or \$1M.

**Impact:** Re-planning of work has been implemented via approved baseline change requests (BCR).

**Corrective Actions:** The CTD behind schedule work related to Liquid Mitigation of Catch Tanks and HIHTL is ongoing and expected to recover by the end of FY 2008.

### COST VARIANCE

**Description and Cause:** The CM CV is due to 1) Vadose Zone RCRA Corrective Actions (July 2008 progress earned and cost efficiencies on the BX Borehole); 2) HIHTL Project (progress earned and cost efficiencies on the S-B to S-D Hose-in-Pipe Stabilization, which was completed in July 2008); 3) Less labor than planned for SST Operations Essential Services, which is 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;

4) Cost savings on Infrastructure due to lower than projected costs for support from FH and Lockheed-Martin Services, Inc. (LMSI); 5) Closure Project Office of the Vice President reduced labor due to reorganization; and 6) Waste Management Program/Administration (lag in the treatment of low-level waste (LLW) volume and mixed waste that has been shipped to the treatment contractor).

The CTD favorable CV is due to 1) Underruns 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 (reduced requirement to support LOE activity), Waste Management Program/Administration (less than planned waste projections and actual labor rates less than planned rates), Liquid Level and Video Assessment (underruns on completed work), Tank Farms Risk Assessments (use of in-house staff instead of subcontractors as planned), Retrieval Technology Development, Cold Test Facility (CTF) Management and Maintenance (lower share of cost as other programs used the facility), HIHTL (re-planning of prior year work), and 244-CR vault (re-planning of prior year work).

The favorable CTD CVs are partially offset by unfavorable variances for 1) 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 to complete basic PMs/CMs and maintain the backlog and support accelerated retrievals; overruns are being offset by underruns in SST Essential Services); and 3) Closure Operations Office of the VP (unplanned purchase of spare cameras, unplanned costs for vapor sampling for chemicals of concern, and unplanned costs for the carpenter shop conversion).

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

**Corrective Action:** Cost efficiencies and savings are expected to continue for support activities and SST Operations Essential Services. Measures were implemented to reduce the costs on the T Farm Interim Surface Barrier construction work (streamlined the management structure, implemented weather enclosure to apply polyurea in bad weather, and optimized staff). BCRs have been implemented for needed re-planning of work. Behind schedule work for Liquid Mitigation of Catch Tanks and HIHTL is expected to recover by the end of FY 2008.

## 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	720.9	5,803.6	3,608.4	5,082.7 705.1%	2,195.2 37.8%	
CTD	51,428.9	90,070.0	91,441.1	38,641.1 75.1%	-1,371.1 -1.5%	52,663.3

### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is due to 1) Significant progress earned in July 2008 on accelerated work for Tank C-110 Retrieval (design and engineering, procurement, system installation construction, and startup and readiness); and 2) Tank C-109 Retrieval (hard heel removal was completed ahead of schedule).

The CM favorable SVs are partially offset by delays in Tank S-102 Retrieval (operations and maintenance shutdown pending spill recovery and cleanup actions).

The CTD favorable SV is due to 1) Accelerated work performed on retrieval of Tanks S-102, C-104, C-110 and C Farm Infrastructure; and 2) Work completed ahead of 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 favorable CV is due to 1) Significant progress earned and cost efficiencies on accelerated work for Tank C-110 Retrieval (design and engineering, procurement, system installation construction, and startup and readiness); and 2) Tank C-109 Retrieval (progress earned for completion of hard heel removal).

The CM favorable CV is partially offset by unfavorable variances for 1) Tank C-104 Retrieval (costs incurred for shutdown and safe standby work once the decision was made to focus

resources on retrieval of Tank C-110); and 2) Tank S-102 (unplanned costs for the Tank S-102 leak event cleanup and evaluation of retrieval path forward.

The CTD unfavorable CV is driven by 1) Unplanned costs for Tank S-102 leak event investigation, corrective actions, and cleanup; 2) Tank C-104 Retrieval (additional and unplanned construction costs for a second construction crew, delays, costs associated with the impacts of S-102 Corrective Action implementation [Compensatory Measures and engineering requirements]; costs incurred for shutdown and safe standby work once the decision was made to focus resources on retrieval of Tank C-110; and C-104 Design and Engineering [unplanned costs for design review changes due to additional requirements]); and 3) Tanks C-100 and C-200 Retrievals due to prior year overruns on C-103 and C-201 to C-204 retrievals due to technical difficulties.

The CTD unfavorable CV is nearly offset by efficiencies in Retrieval of Tanks C-108, C-109, C-110, S-102, S-109 (partial retrieval) and S-112.

**Impact:** The large favorable CV generated through retrieval efficiencies and savings was 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 RA and technical difficulties with the mobile retrieval tool (MRT).

**Corrective Action:** Cost impacts have been factored into the fiscal year spend forecasts and work prioritized within available funds. Retrieval operation concluded on Tank C-109 in July 2008. Work on retrieval of Tanks C-104 and C-108 has been postponed to focus resources and remaining funding on Tank C-110 Retrieval. Continued acceleration of C-110 Hard Heel Removal 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.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	123.2	96.4	26.4	-26.8 -21.7%	70.1 72.7%	
CTD	1,252.6	1,118.7	1,043.5	-133.9 -10.7%	75.1 6.7%	1,453.3

### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is due to slow startup of the S-Farm Closure Management account recently added by a BCR.

The CTD SV is due to the same reason as the CM SV.

**Impact:** No impact.

**Corrective Action:** None required.

### COST VARIANCE

**Description and Cause:** The CM CV is due to favorable performance on the S Farm Closure Management account.

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 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 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	1,184.3	1,203.8	462.6	19.5 1.6%	741.1 61.6%	
CTD	15,858.9	15,789.6	11,514.7	-69.3 -0.4%	4,274.9 27.1%	18,002.7

### SCHEDULE VARIANCE

**Description and Cause:** The CM and CTD SVs 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 driven by 1) Efficiencies in the Integrated Pretreatment System (IPS) Project (labor costs less than planned due to self-performance instead of subcontractors); 2) Labor efficiencies in Supplemental Treatment Strategic Planning; 3) less electrical usage at the WTP than planned; and 4) Efficiencies on the Integrated Disposal Facility (IDF) Operations.

The CTD favorable CV is due to 1) Less electrical usage at the WTP than planned; 2) Labor efficiencies in Strategic Planning; 3) Cost efficiencies on the IPS Project Support and Technology Development; 4) Underruns in the Immobilized Low-Activity Waste (ILAW) Baseline Management, Systems Definition, and Performance Assessment; and 5) Underruns in IHLW Baseline Management and Systems Definition.

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

**Impact:** None.

**Corrective Action:** None required.

## 5.09.02.02 - TRU / LLW PACKAGING

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

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

### SCHEDULE VARIANCE

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

### 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.

## 5.09.02.03/.08 - LAW TREATMENT

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

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	68.9	68.8	101.0	-0.1 -0.1%	-32.2 -46.8%	
CTD	2,018.2	2,018.1	2,026.2	-0.1 0.0%	-8.1 -0.4%	2,150.2

### SCHEDULE VARIANCE

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

### COST VARIANCE

**Description and Cause:** The CM CV is due to final cost adjustments for the Pretreatment Developmental Testing 200W (Savannah River National Laboratory [SRNL] Pilot Scale Baseline tests).

The CTD CV is within the reporting threshold of  $\pm 10$  percent or \$1M.

