

Office of River Protection

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Tri-Party Agreement  
Manager Milestone Review Meeting  
December 16, 2008



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

November 2008

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**Agenda**

Office of River Protection  
Tri-Party Agreement  
Manager Milestone Review Meeting  
2440 Stevens Center, Conference Room 1200  
December 16, 2008  
9:00 a.m. – 11:30 a.m.

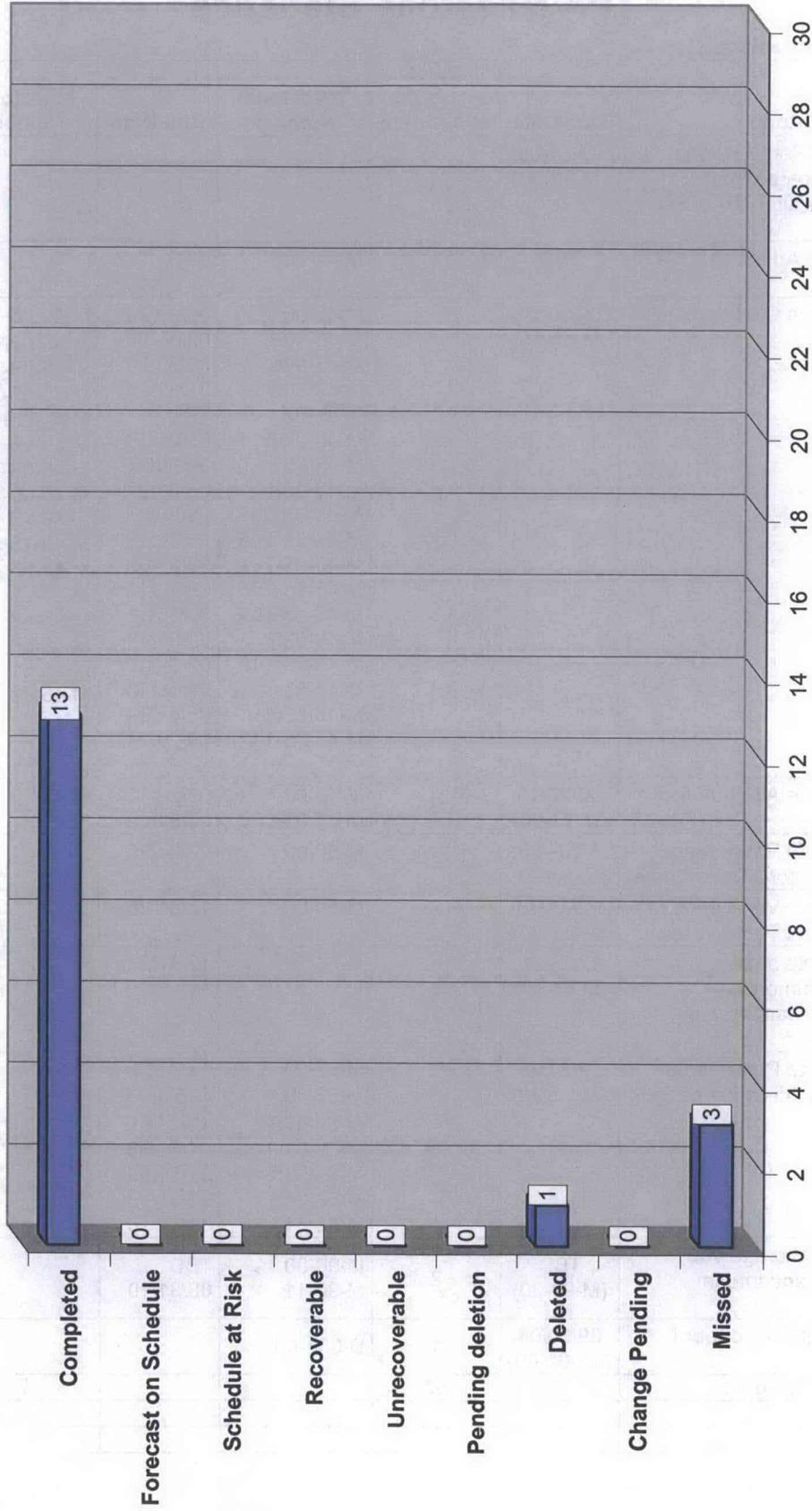
Page	Topic	Leads	Time
3	TPA Milestone Statistics	Woody Russell Suzanne Dahl /Jeff Lyon	9:00
54	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober /Joe Caggiano	9:05
56	M-45-00, Complete Closure of All Single-Shell Tank Farms	Chris Kemp /Jeff Lyon	9:15
66	Interim Stabilization Consent Decree	John Long /Nancy Uziemblo	9:30
67	In Tank Characterization and Summary	John Long /Michael Barnes	9:40
68	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Ben Harp /Les Fort	9:45
70	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	9:50
71	M-62-08, M-62-11 Bulk Vitrification/ Supplemental Technologies	Ben Harp /Ed Fredenburg	9:55
	<b>BREAK</b>		
21	FY 2007 ORP TPA Cost & Schedule Performance (CHG)	Janet Diediker Ed Fredenburg /Jeff Lyon	10:00
73	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
M-20-00, Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	12/31/08 (M-20-00)	0				
M-42-00, Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-45-00, Complete Closure of all SST Farms	09/30/24 (M-45-00)	35	M-45-00 M-45-00B M-45-00C M-45-00D M-45-02 M-45-02O M-45-05 M-45-05A M-45-05-T05 M-45-05-T06 M-45-05-T07 M-45-05-T08 M-45-05-T09 M-45-02P M-45-05-T10 M-45-05-T11 M-45-02Q M-45-05-T12	09/30/24 09/30/06 09/30/06 01/31/08 TBD 03/01/10 09/30/18 03/31/07 09/30/07 09/30/08 09/30/09 09/30/10 09/30/11 03/01/12 09/30/12 09/30/13 03/01/14 09/30/14	M-45-05-T13 M-45-02R M-45-05-T14 M-45-05-T15 M45-02S M-45-06 M-45-06-T03 M-45-06-T04 M-45-13 M-45-15 M-45-56 M-45-58 M-45-59 M-45-60 M-45-61 M-45-62	09/30/15 03/01/16 09/30/16 09/30/17 03/01/18 09/30/24 03/31/12 03/31/14 06/30/11 06/30/11 TBD 12/31/08 TBD 12/31/08 12/31/10 07/31/12
M-47-00, Complete All Work for Phase 1 Operations	02/28/18 (M-47-00)	3	M-47-00 M-47-03A	02/28/18 03/31/09	M-47-06	06/30/10
M-50-00, Complete Pretreatment Processing of Hanford Tank Waste	12/31/28 (M-50-00)	1	M-50-00	12/31/28		
M-51-00, Complete Vitrification of Hanford High Level Tank Waste	12/31/28 (M-51-00)	1	M-51-00	12/31/28		
M-61-00* (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/28 (M-61-00)	1	M-61-00	12/31/28		
M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	12/31/28 (M-62-00)	14	M-62-00 M-62-00A M-62-07B M-62-01Q M-62-01R M-62-01S M-62-01T	12/31/28 02/28/18 12/31/07 07/31/08 01/31/09 07/31/09 01/31/10	M-62-08 M-62-09 M-62-01U M-62-01V M-62-10 M-62-01W M-62-11	06/30/06 02/28/09 07/31/10 01/31/11 01/31/11 07/31/11 06/30/07
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	2	M-90-00 M-90-11	TBD 08/31/10		
Interim Stabilization Consent Decree	09/30/04 (D-001-00)	1	D-001-00			
<b>Total Active Milestones:</b>		<b>59</b>				

### FY 2006 MILESTONE PERFORMANCE



## Fiscal Year 2006 Tri-Party Agreement Milestone Status

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

## Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-048-07A-B	Completion of construction for the 241-AP-106A central pump pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-B.	3/31/06	3/30/06								
M-048-14	Submit Written Integrity Report For The Double-Shell Tank System.	3/31/06	3/31/06								
M-047-05A	Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial low-activity waste feed tank (other than AZ-101 or AZ-102).	4/30/06	02/2/05								
M-45-55-T04	Submit to Ecology for review and comment a draft Field Investigation Report combining the results of field investigations and analysis for WMAs A-AX, C and U. As part of the Phase 2 Vadose Zone project renegotiations being developed, this target milestone scope has been included in M-45-55 Phase 1 rollup documentation due in 1/08.	4/30/06								X	