## 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	14.7	14.7	-1.9	0.0 0.0%	16.6 112.9%	
CTD	28,255.2	42,097.0	45,618.6	13,841.7 49.0%	-3,521.7 -8.4%	28,283.4

### SCHEDULE VARIANCE

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

The CTD 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-2/3).

**Impact:** None.

**Corrective Action:** None.

### COST VARIANCE

**Description and Cause:** The CM favorable CV is due to final cost adjustments to closeout DBVS Design, Technology Development, and Engineering During Construction (final subcontract closeout costs).

The CTD unfavorable CV is due to additional subcontractors' effort to complete initial design (in prior years), 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). 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, provided ORP determines a path forward and directs that the work be done.

### 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	5,352.0	0.0 0.0%	1,781.0 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 completed.

#### 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.

## 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.

### 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.

## 5.10 - ANALYTICAL TECHNICAL SERVICES (ATS)

**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	2,627.7	2,563.9	1,942.6	-63.9 -2.4%	621.3 24.2%	
CTD	71,474.2	71,326.7	64,527.5	-147.5 -0.2%	6,799.2 9.5%	76,397.0

### 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.

### COST VARIANCE

**Description and Cause:** The CM CV is due to efficiencies associated with actual labor costs being less than planned and ATL Readiness to Serve costs less than planned.

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 and subsequently 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.

Favorable CTD CVs are partially offset by minor unfavorable variance for 1) Procurement of the gas chromatograph/mass spectrometer [GC/MS] 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 and subsequently the billing of ATL waste handling costs to the end users being less than planned).

**Impact:** None.

**Corrective Action:** Cost estimates have been prepared and some design is proceeding for 222-S Facility Reliability repair/replacement (as required) of the 222S, 222SA, and 222S Maintenance Annex roofs.

## 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: Complete. ORP- Ecology annual meeting held July 22, 2008 to discuss interim measures anticipated next year in Tank Farms. This discussion did not include scope under current negotiations.
  
- **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:

- T-Farm interim barrier monitoring continues.
- The TX and TY geophysics fieldwork is complete; final report (RPP-RPT-38320) issued 8/27/08.

- Construction of a groundwater monitoring and Vadose Zone sampling well in the BX Tank Farm is complete. Final monitoring well has been accepted into the monitoring program
- Initiated investigations for interim surface barriers in TY and SX Tank Farms.
- Initiated rebaselining the spectral gamma logs of drywells in the T Tank Farm.

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

- Complete the WMA C data quality objectives.
- Complete the Master Work Plan.
- Complete the Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C.
- Complete direct push activities in TY Farm in support of an interim surface barrier.

### **IV. Issues**

- M-45-61 (CMS submittal) in 2010 is dictated by scope of characterization activities determined via M-45-60 (WMA C work plan and SAP) and EIS schedule.
- There is no apparent maintenance plan for the ongoing maintenance of interim measures.

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

### **SST Retrieval and Closure Program**

#### **I. Deliverables**

- **M-45-00, Complete Closure of all Single-Shell Tank Farms**  
Due: 9/30/24  
Status: To Be Missed (Based on current DOE Baseline planning)
  
- **M-45-00B, Complete Specified "Near-Term" SST Waste Retrieval and Interim Closure Activities, to Result in the Retrieval of all Tank Wastes in WMA-C SSTs Pursuant to the Agreement Criteria in Milestone M-45-00**  
Due: 9/30/06 (Or as otherwise indicated within the descriptive text of this milestone.)  
Status: Missed.
  - Completion of four limits of technology retrieval demonstrations:
    - Saltcake dissolution (S-112): Completed (M-45-03C)
    - Modified sluicing (C-106): Completed
    - Vacuum retrieval (C-200s): Completed; C-203 field retrieval operations completed on 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 FY 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.
    - 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**

- Completed design of C-110 retrieval system (8/27/08)
- Continued construction work for the C-110 retrieval system.
- HRR system installed at C-110 and is undergoing baseline testing scheduled for completion on 9/2/08. HRR will be fully functional procedurally and in the field to support retrieval.
- Continued comments review of RPP-22520, Rev. 4 (241-C-101, 241-C-105, and 241-C-111 Tank Waste Retrieval Work Plan).

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

- Complete construction and Level III readiness review for the C-110 retrieval system and start retrieval.
- Complete comment resolution on the Mobile Retrieval System (MRS) TWRWP (RPP-22520 Rev. 4 for tanks C-101, C-105, and C-111) and obtain Ecology approval.

**IV. Issues**

- The MRS TWRWP review comment process is ongoing and the TWRWP has not been approved by Ecology. ORP submitted a document update 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.
- Ecology formally requested re-start dates for C-108 and 109, and S-102 in a letter dated September 12, 2008. No formal response has been received.

**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>	1/27/09	5/13/09	4/13/09	5/14/09	12/23/09	11/23/09	11/4/10
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	TBD	TBD	TBD
C-109 <sup>de</sup>	Complete	Complete	Complete	Complete	TBD	TBD	TBD
C-110 <sup>bc</sup>	Complete	9/8/08	9/4/08	9/15/08	9/30/09	8/30/09	7/6/10
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 July month-end Integrated Mission Execution Schedule (IMES) as of 8/27/08 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. Sluicing was performed to the limits of the sluicing system technology.

e. Hard Heel Retrieval using MRT complete to limits of technology, not achieving less than 360 cu ft residual, awaiting future retrieval path forward.

## 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 May 15, 2008, Ecology transmitted comments on the M-45-02N deliverable. On July 23, 2008, ORP transmitted letter 08-TF-049 to Ecology with a plan for responding to Ecology comments on and updating the Retrieval Sequence Document (RPP-21216). It is planned to submit the revised document by September 15, 2008.
- **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**

- None

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

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

**IV. Issues**

- Ecology approval of the M-45-02N submittal is still outstanding.

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

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

Due: 2/27/04

Status: Complete

**II. Significant Accomplishments**

- None

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

- Continue NRC review of the C-106 exception request. A Request for Additional Information (RAI) is planned for submittal by the NRC in January 2009.
- 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 ROD is January 2010.

**Tank 241-S-102****I. Deliverables**

- **M-45-05A, Complete Waste Retrieval from Tank S-102**  
Due: 3/31/07  
Status: Missed. As a result of equipment failure on March 14, 2007, retrieval operations were suspended at Tank S-102 with retrieval approximately 91% complete and approximately 423,000 gallons total waste removed. Retrieval restarted on July 25, 2007 and was suspended after a waste spill on July 27, 2007. The HRR system is currently shut down.
- **M-45-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**  
Due: 6/30/11  
Status: On Schedule. Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.
- **M-45-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**  
Due: 6/30/11  
Status: On schedule
- **M-45-15B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank.**  
Due: 6/30/11  
Status: On schedule
- **M-45-15C, Embedded Milestone, An update to the S-102 Component Closure Activity Plan has been submitted by DOE.**  
Due: 6/30/11  
Status: On schedule
- **M-45-15D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H.**  
Due: 6/30/11  
Status: On schedule

**II. Significant Accomplishments**

- None

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

- Complete recovery actions for the waste leak of July 27, 2007.

#### 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 85 gallons of tank waste occurred from the S-102 pumping system. Operations were suspended and recovery actions started. Ninety-three drums of soil and several disposal boxes of equipment have been removed, and radiological downposting of the site is ongoing.

#### 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**

- None

## Interim Stabilization Consent Decree

### I. Near-Term Deliverables:

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

Due: 09/30/04

Status: Completed on 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 has been impacted by the 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 August 1 – August 31, 2008

### **I. Accomplishments:**

- Nothing significant to report.

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

#### Tank Sampling

- Tank 241-AZ-102 liquid grab samples scheduled for November 2008.
- Tank 241-AP-107 liquid grab samples scheduled for November 2008.
- Tank 241-AW-106 liquid grab samples scheduled for October 2008.
- Tank 241-C-110 vapor samples scheduled for September 2008.
- Tank 241-C-104 vapor samples scheduled for January 2009.
- Tank 241-AN-106 grab samples for mid 241-C-110 retrieval scheduled for December 2008.
- Tank 241-AN-103 core samples scheduled for November 2008.
- Tank 241-AP-104 core samples scheduled for December 2008.

#### BBI Updates

- Eight tank updates are planned for the fourth quarter of FY 2008.
- Two updates are complete.
- Five updates are in preparation.

#### DQOs

- Complete Evaporator DQO, Rev. 5 in September 2008.
- Complete SST Component Closure DQO, Rev 4 in September 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:**

- None

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

- None

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

- None

### **V. Issues:**

- Nothing to report.

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

### EVAPORATOR CAMPAIGNS

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
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	(AW-102/ AP-104)	A Cold Run to complete 242-A monitoring and control system (MCS) upgrades and equipment testing, and personnel training is underway. Flush water will be discharged to either AP-104 or AW-102.
FY08	08-01 (10-01)	AP-101/AP-105	AP-104	Planning is underway to accelerate the FY10 baseline campaign into FY09. The accelerated campaign will be performed in October 2008.
FY08	08-02 (09-01)	AP-101/AP-105	AP-104/ AP-101	The baseline FY09 campaign is being accelerated into early FY09 and will be performed following Campaign 08-01 in November 2008.
FY09	09-01	AW-106	AP-101	Detailed planning for FY09 and outyear campaigns subject to retrieval activities and contract requirements. Forecast FY09 campaigns are based on preliminary planning associated with blending AZ-102.
FY09	09-02	AP-107	AP-101/ AP-107	

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

**I. Near-Term Deliverables:**

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

**II. Significant Accomplishments:**

- None to report.

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

- 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.

**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 funding for 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:**

- None to report.

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

- Complete Interim Pretreatment studies to support the “Early LAW” initiative and provide results and recommendations to ORP by September 30.

**IV. Issues:**

- None

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

### Waste Treatment and Immobilization Plant

There are 1,658 people assigned to the Waste Treatment and Immobilization Plant (WTP) Project construction site (all facilities), 1,041 manual and 617 non-manual. Overall project percent complete is 44%. Design and engineering is 74% complete and construction is 38% complete.

Fiscal year financial expenditures to date are \$591 million that, combined with approved baseline change proposals (BCP) implemented this year, result in a forecasted spend of \$742 million.

Cumulative fiscal year-to-date earned value performance for the project is shown in the table below.

	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08
BCWS	48,396	93,184	135,015	178,633	259,849	315,441	369,217	405,324	465,138	525,929
BCWP	48,645	95,247	134,615	177,802	255,241	303,880	363,561	396,581	448,239	499,924
ACWP	54,226	111,143	160,591	208,495	283,264	341,823	409,221	458,958	516,307	576,985

The WTP has a cumulative unfavorable cost variance (CV) of \$51.4 million, a decline of \$9 million from the previous month. Total schedule variance (SV) is also unfavorable at \$56.5 million—a decline of \$9.1 million from the previous month. The decline in cost and schedule performance is the result of delays in resolution of technical issues including vessel mixing and activities to support the Pretreatment Engineering Platform (PEP); and revised ground motion (RGM) work on-hold pending completion of hydrogen piping and ancillary vessel (HPAV) work. Poor engineering performance (additional design activities and revisions and increased documentation due to quality initiatives) also continues to significantly affect performance across the project, including plant equipment delays and scheduled construction activities.

Senior management meetings are continuing on a regular basis to identify and resolve issues. Work processes continue to be reviewed by Bechtel National, Inc. (BNI) in an effort to mitigate future overruns. These include receipt of vendor information, document reviews and identification, and timely analysis and closure of technical issues. Implementation of improvements is expected in October 2008 along with a comprehensive engineering work plan for elements included in the current estimate at completion.

The U.S. Nuclear Regulatory Commission (NRC) will hold a public meeting in Richland, Washington, to discuss their report and conclusions and to allow for public response. The NRC's report, documenting their review of the U.S. Department of Energy's (DOE) regulatory processes for construction of the WTP was issued to the public in August 2008, and posted on the NRC's external website. The report concluded in part, "The regulations and requirements that DOE has in place, in most cases, are similar to the NRC's. Despite the issues identified in the report, the NRC believes that the DOE program, if properly implemented, is adequate to ensure protection of public health and safety." The issues identified relate to the lack of an owner-regulator

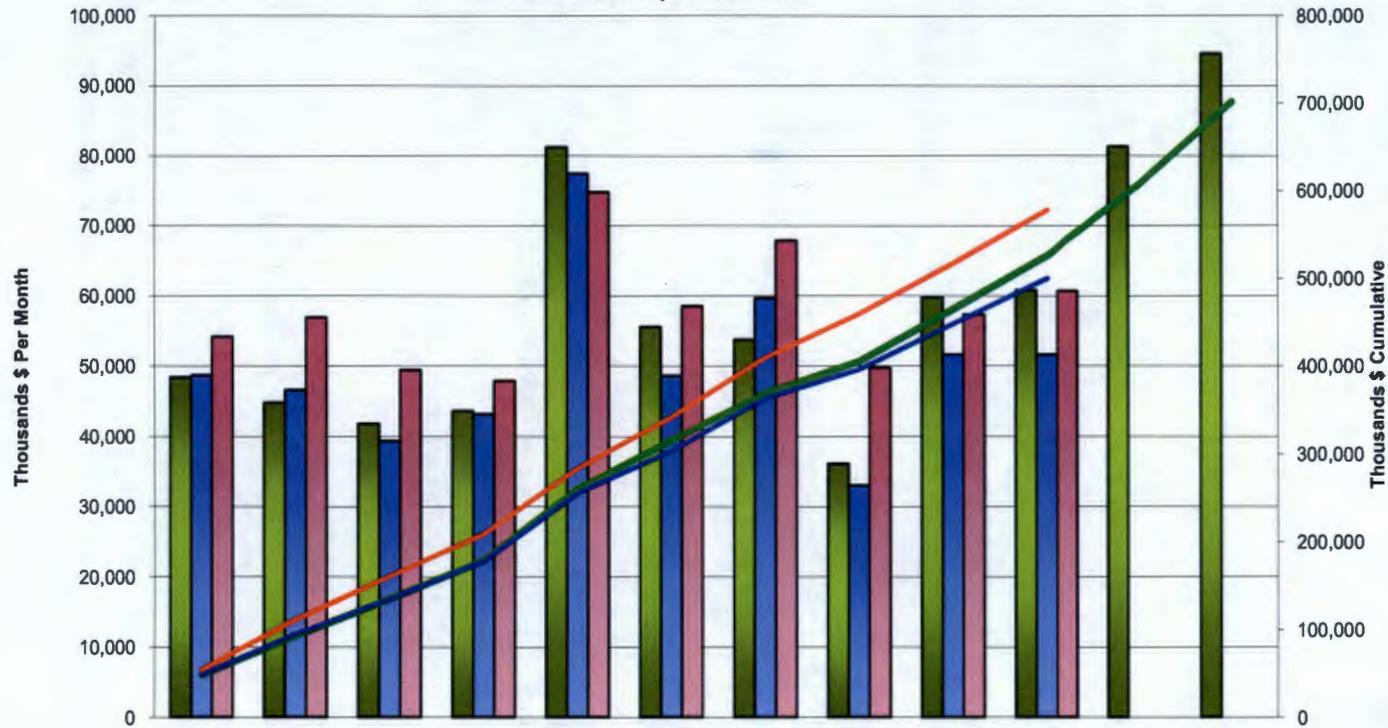
construct that DOE does not have and the degree of separation of functions to provide integrity and credibility to the project.