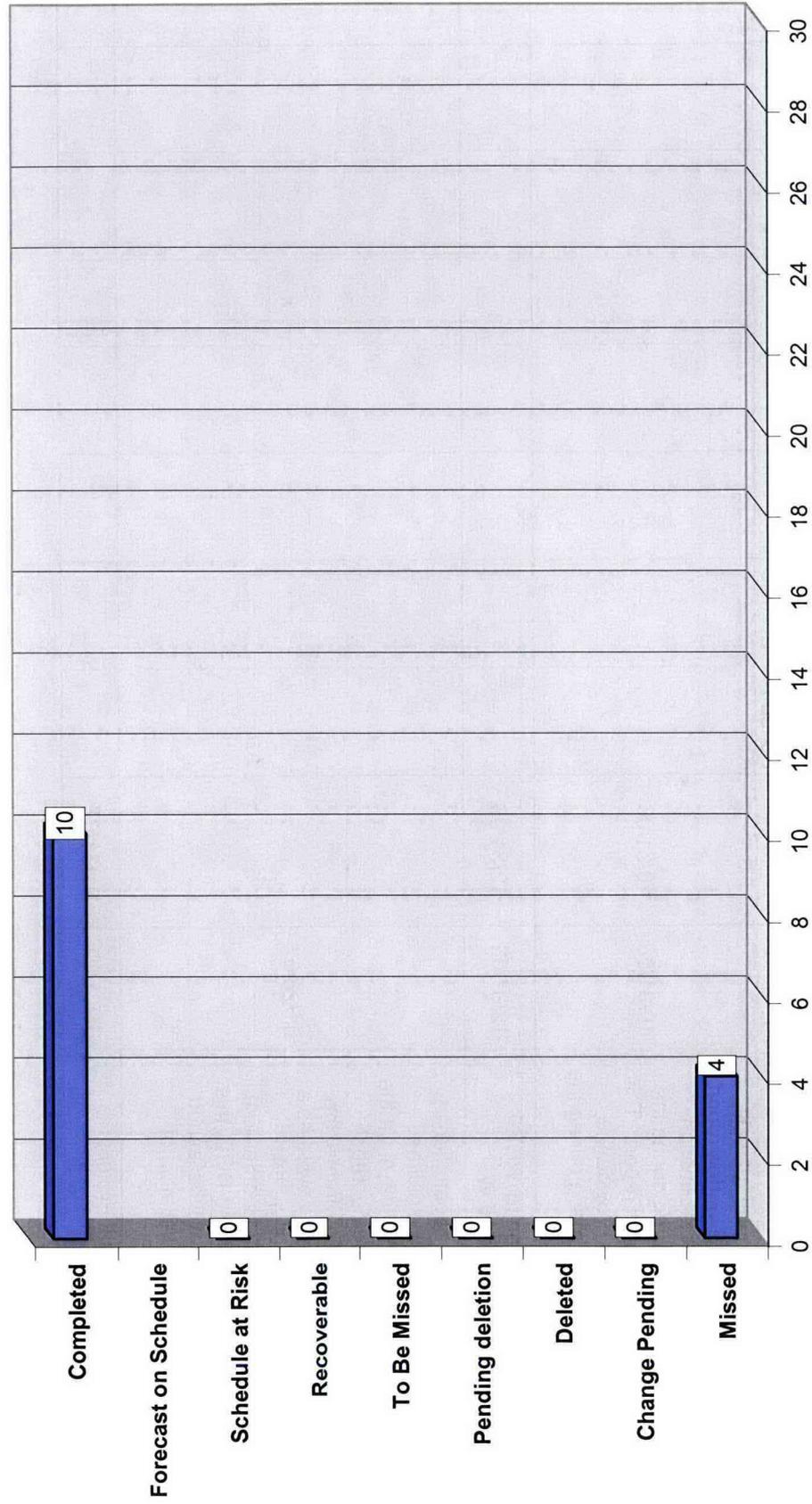
## Fiscal Year 2006 Tri-Party Agreement Milestone Status

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		Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk					
D-001-00-R30	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/06	10/31/06							
M-062-03	Submit DOE Petition for RCRA Delisting of Vitrified HLW.	12/31/06	12/31/06							
M-045-00C-A	Ecology and DOE negotiations under this milestone shall be completed within 120 days. In the event the parties do not reach agreement within timeframe, the negotiations will be resolved as a resolution of dispute via final determination. Unless otherwise agreed by Ecology and DOE, this final determination will be issued within 150 days of initiation of negotiations.	01/28/07					X			
M-062-01N	Submit Semi-Annual Project Compliance Report.	01/31/07	01/31/07							

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

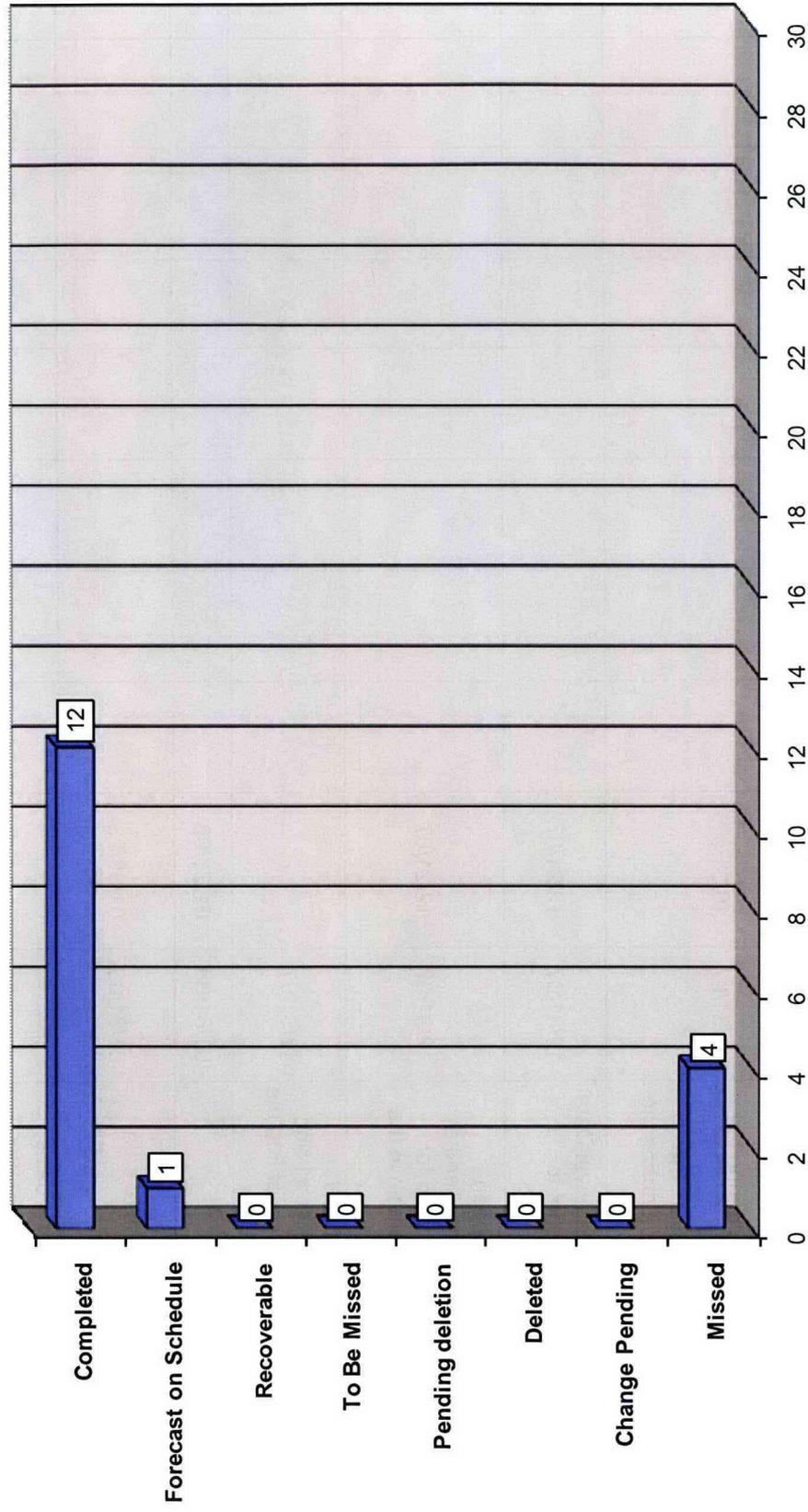
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R31	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred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

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

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-56C	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/07	07/31/07								
D-001-00-R33	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/07	07/30/07								
M-062-010	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 Vitriification Facility melter #1 and complete move of #1 melter into the HLW Vitriification 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								

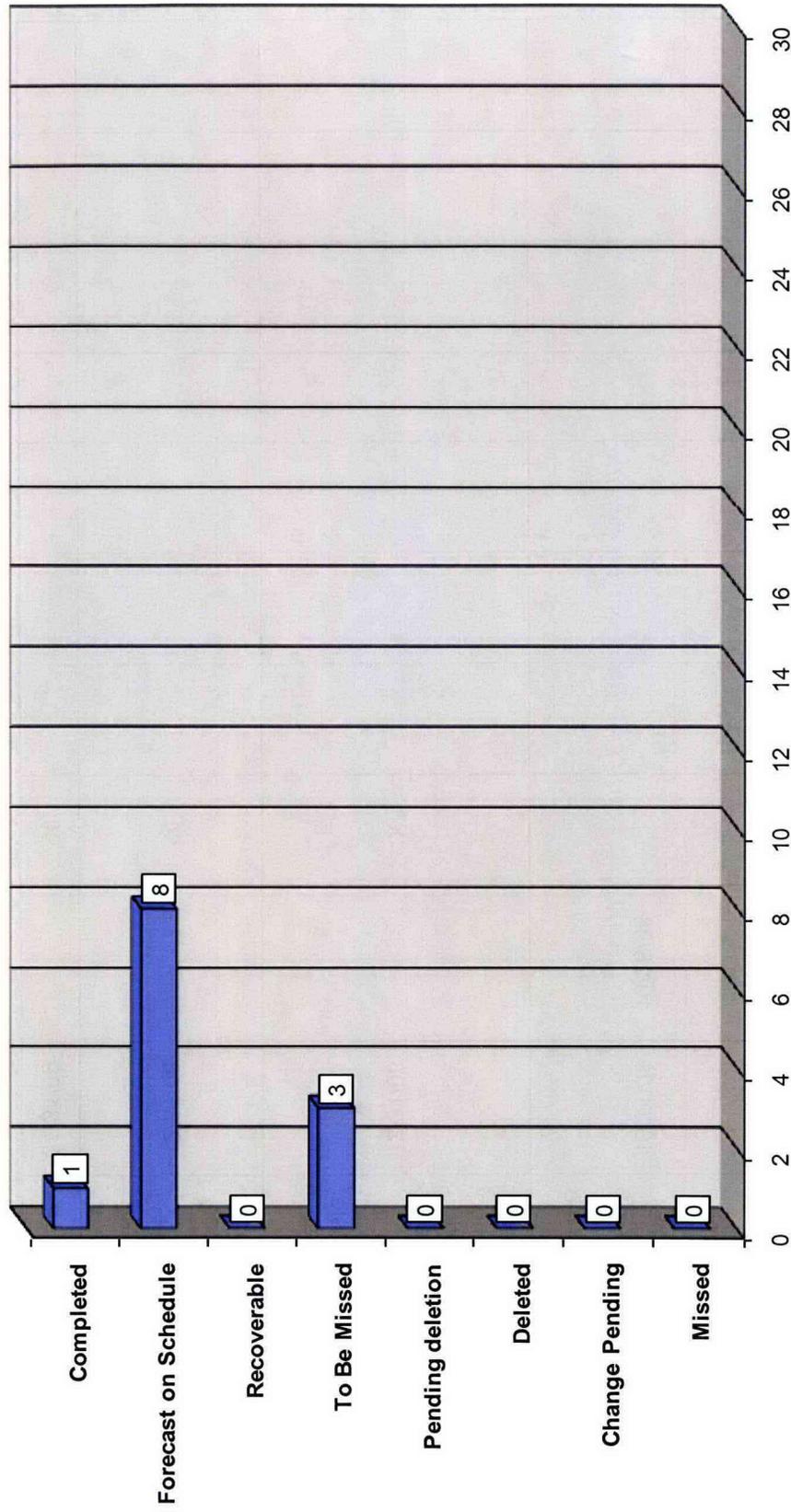
### Fiscal Year 2008 Tri-Party Agreement Milestone Status

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								

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

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

### FY 2009 MILESTONE PERFORMANCE



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

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R38	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/08	10/28/08								
M-045-58	Submit to Ecology for Review and Approval as an Agreement Primary Document Phase 2 Master Work Plan that describes the proposed approach for the completion of Corrective Action to meet final closure requirements in the Waste Management Areas as described in Appendix I, Section 2.3	12/31/08		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							

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

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

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

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

## EXECUTIVE SUMMARY ON TANK FARMS EARNED VALUE REPORTING

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

The company's current month (CM) schedule variance (SV) was a positive \$3.8M with a schedule performance index (SPI) of 1.14 and a favorable cost variance (CV) of \$9.5M with a cost performance index (CPI) of 1.43. The CTD favorable SV increased from \$66.2M to \$70.0M and the favorable CTD CV increased from \$58.2M to \$67.7M.

The overall contract-to-date (CTD) cost and schedule performance remains outstanding. The CTD SV is a favorable \$70.0M with a SPI of 1.08 and a CV of \$67.7M with a CPI of 1.08.

### Schedule Variance Analysis

In September 2008, the CM SV was a positive \$3.8M. The CTD favorable SV increased from \$66.2M to \$70.0M. The CM favorable SV of \$3.8M is primarily due to 1) significant progress earned on accelerated work for Tank C-110 Retrieval (design and engineering, construction and demobilization, testing, startup and readiness, and the start of operations [completed transfer of an estimated 51,800 gallons, or 29.1 percent]; 2) progress earned on completion of all remaining field activities for the Hose-in-Hose Transfer Line (HIHTL) Disposition Project); 3) completion of removal of pumpable liquids from Tank S-302 (fieldwork, readiness and pumping); and 4) progress earned on the preparation for the next two 242-A Evaporator campaigns.

The favorable CM SVs are partially offset by unfavorable variances related to 1) due to budget in September for work completed early (direct push sampling, Surface Geophysical Exploration (SGE), and additional interim barrier work in TY and S/SX Farms); 2) for budget in the current month for work completed early (242-A Evaporator Heating, Ventilation, and Air-Conditioning [HVAC] Upgrades); and 3) budget in the current month for work completed early (Tank C-109 Hard Heel Retrieval).

The CTD positive SV of \$70.0M is due to 1) accelerated work on C-104 and C-110 retrievals, C-108 and C-109 retrievals; 2) accelerated work on Demonstration Bulk Vitrification System (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) Construction of Double-Shell Tank (DST) Transfer Systems for Project W-314 accelerated work on completion and turnover of AN, AP, AW, SY Farms electrical and ventilation exhausters 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, DST-to-DST Transfers, and 242-A Evaporator Operation and Maintenance (preparations for the next two campaigns); and 6) accelerated work on the AY/AZ Farm Upgrades (AZ-102 pump replacement and installation).

These favorable CTD SVs are partially offset by minor unfavorable variances for 1) due to the delay in buoyant displacement gas release event [BDGRE]; work not needed due to delay in Tank C-110 Retrieval); 2) deferral of Flow Indicator Upgrades for the 242-A Evaporator and exhauster long lead procurement and fabrication, and AP Farm Upgrade Projects (deferral of AP-101 slurry jumper installation and AP-103 in-process leak check/level rise); and 3) deferral of Expert Panel Oversight Committee activities for the Single-Shell Tank (SST) Integrity Project.

**Action:** The TFC work was concluded this month and remaining work transitioned to the Tank Operations Contractor (TOC). Fiscal year 2009 and outyear work is being prioritized and re-planned by the TOC.

### **Cost Variance Analysis**

The CM CV of \$9.5M is primarily due to 1) progress earned in the CM and cost efficiencies on Tank C-110 Retrieval (completed construction, testing, readiness, and operations including pumping of 29.1% of the waste); 2) less than planned labor and crane and rigging support and labor costs less than planned rates for Tank Sampling activities; 3) resources assigned to support higher priority work in Essential Services and general miscellaneous cost efficiencies in Base Operations; 4) cost efficiencies in Contract Transition, Information Resource Management (IRM) (including Program and Requirements Management and desktop support costs less than planned), efficiencies in Standards and Compliance (resulting from reallocation of manpower to Core Training and Core Procedures), and miscellaneous other cost efficiencies including River Protection Project (RPP) Baseline Integration Support, Finance, and Production Planning and Control; 5) cost efficiencies on work for removal and disposal of HIHTLs; 6) progress on the 242-A Evaporator Operation and Maintenance for the next two accelerated campaigns; 7) labor liquidations (work for others higher than planned); and 8) miscellaneous efficiencies from general labor underruns.

The current month favorable CVs are partially offset by minor unfavorable variances for 1) Project Support, for Labor Relations costs to close out the contract; 2) Miscellaneous Costs and Services and Technical Library; 3) Project W-314 Phase 2 Startup, Testing, and Turnover of AN and AW Farm HVAC exhausters (troubleshooting and repair of test deficiencies during the operational acceptance testing [OAT] and software upgrades); 4) costs to complete the TY Farm Barrier Activities; and 5) complete the S-302 pumping activities and implementation of corrective actions from the Tank S-102 spill event) and less than planned Advanced Technologies and Laboratories International, Inc. (ATL) Readiness to Serve costs.