BNI presented the interim Broad Based Review (BBR) report to the DOE, Office of River Protection (ORP). The review phase of the BBR is scheduled to be complete in September 2008, followed by two to three months of issue resolution. The final report is scheduled to be published in December 2008. The BBR is a result of the quality issues associated with the procurement of black cell piping for the WTP.

ORP is currently working with the DOE Offices of Environmental Management (EM) and Engineering and Construction Management (OECM) personnel to resolve comments on the OECM team's draft report addressing its June 2008 management review of ORP and the WTP Contractor, BNI. The draft report was submitted for review on July 30, 2008. The OECM review focused on concerns over continued monitoring of the WTP Project, the actions ORP has taken to resolve recommendations from prior external reviews, and BNI's incorporation of corrective actions resulting from the Earned Value Management System (EVMS) Certification Reviews.

ORP is making progress evaluating and providing feedback on the calculation methodologies that BNI will use to conduct the actual analytical calculation necessary to demonstrate equivalent or superior fire protection features in protecting the final high-efficiency particulate air (HEPA) filters for the WTP. Resolution of the exposure fire methodology was reached on August 21, 2008.

**Total Project  
WTP 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)	48,396	44,788	41,831	43,618	81,216	55,591	53,776	36,107	59,814	60,791	81,311	94,593
Mthly Perf (BCWP)	48,646	46,602	39,368	43,187	77,439	48,637	59,681	33,020	51,658	51,685		
Mthly Actuals (ACWP)	54,226	56,917	49,448	47,904	74,769	58,559	67,938	49,737	57,349	60,678		
FY 08 TD Plan (BCWS)	48,396	93,184	135,016	178,634	259,849	315,441	369,216	405,323	465,137	525,928	607,238	701,832
FY 08 TD Perf (BCWP)	48,646	95,248	134,616	177,804	255,242	303,880	363,561	396,581	448,239	499,924		
FY 08 TD Actuals (ACWP)	54,226	111,143	160,591	208,495	283,264	341,823	409,760	459,497	516,846	577,524		

## 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 38%, design is 66% complete, and construction is 25% complete.

Construction activities continue at a steady pace and engineering activities are progressing although some technical issues need to be resolved in order to maintain equipment procurement schedules.

Crews successfully lowered vessel TLP-VSL-00002 inside Planning Area 22 at 0' elevation and placed 20 cubic yards of concrete for a ring beam in the HLW blending black cell. At the 0' elevation, construction forces continue installing ring beams, grillage, and liner plate in south cells; abrasive blasting in the north area; and erecting structural steel in the south area. At the 28' elevation, workers continue installing structural steel on the south side and abrasive blasting and coating beam seats. At the 56' elevation, crews continue to install commodities for slabs over the hot cell decking at the south side and the northeast as well as for walls on the west end and to stage decking on the south side.

Drawing change notices, model change requests, and numerous drawings and analysis were completed this month towards HPAV bulges, Plant Service Air System racks, and the Autosampling System. Phase I of the plan to execute design of the small bore jumpers related to the reboiler system was also completed along with clearing 27 isometric drawings from RGM nonconformance report lists.

DOE issued a letter to BNI detailing ORP concerns about lack of performance in solving the External Flowsheet Review Team (EFRT) issue M-3, "Inadequate Mixing.". DOE also provided specific performance issues and actions required to correct these inadequacies. Analysis of data from Phase 1 testing is in progress and a report is expected in September 2008. The objective of Phase 1 testing is to understand the basic mixing phenomena and relationships to allow incorporation of basic fundamentals to plan advanced testing with complex simulants.

The PEP is on schedule to initiate integrated water testing in mid-September and simulant functional tests in late September 2008. Phase 1 testing, which consists of four integrated tests, will begin in October 2008. These tests will provide critical information needed to confirm the ultrafiltration system design by demonstrating caustic leaching, oxidative leaching, solids washing, and process control strategies. The PEP 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.

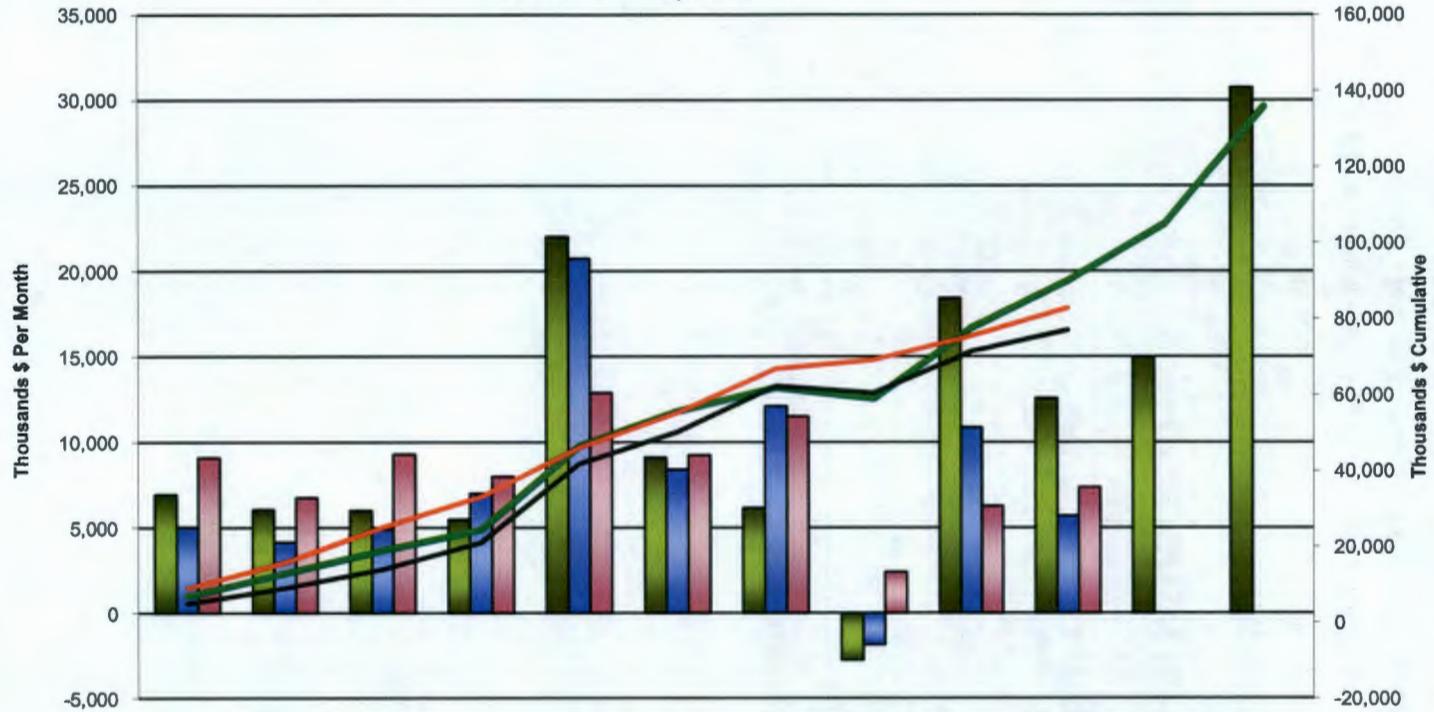
During BNI's review of the four PT Facility evaporator systems supplier's design calculations, it was noted the supplier may have under designed the thermal stresses due to a misinterpretation of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) requirements. Improper application