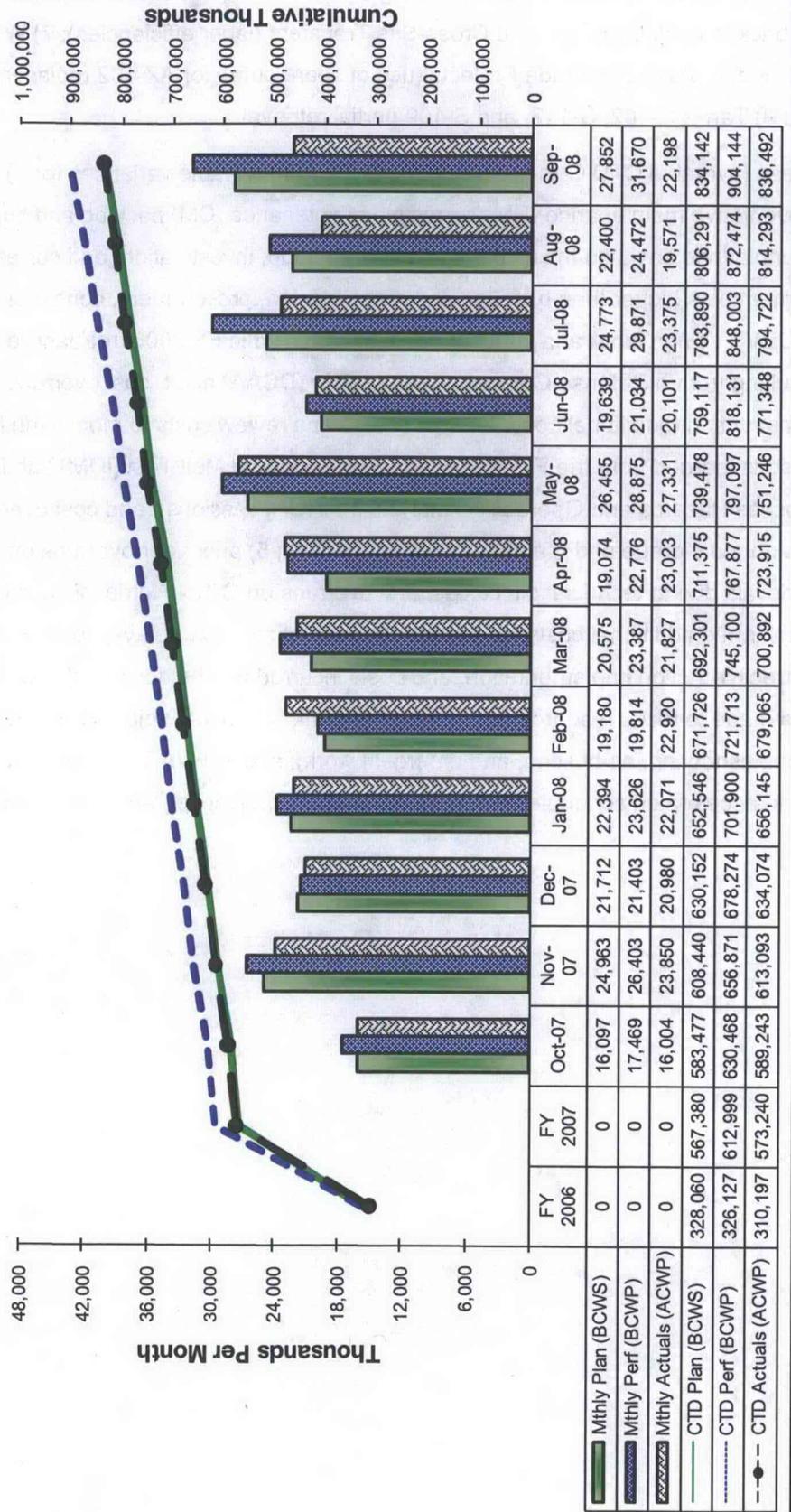
The CTD CV of \$67.7M is primarily due to variances for 1) cost savings and efficiencies in Site Wide, Shared, and Miscellaneous Services as well as Labor Liquidations; 2) cost savings and efficiencies in many areas including Waste Feed Operations, Engineering Program, Industrial Health and Safety/Health and Safety Plan (HASP), Quality Assurance (QA) Program, Finance, RPP Baseline Integration Support, IRM, Contract Transition Planning, Legal Counsel, and occupancy costs; 3) planned dedicated and matrixed staff for 222-S Laboratory Base Services and labor rates greater than actual costs, revised waste volume projections and ATL Readiness to Serve costs less than planned; 4) efficiencies in preparation and retrieval work for C-100 Tank Retrievals (Tanks C-109, C-108, and C-110); 5) Integrated Disposal Facility construction and engineering less than

planned; 6) DST-to-DST Transfers (using shift personnel instead of overtime and the same planning package for back to back transfers, and Cross-Site Transfers (labor efficiencies); 7) WTP electricity costs less than planned; 8) AY/AZ Upgrade Projects (use of spare pump for AZ-102 replacement instead of new procurement); and 9) Tanks S-102, S-112, and S-109 partial retrieval.

These favorable CTD CVs are partially offset by unfavorable variances for 1) costs to reduce and maintain the preventative maintenance (PM)/corrective maintenance (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, cost overruns on DBVS Engineering during Construction (additional costs for final design and review costs to modify the facility design to incorporate lessons learned from the FY 2007 Integrated Dryer and Melt Test [IDMT] and design changes identified in the Process Hazards and Operability Analysis [PRHOA] sessions), and cost overruns on DBVS Procurement (for unplanned storage and maintenance of equipment; 5) prior year overruns on C-103 and C-201 to C-204 retrievals due to technical difficulties, and overruns on C-104 Retrieval construction and procurement (unplanned additional costs for a second construction crew, delays, costs associated with the impacts of S-102 Corrective Action implementation, and costs incurred for shutdown and safe standby work once the decision was made to focus resources on retrieval of Tank C-110; 6) Project W-314 Upgrades and Turnover (troubleshooting, as-builtting, and emergent work); and 7) HVAC Upgrade costs due to complexity, emergent work, accelerated schedule and concurrent facility project upgrades, and corrective/maintenance activities.

# CURRENT MONTH/CONTRACT-TO-DATE PERFORMANCE

## CH2M HILL Contract-to-Date Performance (\$000) 10/2005 - 09/2008



## CURRENT MONTH PERFORMANCE CHART

CH2M HILL Hanford Group, Inc.

CURRENT MONTH PERFORMANCE MEASUREMENT - 09/2008  
BY WORK BREAKDOWN STRUCTURE

Dollars in Thousands

WBS	TITLE	Budgeted Cost			Current Month			Variance		
		Work Scheduled	Work Performed	Actual Cost Work Performed	Schedule	SV %	Cost	CV %		
									Work Scheduled	Work Performed
5.7	<b>BASE OPERATIONS - Excluding 5.07.02</b>	14,918.6	14,080.3	10,219.7	-838.3	-5.6%	3,860.6	27.4%		
5.07.02	Env/TPA Milestone Achievement	1,616.3	1,853.0	1,274.8	236.7	14.6%	578.2	31.2%		
	<b>TOTAL BASE OPERATIONS</b>	16,534.9	15,933.3	11,494.5	-601.6	-3.6%	4,438.8	27.9%		
5.8	<b>RETRIEVE AND CLOSE - Excluding foll. WBS Elements</b>	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%		
5.08.02	WTP Feed Delivery Program	761.3	761.4	352.0	0.1	0.0%	409.4	53.8%		
5.08.03	DST Retrieval Program	0.0	0.0	-2.8	0.0	0.0%	2.8	0.0%		
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	0.0	38.5	258.5	38.5	325.3%	-220.0	-571.4%		
5.08.04.02	Upgrade Transfer System (E-525)	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%		
5.08.05	Retrieval / Closure Program	5,763.5	5,669.8	4,360.4	-93.7	-1.6%	1,309.4	23.1%		
5.08.06/.07	SST Retrieval East / West Area	633.6	5,406.8	3,007.0	4,773.2	753.3%	2,399.8	44.4%		
5.08.12/.13	SST Closure	94.1	135.2	12.5	41.1	43.7%	122.7	90.8%		
	<b>TOTAL RETRIEVE AND CLOSE</b>	7,252.5	12,011.7	7,987.6	4,759.2	65.6%	4,024.1	33.5%		
5.9	<b>TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements</b>	1,196.7	827.0	413.1	-369.7	-30.9%	413.9	50.0%		
5.09.02.02	TRU / LLW Packaging	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%		
5.09.02.03/.08	LAW Treatment	74.6	74.7	22.7	0.1	0.1%	52.0	69.6%		
5.09.02.05/.11	Bulk Vitrification System (BVS) Project	15.9	15.9	24.2	0.0	0.0%	-8.3	-52.2%		
5.09.03.01	Integrated Disposal Facility	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%		
5.09.03.04	Initial IHLW Storage Facility (W-464)	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%		
	<b>TOTAL TREAT AND DISPOSE WASTE</b>	1,287.2	917.6	460.0	-369.6	-28.7%	457.6	49.9%		
5.10	<b>ANALYTICAL/TECHNICAL SERVICES</b>	2,776.8	2,807.0	2,256.7	30.2	1.1%	550.3	19.6%		
	<b>TFC TOTAL</b>	27,851.4	31,669.6	22,198.8	3,818.2	13.7%	9,470.8	29.9%		