of code requirements would result in an overstress of evaporator nozzles and potential nozzle failure. Fabrication was 90% to 95% complete for three of the four vessels and the fabrication of the fourth vessel had not begun. ORP continues to work with BNI to resolve the issue. Based on preliminary analysis and data, re-fabrication of vessel shells is not anticipated, lowering the overall cost and schedule impact. The issue will not impact construction need dates, which are in the 2011 timeframe, and resolution will ensure vessels are certified to the ASME BPVC, inspected by a qualified ASME inspector licensed by a National Board of Boiler and Pressure Vessel Inspectors, and stamped with the ASME code symbol.

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

<b>PRETREATMENT FACILITY - 90 Day Outlook</b>		
<b>Milestone/Activity</b>	<b>Target Date</b>	<b>Status</b>
Complete Installation of all Major Steel up to 28' elevation	5/08	4/08 A
Prepare 2008 Preliminary Safety Analysis Report (PSAR) Update	5/08	3/08 A
Issue Jumper Design for Planning Area 25	7/08	7/08 A
Receive Final Multiple Overblow Load Specification	7/08	7/08 A
Complete Slab 2832 (28' elevation)	9/08	6/08 A
Complete Vessel Support Installation	9/08	8/08 A
Complete Installation of Structural Steel (56' elevation, Southwest Side)	11/08	11/08
Issue IFC Drawings for PSA Rack	11/08	12/08
Complete Third Lift Concrete Walls	12/08	11/08
Complete Wall Concrete Placements to 56' Elevation	12/08	12/08

### Pretreatment 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)	6,935	6,054	6,010	5,475	22,025	9,118	6,159	-2,747	18,422	12,575	15,003	30,747
Mthly Perf (BCWP)	5,028	4,153	4,908	6,993	20,744	8,410	12,095	-1,863	10,866	5,699		
Mthly Actuals (ACWP)	9,100	8,756	9,297	7,989	12,875	9,248	11,510	2,406	6,260	7,368		
FYTD Plan (BCWS)	6,935	12,990	19,000	24,475	46,500	55,617	61,776	59,030	77,452	90,027	105,030	135,777
FYTD Perf (BCWP)	5,028	9,182	14,090	21,083	41,827	50,237	62,332	60,469	71,336	77,035		
FYTD Actuals (ACWP)	9,100	15,856	25,153	33,142	46,017	55,266	66,776	69,181	75,442	82,809		

## High-Level Waste (HLW) Facility

Construction and design activities are progressing at the HLW Facility. HLW design and construction completions are 84% and 20%, respectively. Overall HLW Facility completion is 41%.

During August, construction crews placed over 900 cubic yards of concrete for various walls and slabs. Crews also continue installing rebar and commodities for walls and slabs, as well as stainless steel liner in a pipe chase west of the melter 2 cave. At the -21' elevation, work crews are abrasive blasting and coating in the drum transfer tunnel and southeast plant stairs; installing structural steel supports, electrical conduit, tray supports, and piping; and fabricating ductwork. At the 0' elevation, crews continue to install commodities and prepare walls for concrete placement; erect structural steel; and install a stainless steel liner. At the 14' elevation, crews are installing commodities for slabs and erecting structural steel at the west end.

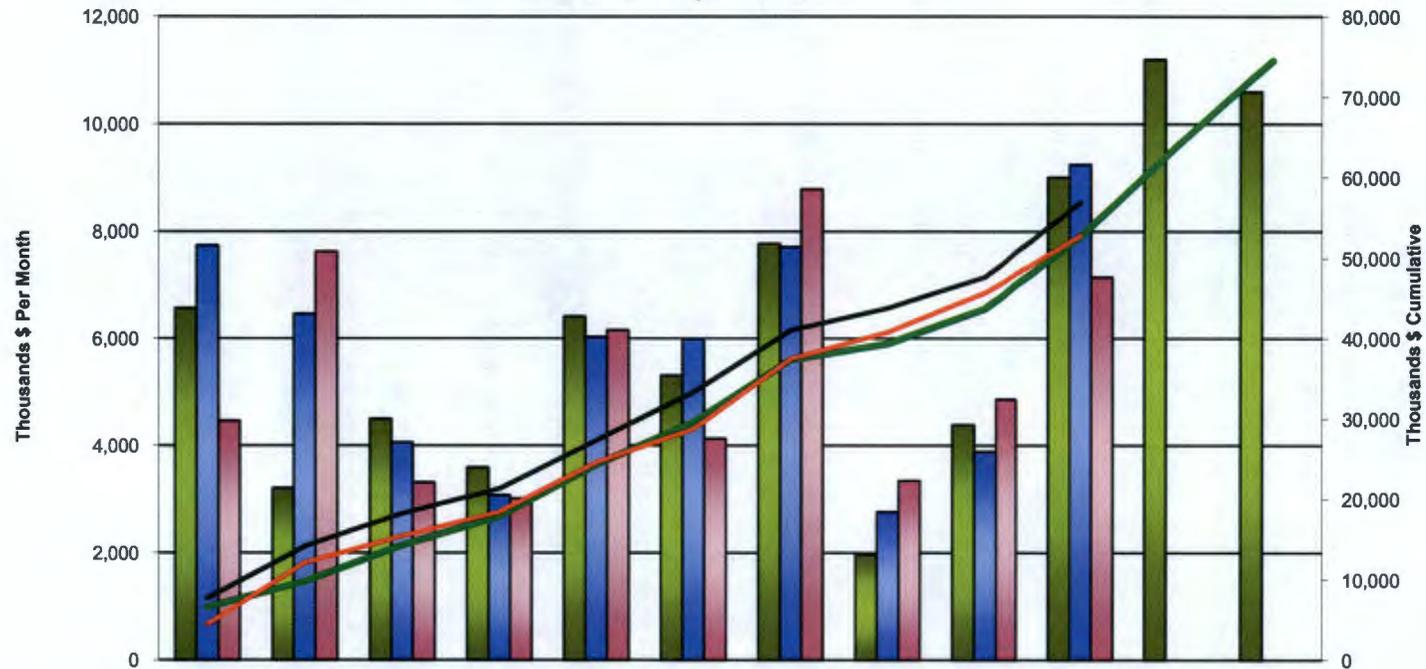
Radioactive liquid waste disposal (RLD) system vessels 7 and 8 were released from the RGM holds this month (completion of a gatepost milestone). To date, 649 of 769 isometric drawings have been cleared from RGM holds. Other engineering activities included review and completion of over 60 isometric drawings and numerous calculations including the drop load calculation for the impact absorber and the computational fluid dynamics.