# CONTRACT-TO-DATE PERFORMANCE

## CH2M HILL Hanford Group, Inc. CONTRACT-TO-DATE PERFORMANCE MEASUREMENT - 10/2005 - 09/2008 BY WORK BREAKDOWN STRUCTURE Dollars in Thousands

WBS	TITLE	Cumulative Contract-To-Date									
		Budgeted Cost		Actual Cost		Variance		Budget at Completion		Estimate at Completion	
		Work Scheduled	Work Performed	Work Scheduled	Work Performed	Schedule	SV %	Cost	CV %	Completion (BAC)*	Accelerated Scope**
5.07	<b>BASE OPERATIONS - Excluding 5.07.02</b>	416,328.4	416,752.1	374,466.6	423.7	0.1%	42,285.5	10.1%	416,328.4	2,709.0	374,466.7
5.07.02	Env/TPA Milestone Achievement	51,021.0	55,170.4	52,948.1	4,149.5	8.1%	2,222.3	4.0%	51,021.0	4,713.8	52,948.0
	<b>TOTAL BASE OPERATIONS</b>	<u>467,349.3</u>	<u>471,922.5</u>	<u>427,414.7</u>	<u>4,573.1</u>	<u>1.0%</u>	<u>44,507.8</u>	<u>9.4%</u>	<u>467,349.3</u>	<u>7,422.8</u>	<u>427,414.7</u>
5.8	<b>RETRIEVE AND CLOSE - Excluding foll. WBS Elements</b>	0.0	298.2	216.7	298.2	298.2%	81.5	27.3%	0.0	298.2	216.8
5.08.02	WTP Feed Delivery Program	22,019.8	22,019.8	18,337.8	0.0	0.0%	3,682.0	16.7%	22,019.8	0.0	18,337.8
5.08.03	DST Retrieval Program	1,676.3	1,984.2	2,268.0	307.9	18.4%	-283.8	-14.3%	1,676.3	307.9	2,268.1
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	2,865.8	8,782.6	11,196.8	5,916.9	206.5%	-2,414.2	-27.5%	2,865.8	5,916.9	11,196.6
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	3,154.3
5.08.05	Retrieval / Closure Program	151,326.5	151,593.9	141,185.6	267.4	0.2%	10,408.2	6.9%	151,326.5	0.0	141,185.4
5.08.06.07	SST Retrieval East / West Area	52,663.3	97,707.0	97,586.1	45,043.7	85.5%	120.9	0.1%	52,663.3	43,296.8	97,586.2
5.08.12.13	SST Closure	1,453.3	1,453.3	1,070.0	0.0	0.0%	383.3	26.4%	1,453.3	0.0	1,070.1
	<b>TOTAL RETRIEVE AND CLOSE</b>	<u>234,717.2</u>	<u>286,551.3</u>	<u>275,015.3</u>	<u>51,834.1</u>	<u>22.1%</u>	<u>11,536.0</u>	<u>4.0%</u>	<u>234,717.2</u>	<u>49,819.8</u>	<u>275,015.3</u>
5.9	<b>TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements</b>	18,002.7	17,883.4	12,300.4	-119.3	-0.7%	5,583.0	31.2%	18,002.7	0.0	12,300.4
5.09.02.02	TRU / LLW Packaging	0.0	0.0	65.6	0.0	0.0%	-65.6	-65.6%	0.0	0.0	65.6
5.09.02.03.08	LAW Treatment	2,150.2	2,150.3	2,088.1	0.1	0.0%	62.2	2.9%	2,150.2	0.0	2,088.1
5.09.02.05/11	Bulk Vittrification System (BVS) Project	28,283.4	42,125.1	45,656.5	13,841.7	48.9%	-3,531.4	-8.4%	28,283.4	13,841.7	45,656.5
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	5,351.9
5.09.03.04	Initial IHLW Storage Facility (W-464)	109.4	109.4	35.1	0.0	0.0%	74.3	67.9%	109.4	0.0	35.1
	<b>TOTAL TREAT AND DISPOSE WASTE</b>	<u>55,678.6</u>	<u>69,401.1</u>	<u>65,497.6</u>	<u>13,722.5</u>	<u>24.6%</u>	<u>3,903.5</u>	<u>5.6%</u>	<u>55,678.6</u>	<u>13,841.7</u>	<u>65,497.6</u>
5.10	<b>ANALYTICAL/TECHNICAL SERVICES</b>	76,397.0	76,269.1	68,563.9	-127.9	-0.2%	7,705.1	10.1%	76,397.0	0.0	68,564.0
	<b>TFC TOTAL</b>	<u>834,142.1</u>	<u>904,144.0</u>	<u>836,491.6</u>	<u>70,001.8</u>	<u>8.4%</u>	<u>67,652.4</u>	<u>7.5%</u>	<u>834,142.1</u>	<u>71,084.4</u>	<u>836,491.6</u>
	BAC										
	Adjusted Total with Accelerated Scope										

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

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

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

## EARNED VALUE PERFORMANCE

### 5.07 - BASE OPERATIONS (EXCLUDES 5.07.02)

**Scope Description:** The baseline scope for this Work Breakdown Structure (WBS) includes monitoring and maintaining the DSTs and equipment in compliance with 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	14,918.6	14,080.3	10,219.7	-838.3 -5.6%	3,860.6 27.4%	
CTD	416,328.4	416,752.1	374,466.6	423.7 0.1%	42,285.5 10.1%	416,328.4

Note (All tables): Dollars in thousands.

#### SCHEDULE VARIANCE

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

**Impact:** None.

**Corrective Action:** None required.

#### COST VARIANCE

**Description and Cause:** The CM CV is due to 1) WBS 5.07.01, Base Operations, for Tank Waste Sampling (less than planned labor and crane and rigging support and labor costs less than planned rates), Waste Feed Operations (WFO) Safe Storage Surveillance/Monitoring (efficiencies and support to field activities), WFO Essential Services (resources assigned to support higher priority work), cost efficiencies in the Environmental Health Program and Upgrade and Maintain Authorization Basis, and miscellaneous cost efficiencies in Assessments, Core and Bargaining Unit Training, Engineering Program, WFO Facilities Operations Management, WFO/TSR/Basic Maintenance, and WFO Radcon Surveys; 2) WBS 5.07.03, Project Support, for cost efficiencies on Contract Transition, cost efficiencies in IRM (including Program and Requirements Management and desktop support costs less than planned), Manage Facilities and Property Services (related to 2440 occupancy), efficiencies in Standards and Compliance (resulting from reallocation of manpower to Core Training and Core Procedures), and

miscellaneous other cost efficiencies including RPP Baseline Integration Support, Finance, and Production Planning and Control; and 3) WBS 5.07.04, Essential Services, for labor Liquidations (work for others higher than planned);

These favorable CM variances are partially offset by unfavorable variances for 1) WBS 5.07.03, Project Support, for Labor Relations costs to close out the contract; and 2) WBS 5.07.04, Essential Services, for the cost of Miscellaneous Services (Miscellaneous Costs and Services and Technical Library).

The CTD CV is due to variances for 1) WBS 5.07.04, Essential Services, for cost savings and efficiencies in Site Wide, Shared, and Miscellaneous Services as well as Labor Liquidations (Fluor Hanford [FH] allocation for General Site-Wide Services, 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) WBS 5.07.01, Base Operations, for cost savings and efficiencies in WFO Safe Storage Surveillance and Monitoring and Essential Services, Tank Sampling due to planning labor rates being greater than actual costs (underrun on core sampling and overrun on grab sampling; these efficiencies have been offset by greater than planned ATL Analytical costs), and labor efficiencies and cost savings in other support and management functions including the Engineering Program, Industrial Health and Safety/HASP, QA Program, Assessments, Price-Anderson Amendment Act of 1988 (PAAA) Program, WFO Facilities Operations Management, WFO Bargaining Unit Training, and Nuclear Operations Program; 3) WBS 5.07.03, Project Support, for cost savings and efficiencies in Finance (labor), RPP Baseline Integration Support (labor efficiencies and lower than planned subcontractor support), IRM (desktop computer support less than planned), Contract Transition Planning (management and interface efficiencies), TFC Executive Management (labor and subcontract efficiencies and work for others higher than planned), Legal Counsel (less than planned offsite legal support and fewer miscellaneous settlements), Manage Facilities and Property Services (occupancy costs), Production Planning and Control, and Standards and Compliance (reallocation of manpower to training and procedures); and 4) WBS 5.07.05, Other Mission Support, for Work Force Alignment and Restructure (fewer employees impacted than anticipated by 2006 Involuntary Reduction of Force), and AY/AZ Upgrade Projects (use of spare pump for AZ-102 replacement instead of new procurement).

The favorable CTD variances are partially offset by 1) WBS 5.07.01, Base Operations, for WFO TSR/ Basic Maintenance (to reduce and maintain the PM and CM backlog and support acceleration of retrievals including DST-to-DST Transfers and Cross-Site Transfer, electrical outages and cathodic protection), WFO Parts/Materials/Tools (fabrication costs for jumpers and parts, purchase of cameras, parts and materials for PMs/CMs, and materials to support additional DST-to-DST and Cross-Site Transfers), and WFO Infrastructure (unplanned expenditures for 274 AW parking lot and unanticipated Project Hanford Management Contract [PHMC] support charges), WFO Radiological Control Surveys (FY 2006 costs for additional surveillances/routines on overtime and additional laboratory costs

incurred), and Environmental Health Program costs (vapors sampling support and ATL Readiness to Serve adder); 2) WBS 5.07.03, Project Support, variances related to Procurement and Contracts costs (work performed on the Marshalling Yard and Connector Road Improvements), Labor Relations (subcontractor support to Hanford Atomic Metal Trades Council Contract negotiations and ratification), SWE (subcontracts), Travel and Computer, Communications; and 3) WBS 5.07.05, Other Mission Support, for Evaporator Upgrades (HVAC Upgrade costs due to complexity, emergent work, accelerated schedule and concurrent facility project upgrades, and corrective/maintenance activities; as well as 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, and extended duration of the OAT), and Tank Farm Upgrades Program Support (additional staff augmentation engineering to support Unresolved Safety Questions [USQ], project work, Hazard and Operability Study [HAZOP] issue resolutions, and Pension pass-back distribution for FYs 2006 and 2007).

**Impact:** None.

**Corrective Action:** None required. The TFC work was concluded this month and remaining work transitioned to the TOC. Fiscal year 2009 and outyear work is being prioritized and re-planned by the TOC.

## 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	1,616.3	1,853.0	1,274.8	236.7 14.6%	578.2 31.2%	
CTD	51,021.0	55,170.4	52,948.1	4,149.5 8.1%	2,222.3 4.0%	51,021.0

### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is due to progress earned on acceleration of preparations for the next two Evaporator campaigns.

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

**Impact:** None.

**Corrective Action:** None required.

### COST VARIANCE

**Description and Cause:** The CM favorable CV is due to 1) Progress earned and cost efficiencies on the 242-A Evaporator Operation and Maintenance (preparations for the next two campaigns); and 2) Cost efficiencies on the Environmental Support and Assessment Program, DST-to-DST Transfer and DST Space Evaluation.

CM favorable variance is partially offset by unfavorable variance for the SST Integrity Project (no progress taken as Expert Panel Oversight Panel Committee work not initiated).

The CTD favorable CV is due to 1) Efficiencies on DST to DST Transfers (minimization of overtime by use of shift personnel and same planning package for back-to-back transfers); 2) Efficiencies on Cross-

Site Transfers (labor); 3) Level of Effort (LOE) efficiencies on Environmental Support and Assessment Program; 4) Efficiencies on DST Facility Upgrades Project Management; and 5) Cost reductions on DST Space Evaluation (shift to higher priority work and reduction of staff).

The CTD favorable CVs are partially offset by unfavorable variances for 1) DST Integrity Project (increased cost for completed work on the AP Valve Pit Integrity Assessment, DST Infrastructure Integrity Assessment, 242-A Evaporator Integrity Assessment and Ultrasonic Examination, AY-101 UT Support, and miscellaneous associated Independent Qualified Registered Professional Engineer (IQRPE) support to integrity assessment); 2) 242-A Evaporator Operations and Maintenance (increased overtime and regular labor to support additional [3x] PMs for the MCS Upgrade OAT, materials and contract support for the PB-1 pump refurbishment, Crane and rigging costs higher than expected and distributions for pensions and retroactive pay); 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:** None required. The TFC work was concluded this month and remaining work transitioned to the TOC. Fiscal year 2009 and outyear work is being prioritized and re-planned by the TOC.

## 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 the 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	216.7	298.2 298.2%	81.5 27.3%	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 (CERCLA) 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	761.3	761.4	352.0	0.1 0.0%	409.4 53.8%	
CTD	22,019.8	22,019.8	18,337.8	0.0 0.0%	3,682.0 16.7%	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 WFO 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 CVs are partially offset by minor unfavorable CVs 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.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	-2.8	0.0 0.0%	2.8 0.0%	
CTD	1,676.3	1,984.2	2,268.0	307.9 18.4%	-283.8 -14.3%	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	38.5	258.5	38.5 325.3%	-220.0 -571.4%	
CTD	2,865.8	8,782.6	11,196.8	5,916.9 206.5%	-2,414.2 -27.5%	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 CV is due to complete readiness and turnover to operations of the AN and AW HVAC exhausters.

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 online, 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 underestimated); 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 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 5) 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:** None required. The TFC work was concluded this month and remaining work transitioned to the TOC. Fiscal year 2009 and out year work is being prioritized and re-planned by the TOC.

### 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, turn over, 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/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 COBs and the SY Farm Transfer Line Backfill (work performed on supplied air that was not budgeted for at the time). Unfavorable CV for construction is partially offset by cost efficiencies on the AZ-151 Catch Tank Bypass Construction and in LOE Project Support.

**Impact:** None.

**Corrective Action:** None required.

## 5.08.05 - RETRIEVAL / CLOSURE PROGRAM

**Scope Description:** The baseline provides for Retrieval and Closure support activities in this WBS. Specifically, the scope includes program management, regulatory documentation, SST cross-site transfers, technology development, Cold Test Facility (CTF) management and maintenance, Vadose Zone support, inactive waste sites administration, and 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	5,763.5	5,669.8	4,360.4	-93.7 -1.6%	1,309.4 23.1%	
CTD	151,326.5	151,593.9	141,185.6	267.4 0.2%	10,408.2 6.9%	151,326.5

### SCHEDULE VARIANCE

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

**Impact:** None.

**Corrective Actions:** None required.

### COST VARIANCE

**Description and Cause:** The CM CV is due to 1) HIHTL Disposition (cost efficiencies on work for removal and disposal of HIHTLs); 2) SST Operations Essential Services (less labor than planned); 3) Closure Project Office of the Vice President (reduced labor due to reorganization); 4) 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); and 5) Other cost efficiencies on Closure Projects Safe Storage, Surveillance and Monitoring, and Infrastructure.

The favorable CM CVs are partially offset by unfavorable variances for 1) Costs to complete the Liquid Mitigation of Catch Tanks/Double-Contained Receiver Tanks (DCRT) work (Tank S-302 pumping activities associated with implementation of corrective actions from the Tank S-102 spill event); and 2) Costs to complete the TY Farm Barrier Activities (CTD, the activity has a favorable CV).

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); 4) Cost efficiencies and savings in Grand Junction Gamma Logging (reduced requirement to support LOE activity); 5) Waste Management Program/Administration (less than planned waste projections and actual labor rates less than planned rates); 6) HIHTL Disposition (re-planning of work deferred from the prior year resulting in adjustment of CTD performance); and 7) Miscellaneous other cost savings and efficiencies including Liquid Level and Video Assessment (underruns on completed work), Tank Farms Risk Assessments (efficient use of in-house staff instead of subcontractors as planned), Retrieval Technology Development, CTF Management and Maintenance (lower share of cost as other programs used the facility), and 244-CR vault (re-planning of prior year work).