Closeout activities for procurement of the melter cave vacuum system were completed this month and all items have been shipped. The melter transport system equipment technical specification was also completed this month.

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

<b>HIGH LEVEL WASTE FACILITY- 90-Day Outlook</b>		
<b>Milestone/Activity</b>	<b>Target Date</b>	<b>Status</b>
Preliminary RGM Evaluation of Melter	6/08	6/08 A
RGM Evaluation of RLD Vessels	8/08	8/08 A
Safety Systems Requirement Specification-Interlocks C2/C3 Rev.0	8/08	10/08
Erect Structural Steel & Decking Slab 2002 (+14')	9/08	6/08 A
Issued for Construction-Piping Isometrics for Breathing Service Air	11/08	10/08
Place Elevated Slab 2001 (+14') Annex	12/08	7/08 A

### 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
Mthly Plan (BCWS)	6,569	3,208	4,498	3,594	6,415	5,310	7,772	1,972	4,387	9,013	11,205	10,607
Mthly Perf (BCWP)	7,740	6,457	4,060	3,074	6,030	5,991	7,709	2,762	3,888	9,252		
Mthly Actuals (ACWP)	4,466	7,623	3,309	3,015	6,156	4,130	8,786	3,347	4,864	7,147		
FYTD Plan (BCWS)	6,569	9,777	14,275	17,869	24,284	29,594	37,366	39,337	43,725	52,737	63,943	74,549
FYTD Perf (BCWP)	7,740	14,197	18,257	21,331	27,362	33,353	41,061	43,824	47,711	56,963		
FYTD Actuals (ACWP)	4,466	12,089	15,399	18,413	24,569	28,699	37,486	40,833	45,697	52,844		

## Low-Activity Waste (LAW) Facility

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless steel containers that will be disposed onsite in the Integrated Disposal Facility. Overall facility percent complete is 69%, design is 94%, and construction is 61%.

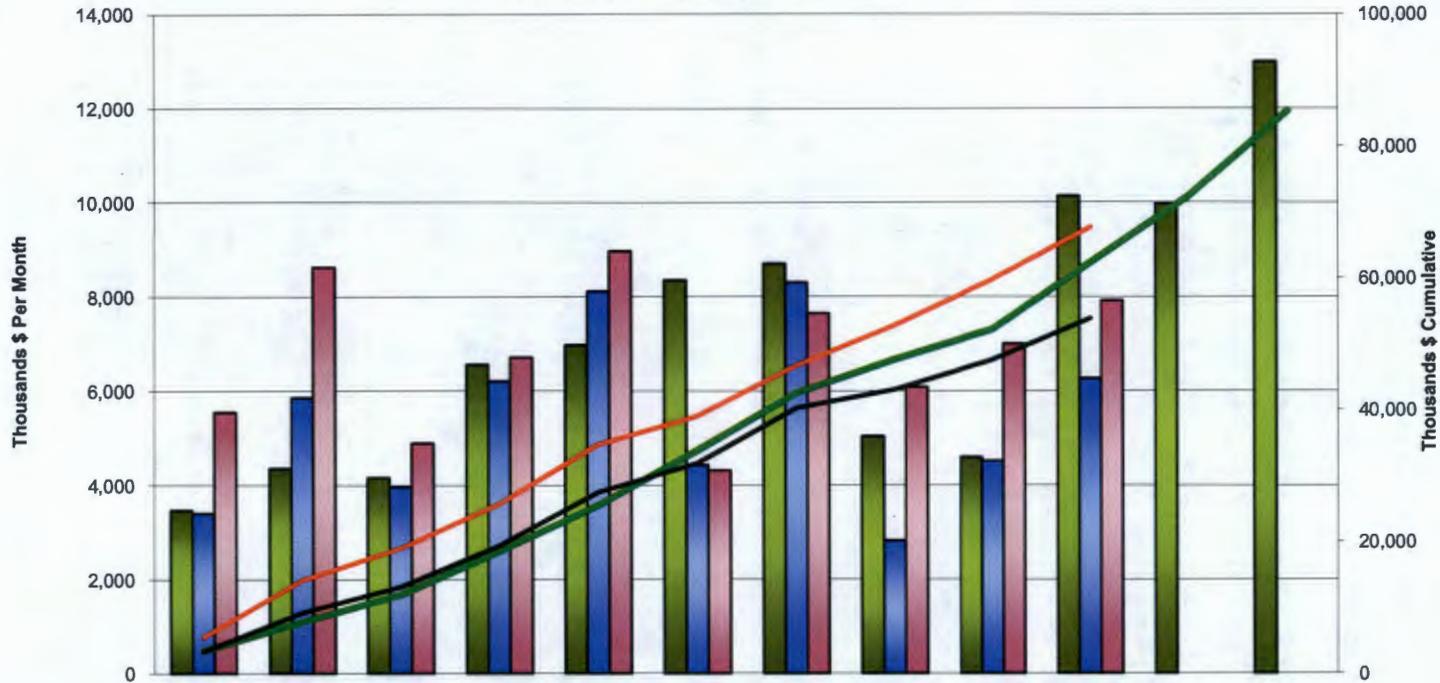
Construction activities this month included placement of the mudmat for the Breathing Service Air System at the southeast corner of the facility. Installation of reinforcement steel for the basemat on the south side of the facility has also been initiated. Crews finished applying epoxy floor covering on the +28' elevation concrete floor above the effluent cell and process cell #3 and fireproofing on the first floor in the annex. Other activities included installation of nelson studs on the export bay beams and structural steel members for glass former hoppers on the +58' elevation; grillage clips for the attachment of insulation, and installation of platform steel over the container conveyors.

Engineering activities in August included the release of eight vendor submittals for standardized bogies; three vendor submittals for container lidding equipment welding procedures; and delivery of all pour cave cooling panels to the construction site. Four master slave manipulators for the laboratory in-cell handling system were shipped this month and an initial order was placed for variable speed drives. The factory acceptance test for the container pour handling bogie system was successfully completed this month and a system description for the melter process system was also completed.

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

<b>LOW ACTIVITY WASTE FACILITY- 90 Day Outlook</b>		
<b>Milestone/Activity</b>	<b>Target Date</b>	<b>Status</b>
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	3/08 A
Complete Export Bay Structural Steel	5/08	5/08 A
Deliver Remaining Process Bulges	6/08	6/08 A
Annex Facility "Closed In"	7/08	6/08 A
Deliver Repaired RLD Process Bulge	8/08	10/08
Civil/Structural Design Complete	9/08	7/08A
Electrical Design Complete	9/08	7/08A
Deliver Melter Off-Gas Spools 1B&1C	10/08	9/08
Complete Remaining Iso Design	12/08	12/08
Deliver Melter #1 Base	12/08	11/08

### 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	8,707	5,039	4,593	10,136	9,980	12,997
Mthly Perf (BCWP)	3,408	5,851	3,964	6,207	8,115	4,426	8,309	2,829	4,514	6,260		
Mthly Actuals (ACWP)	5,554	8,632	4,887	6,713	8,973	4,318	7,654	6,081	7,005	7,919		
FYTD Plan (BCWS)	3,471	7,830	11,993	18,558	25,533	33,885	42,592	47,631	52,224	62,360	72,340	85,337
FYTD Perf (BCWP)	3,408	9,259	13,224	19,431	27,546	31,972	40,281	43,110	47,624	53,884		
FYTD Actuals (ACWP)	5,554	14,186	19,073	25,786	34,759	39,077	46,730	52,811	59,816	67,735		

## Analytical Laboratory (LAB)

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 41%, design is 89%, and construction is 51%.

Millwrights are working on installation of the monorail in the C-3 maintenance area, erecting metal stud partition walls and rake flashing on the roof. Construction forces continue to install stack grating and handrails; trolley trough and partition walls in the hot cell; cable tray supports east of the hot cells; piping, ductwork; and firewater piping. Sections of the LAB ventilation ducting are being leak tested.

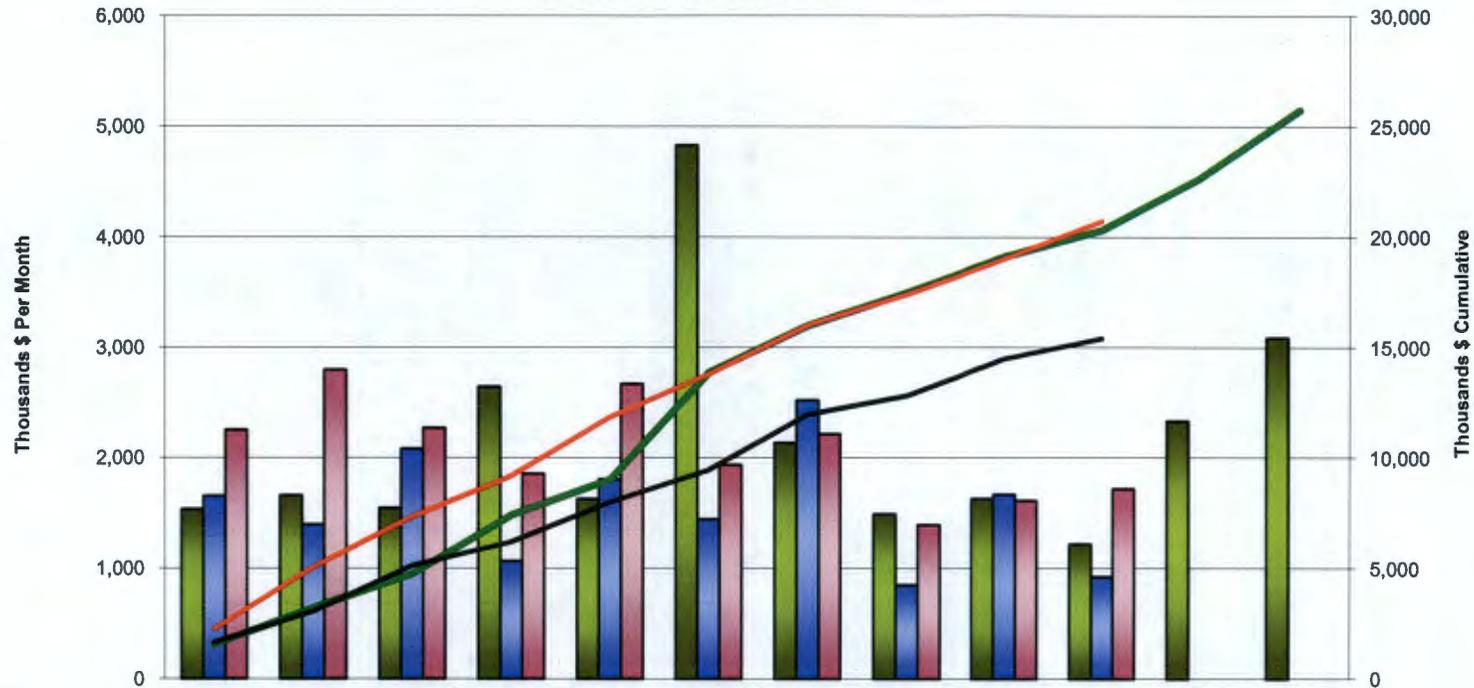
Workers have the stairway on the southwest side of the hot cell in place, and continue to adjust and secure in place.

Engineering activities this month included the issuance of the plant vacuum air system overprotection calculation, completion of the Civil, Structural, Architectural Title II design, hatch design for the C5 pit, and architectural specialties/laboratory casework subcontract formation support. The initial order for variable speed drives was also issued along with two heating, ventilation, and air conditioning (HVAC) penetration schedules. Numerous procurement datasheets have been issued for the combined facilities including gauges, transmitters, valves, vents, and instruments.

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

<b>ANALYTICAL LABORATORY- 90 Day Outlook</b>		
<b>Milestone/Activity</b>	<b>Target Date</b>	<b>Status</b>
Complete Structural Steel Frame	11/07	10/07 A
Complete Instrument Database	1/08	4/08 A
Issue Final C&I Conduit Design	4/08	4/08 A
Deliver Master Slave Manipulators	4/08	11/08
Complete Structural Steel Fireproofing	5/08	5/08 A
Complete Laser Ablation Site Accept Testing	7/08	7/08 A
Complete 65% HVAC QL Ducts & Support Installation	9/08	9/08
Complete 55% HVAC CM Duct and Support Installation	12/08	12/08

### 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
Mthly Plan (BCWS)	1,534	1,659	1,545	2,643	1,627	4,834	2,139	1,491	1,629	1,219	2,334	3,084
Mthly Perf (BCWP)	1,654	1,395	2,079	1,066	1,804	1,446	2,520	849	1,666	923		
Mthly Actuals (ACWP)	2,253	2,796	2,269	1,854	2,667	1,937	2,216	1,394	1,614	1,720		
FYTD Plan (BCWS)	1,534	3,194	4,739	7,381	9,008	13,842	15,980	17,471	19,100	20,319	22,653	25,737
FYTD Perf (BCWP)	1,654	3,049	5,127	6,193	7,997	9,443	11,963	12,813	14,479	15,402		
FYTD Actuals (ACWP)	2,253	5,049	7,317	9,171	11,838	13,775	15,991	17,385	18,999	20,719		

## Balance of Facilities (BOF)

BOF provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. Overall facility percent complete for BOF is 50%, design/engineering is 74%, and construction is 63%.

Construction activities in August included receipt and placement of the Borax Silo for the Glass Former Facility. Crews also completed formwork and placed 20-cubic yards of concrete around the south Fire Service Water pump house. Work continues on backfilling the Liquid Effluent Retention Facility (LERF) lines north of the PT Facility, with approximately 75 linear feet to go. Installation of insulation over epoxy coating was also completed at two locations on the LERF lines north of the PT Facility.