The favorable CTD CVs are partially offset by unfavorable variances for 1) Vadose Resource Conservation and Recovery Act of 1976 (RCRA) Corrective Actions for T Farm Interim Surface Barrier work exceeding the baseline estimates (design, procurement, weather, and construction scope issues including additional steps to complete the required work such as transportation of soil into the respective area, grading and compaction of soil prior to placing material, development of an infiltration area for water run-off, interior trench and anchor supports for the material and associated material costs); 2) SST TSR Basic Maintenance (higher than expected labor costs being incurred to complete basic PMs/CMs and maintain the backlog and support accelerated retrievals; overruns here are being offset by under-runs in SST Essential Services); and 3) Liquid Mitigation of Catch Tanks/DCRTs (Tank S-302 pumping activities associated with implementation of corrective actions from the Tank S-102 spill event).

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

**Corrective Action:** None required. The TFC work was concluded this month and remaining work transitioned to the TOC. Fiscal year 2009 and outyear work is being prioritized and re-planned by the TOC. Behind schedule work for Liquid Mitigation of Catch Tanks and HIHTLs recovered by the end of FY 2008 as forecasted.

## 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	633.6	5,406.8	3,007.0	4,773.2 753.3%	2,399.8 44.4%	
CTD	52,663.3	97,707.0	97,586.1	45,043.7 85.5%	120.9 0.1%	52,663.3

### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is due to significant progress earned for accelerated work on Tank C-110 Retrieval (design and engineering, construction and demobilization, testing, startup and readiness, and the start of operations [completed transfer of an estimated 51,800 gallons, or 29.1 percent, of the waste using the modified sluicing technique]).

The CM favorable SVs are partially offset by minor unfavorable variances for 1) Budget in the current month for Tank C-109 Retrieval Operation (completed in prior months); and 2) 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:** None.

**Corrective Action:** None required. The TFC work was concluded this month and remaining work transitioned to the TOC. Fiscal year 2009 and outyear work is being prioritized and re-planned by the TOC.

### COST VARIANCE

**Description and Cause:** The CM favorable CV is due to progress earned and cost efficiencies on Tank C-110 Retrieval (design and engineering, construction and demobilization, testing, startup and readiness, and the start of operations [completed transfer of an estimated 51,800 gallons, or 29.1 percent, of the waste using the modified sluicing technique]).

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

**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 Readiness Assessments [RA]) and technical difficulties with the mobile retrieval tool (MRT).

**Corrective Action:** None required. The TFC work was concluded this month and remaining work transitioned to the TOC. Fiscal year 2009 and outyear work is being prioritized and re-planned by the TOC.

## 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	94.1	135.2	12.5	41.1 43.7%	122.7 90.8%	
CTD	1,453.3	1,453.3	1,070.0	0.0 0.0%	383.3 26.4%	1,453.3

### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is due to WBS 5.08.13, SST Closure, for S-Farm Closure Management progress earned in support of the S-112 HIHTL work.

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

**Impact:** None.

**Corrective Action:** None required.

### COST VARIANCE

**Description and Cause:** The CM CV is due to S-Farm Closure Management (progress taken here but costs are under WBS 5.08.05.09.12, Hose-in Hose Transfer Line Disposition [SST]).

The CTD CV is due to the same cause as the CM CV.

**Impact:** None.

**Corrective Action:** None required.

## 5.09 - TREAT AND DISPOSE WASTE (EXCLUDES WBS

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

**Scope Description:** The baseline provides for the remaining scope for WBS 5.09, which includes the Infrastructure Services that provide for electrical power to the WTP; Strategic planning including the support to Optimization Studies; the newly established Interim Pretreatment System (IPS) Project; Project W-QQQ immobilized high-level waste (IHLW) Shipping Facility support; and support to the TPA Milestone M-62-08 deliverables. Also included are the Failed Melter Disposal System and future expansions to Integrated Disposal Facility (IDF). Both are outside of the CTD reporting. Startup and Turnover, performance of Operations Readiness Reviews, and turnover of the constructed IDF to Operations are included in this WBS. Additional work was added under WBS 5.09.02.12 in FY 2008 for the IPS Project

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	1,196.7	827.0	413.1	-369.7 -30.9%	413.9 50.0%	
CTD	18,002.7	17,883.4	12,300.4	-119.3 -0.7%	5,583.0 31.2%	18,002.7

#### SCHEDULE VARIANCE

**Description and Cause:** The CM SV is due to WBS 5.09.02, Supplemental Treatment, for budget in the current month for IPS Project work performed ahead of schedule in prior months (Project Support, Permitting Support, Safety Analysis, and Technology Development).

The CTD SV is 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) Labor efficiencies in Supplemental Treatment Strategic Planning; 2) Efficiencies in the IPS Project (Project Support and Safety Analysis labor less than planned and labor costs less than planned due to self-performance instead of subcontractors); and 3) Infrastructure Services Phase 1 (less electrical usage at the WTP than planned).

The CTD favorable CV is due to 1) Infrastructure Services Phase 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-Activitylevel Waste (ILAW) Baseline

Management, Systems Definition, and Performance Assessment; and 5) Underruns in the 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.

**Impact:** None.

**Corrective Action:** None required.

### COST VARIANCE

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

The CTD unfavorable CV is due to residual costs received in early FY 2006.

**Impact:** None.

**Corrective Action:** None required.

### 5.09.02.03/.08 - LAW TREATMENT

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

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	74.6	74.7	22.7	0.1 0.1%	52.0 69.6%	
CTD	2,150.2	2,150.3	2,088.1	0.1 0.0%	62.2 2.9%	2,150.2

#### SCHEDULE VARIANCE

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

**Impact:** None.

**Corrective Action:** None required.

#### COST VARIANCE

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

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

**Impact:** None.

**Corrective Action:** None required.

## 5.09.02.05/.11 - DEMONSTRATION BULK VITRIFICATION SYSTEM PROJECT

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

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	15.9	15.9	24.2	0.0 0.0%	-8.3 -52.2%	
CTD	28,283.4	42,125.1	45,656.5	13,841.7 48.9%	-3,531.4 -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 unfavorable CV is negligible.

The CTD unfavorable CV is due to additional subcontractors' effort to complete initial design (in prior years), retroactive subcontractor rate adjustments resulting from a DCAA audit, cost overruns on DBVS Engineering During Construction 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 performance of the work.

### 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. This WBS will provide infrastructure necessary to provide operations and maintenance support (e.g., utilities, roads, and fencing).

	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.

**Impact:** None.

**Corrective Action:** None required.

#### COST VARIANCE

**Description and Cause:** The CTD favorable CV is due to cost effective management of the IDF construction changes, utilization of internal engineering resources rather than subcontracted support, and less project management resource usage than planned.

**Impact:** None.

**Corrective Action:** None required.

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

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

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

#### SCHEDULE VARIANCE

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

**Impact:** None.

**Corrective Action:** None required.

#### COST VARIANCE

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

The CTD favorable CV is due to cost effective use of support resources on Project W-464.

**Impact:** None.

**Corrective Action:** None required.

## 5.10 - ANALYTICAL TECHNICAL SERVICES

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

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	2,776.8	2,807.0	2,256.7	30.2 1.1%	550.3 19.6	
CTD	76,397.0	76,269.1	68,563.9	-127.9 -0.2%	7,705.1 10.1%	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 favorable CV is due to efficiencies associated with actual labor costs being less than planned partially offset by ATL Readiness To Serve costs higher than planned (CTD, ATL Readiness To Serve has a favorable CV).

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 since payment of capital equipment procurements were completed in FY 2006); 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 unfavorable variances for 1) 222-S Capital Equipment Not Related to Construction (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:** None required. The TFC work was concluded this month and remaining work transitioned to the TOC. Fiscal year 2009 and outyear work is being prioritized and re-planned by the TOC.

## 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. Draft report submitted for ORP/RL review on September 30, 2008. 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. Draft report submitted for ORP/RL review on October 1, 2008. 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.
- Initiated investigations for interim surface barriers in TY and SX Tank Farms.
- Rebaselining of the spectral gamma logs of drywells in the T Tank Farm continues.
- Well-to-well resistivity survey completed in SX Tank Farm (RPP-RPT-38322).

**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.
- Initiate next phase of surface geophysical exploration in either C or SX Farm.

**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 System (HRR) installed; supporting retrieval operations.
    - Tank C-103: HRR demonstration complete.
    - Tank C-108: HRR installed; supporting retrieval operations.
    - Completed HRR injection tests at S-102.
    - Submitted HRR evaluation report and recommendation for further deployment.
  
  - Submittal of 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: Missed.
  
- **M-45-05-T07, Initiate Tank Retrieval from Seven Additional Single-Shell Tanks**  
Due: 9/30/09  
Status: To Be Missed (Based on current DOE Baseline planning).
  