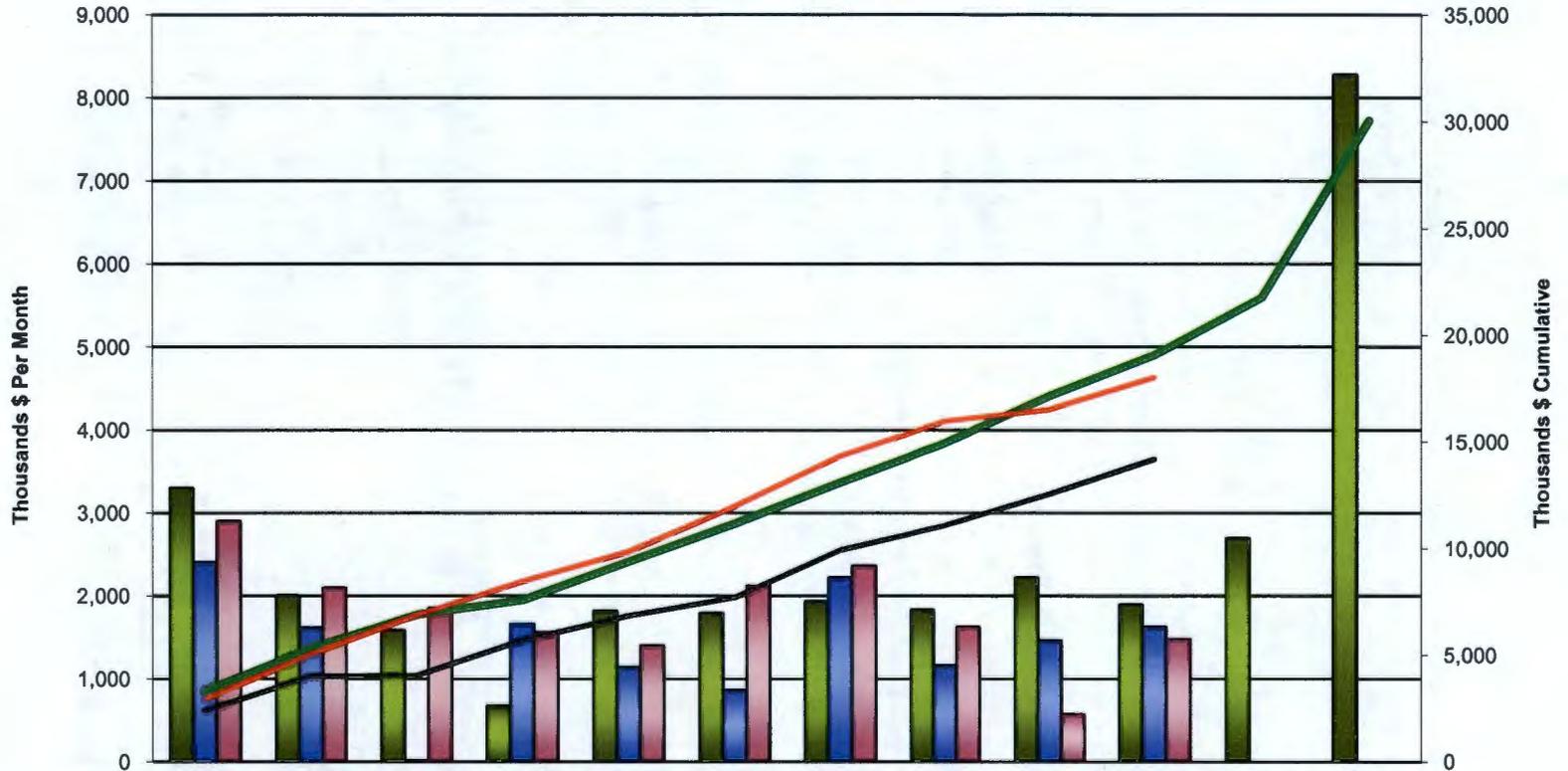
Installation of pipe-in-pipe waste transfer lines also continues. The lines are currently in place from the entrance of the PT Facility to the facility's southwest corner. Propane vaporizers and pumps are being installed at the temporary propane tank west of the Steam Plant and crews continue to backfill cathodic protection west of the PT Facility. In the Water Treatment Plant, pipefitters continue to install piping while electricians are working on electrical panel boxes. In the Chiller Compressor Plant, electricians continue to install conduit and pull in cable. BNI also completed an eight-week walkdown, prior to turnover, of the cathodic protection system.

Other activities this month included the shipment of three backflow preventers for the domestic potable water system, issuance of Glass Former Reagent block diagrams, and issuance of electrical area classification drawings for the glass former storage facility, and the release of various isometric drawings.

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

<b>BALANCE OF FACILITIES - 90 Day Outlook</b>		
<b>Milestone/Activity</b>	<b>Target Date</b>	<b>Status</b>
Deliver GFSF Bins, Silos and Steel	5/07	9/08
Complete GFSF Silo/Tanks (17) Sets	5/07	9/08
Issue Rack #5A Pipe Fab Isometrics	5/08	5/08 A
Complete LAW Melter Slab	6/08	1/08 A
Complete Steam Plant Construction	9/08	4/08 A
Complete LAW Melter Slab	6/08	1/08 A
Complete Steam Plant Construction	9/08	4/08 A
Award 4.16KV Emergency Diesel Generator PO	10/07	10/08
Complete 90% Chiller Compressor Pipe Installation	12/08	12/08

### 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
Mthly Plan (BCWS)	3,305	2,005	1,587	676	1,819	1,792	1,934	1,834	2,223	1,896	2,698	8,285
Mthly Perf (BCWP)	2,408	1,619	20	1,663	1,145	861	2,224	1,162	1,465	1,630		
Mthly Actuals (ACWP)	2,904	2,102	1,854	1,564	1,406	2,127	2,366	1,629	572	1,479		
FYTD Plan (BCWS)	3,305	5,311	6,898	7,574	9,393	11,185	13,119	14,953	17,176	19,072	21,770	30,054
FYTD Perf (BCWP)	2,408	4,028	4,048	5,711	6,856	7,717	9,941	11,102	12,568	14,198		
FYTD Actuals (ACWP)	2,904	5,006	6,860	8,424	9,830	11,957	14,322	15,951	16,524	18,003		

<b>KEY COMMODITY QUANTITY PROGRESS</b>				
<b>Commodity</b>	<b>Unit of Measure</b>	<b>Current Planned at Completion Quantity</b>	<b>Installed-to-Date (July 2008)</b>	<b>Percent Complete</b>
Concrete	1000 cy	260,500	176,000	67.6%
Structural Steel	1 ton	35,915	11,793	32.8%
Piping (in buildings)	1000 lf	888,550	131,290	14.8%
Piping (underground)	1000 lf	124.03	93.49	75.4%
Conduit (in buildings)	1000 lf	782,650	82,160	10.5%
Conduit (underground)	1000 lf	187.32	177.58	94.8%
Cable Tray	1000 lf	96,180	17,430	18.1%
Cable and Wire	1000 lf	4,743,230	198,170	4.2%

**Waste Treatment Plant Project - Percent Complete Status  
Through July 2008**

(Dollars - Millions)	Overall Facility Percent Complete			Design/Engineering			Construction		
	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities									
Low-Activity Waste	1,421.2	974.7	69%	123.9	116.5	94%	224.3	136.9	61%
Analytical Lab	557.0	230.5	41%	35.6	31.8	89%	61.9	31.5	51%
Balance of Facilities	919.5	455.4	50%	61.0	45.1	74%	173.1	109.1	63%
High-Level Waste	2,476.7	1,009.7	41%	197.0	165.7	84%	440.0	87.5	20%
Pretreatment	4,062.8	1,532.0	38%	327.9	214.8	66%	727.1	178.8	25%
Plant Wide/Gen Services	incl. above	incl. above	incl. above	622.8	434.3	70%	1,658.0	697.4	42%
Undistributed Budget	7.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Total WTP</b>	<b>9,444.7</b>	<b>4,202.3</b>	<b>44%</b>	<b>1,368.2</b>	<b>1,008.2</b>	<b>74%</b>	<b>3,284.4</b>	<b>1,241.2</b>	<b>38%</b>

Source: WTP Contract Performance Report