- **M-45-05-T08, Initiate Tank Retrieval from Eight Additional Single-Shell Tanks**  
Due: 9/30/10  
Status: To Be Missed (Based on current DOE Baseline planning).
  
- **M-45-05-T09, Initiate Tank Retrieval from Ten Additional Single-Shell Tanks**  
Due: 9/30/11  
Status: To Be Missed (Based on current DOE Baseline planning).

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

## II. Significant Accomplishments

- Completed retrieval of approximately 28% of C-110 waste.
- HRR is fully functional procedurally and in the field to support retrieval.
- Transmitted RPP-22520, Rev. 5 (241-C-101, 241-C-105, and 241-C-111 Tank Waste Retrieval Work Plan) to Ecology for review and approval.

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

- Obtain Ecology approval of the Mobile Retrieval System (MRS) TWRWP (RPP-22520 Rev. 4 for tanks C-101, C-105, and C-111)
- Complete modifications to AN-106 and continue retrieval of tank C-110.
- Initiate design of retrieval system for Tank C-111 (March 2009).

**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 October 10, 2008.
- Milestones M-45-00B (retrieve all C-Farm tanks), M-45-00C (initiate negotiations on SST retrievals for 2007-2008), and M-45-00D (initiate negotiations on SST retrievals for 2008-2013) were missed. TPA negotiations to address these and other milestones are ongoing.
- Ecology formally requested re-start dates for C-108, C-109, C-110 and S-102 in a letter dated October 13, 2008. Restart dates for these retrievals are in the process of being identified.

**C-FARM RETRIEVAL SUMMARY SCHEDULE FORECASTS <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	7/15/09	4/13/09	7/16/09	2/26/10	1/26/10	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	Complete	Complete	Complete	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 October month-end Integrated Mission Execution Schedule (IMES) as of 10/28/08 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). The revised document was submitted to Ecology on September 12, 2008, by letter 08-TF-062. Ecology has requested more time to review the document.
- **M-45-02O, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**  
Due: 3/1/10 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: On schedule.
- **M-45-02P, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (see Text of M-45-02M for further details)**  
Due: 3/1/12 (Biennially thereafter. Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: On schedule.
- **M-45-02P-A, Embedded Milestone; Within 60 days of receiving the DST Space Evaluation Document, the Three Parties Shall meet to Establish New Milestones, If Required, for Acquisition of Additional Tanks**  
Due: 4/30/10  
Status: On schedule.

**II. Significant Accomplishments**

- Submitted the revised Retrieval Sequence Document (RPP-21216) on September 12, 2008.

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

- None.

**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 expected from 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 (NOC) Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement (EIS) and associated Record of Decision (ROD); forecast completion for the final EIS ROD is 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, but was suspended after a waste spill on July 27, 2007. The HRR 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

- Completed soil cleanup.

## 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.

## 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

- Ecology letter of 8/28/08 concurred with ORP that retrieval of Tank S-112 is complete.

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

- None.

## IV. Issues

- None.

## Interim Stabilization Consent Decree

### I. Near-Term Deliverables:

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

Due: 09/30/04

Status: Completed on 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 video to quantify amount of free liquid in tank.

### 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 October 1 – October 31, 2008:

### I. Accomplishments:

- Completed the data review (data report RPP-RPT-38664) on October 21, 2008, for the sampling event in 241-AP-103.

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

- Tank Sampling
  - Tank 241-AZ-102 liquid grab samples scheduled for December 2008.
  - Tank 241-AP-107 liquid grab samples scheduled for April 2009.
  - Tank 241-AW-106 liquid grab samples scheduled for January 2009.
  - Tank 241-AN-106 liquid grab samples (mid C-110 retrieval) scheduled for February 2009.
  - Tank 241-AN-103 core samples scheduled for March 2009.
- BBI Updates
  - Eight tanks were updated for the fourth quarter of FY 2008 and published to TWINS October 9, 2008.
  - Eight tank updates are scheduled for the first quarter of FY 2009.
    - Three of the eight updates have been started.
- DQOs
  - Complete Evaporator DQO, Rev. 5 in December 2008.
  - Complete SST Component Closure DQO, Rev. 4 in December 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
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.
FY09	09-01	AP-101/AP-105	AP-104	Previously planned as 08-01, this campaign has been deferred into February/March 2009 and will be performed as 09-01. This deferral is required to support the safe and orderly resumption of operations under the new Tank Operation Contract, and implementation of a new contract baseline.
FY09	09-02	AP-101/AP-105	AP-104/ AP-101	Previously planned as 08-02, this campaign has been deferred into March/April 2009 and will be performed as 09-02 immediately following 09-01. This deferral is required to support the safe and orderly resumption of operations under the new Tank Operation Contract, and implementation of a new contract baseline.
FY10	10-01	AW-106	AP-101	Detailed planning for FY10 and outyear campaigns subject to retrieval activities and Tank Operations Contractor commitments and requirements. Forecast FY10 campaigns are based on preliminary planning associated with blending AZ-102.
FY10	10-02	AP-107	AP-101/ AP-107	Detailed planning for FY10 and outyear campaigns subject to retrieval activities and Tank Operations Contractor commitments and requirements. Forecast FY10 campaigns are based on preliminary planning associated with blending AZ-102.

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

**I. Near-Term Deliverables:**

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

**II. Significant Accomplishments:**

- None to report.

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

- None to report.

**IV. Issues**

- None to report.

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

### **I. Near-Term Deliverables:**

- **M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes**  
Due: 12/31/2028  
Status: To Be Missed.
- **M-62-00A, Complete WTP Pretreatment Processing and Vitrification of Hanford HLW and LAW Tank Wastes**  
Due: 02/28/2018  
Status: To Be Missed.
- **M-62-01P, 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: Complete.
- **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:**

- Studies are still ongoing for evaluation of Early LAW configuration alternatives. Comments have been provided by SRS and are being incorporated for completion in November.
- In addition, R&D testing is being requested to further the development of the in-tank alternative for Hanford's application. This is under review by EM-21.

## **IV. Issues:**

- None.

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

### Waste Treatment and Immobilization Plant

There are 1,574 people assigned to the WTP construction site (all facilities); 976 manual and 598 non-manual. Overall project percent complete is 46%. Design and engineering is 75% complete and construction is 39% complete. Financial expenditures against the WTP Project for FY 2008 are \$727.6 million against a forecasted spend of \$751 million.

The WTP Contractor, Bechtel National, Inc. (BNI), has a cumulative unfavorable CV of \$70.5 million, a decline of \$23 million from the previous month; and unfavorable SV of \$84.3 million, a decline of \$15.1 million from the previous month.

Poor cost and schedule performance are attributed to engineering inefficiencies and late equipment and material deliveries. As a result, construction objectives are also being challenged. The contractor has forecast a delay of six to nine months for completion of construction of the Low-Activity Waste (LAW) Facility. Construction completion dates for the Balance of Facilities (BOF) and Analytical Laboratory (LAB) have also been impacted. The BOF Fire Water Pump House and Steam Plant Facilities completion dates have been delayed by several months.

A preliminary engineering recovery plan has been developed, that includes all remaining work scope. The recovery plan is currently undergoing optimization to be fully integrated with construction, procurement, and commissioning and to comply with annual funding limitations. The plan is forecasted to be complete in December 2008. Based on early indications of the engineering re-plan, a significant amount of unplanned work is being added to the schedule that will impact the estimate at completion (EAC) and the available float. Because of these changes, it will take at least a few months to understand how the recovery actions are working. The basis of assumptions of the re-plan will be evaluated in order to ensure alignment with ORP objectives.

BNI has also implemented process improvements for expedited design reviews and review of changes to purchase orders. A new integrated equipment organization has been established to streamline the equipment procurement activities.

Discussions by DOE and BNI at all levels of the organization are ongoing and mitigation actions are being implemented where possible. A thorough review of work processes has also been initiated in an effort to mitigate future overruns and with a focus on improving cost and schedule performance. These include receipt of vendor information, document reviews, and identification, timely analysis, and closure of technical issues.

Representatives from ORP, the Office of Environmental Management (EM), and BNI continued negotiations to restructure the WTP Project contract. The restructuring is necessary to align the contract and performance incentive fees with the December 2006 WTP Project baseline. To date, the negotiations have focused on production requirements and related operational incentives, cost containment measures, schedule milestones, and the possibility of implementing award-fee style incentives assessing project and cost management. A date for completing the negotiations has not been identified.

A 19-member team from the DOE Office of Independent Oversight (HS-64) conducted an inspection of the ORP and BNI environmental, safety, and health programs during the month of October. The inspection focused on WTP activities and the ORP organization and oversight. An inspection plan was forwarded to site employees indicating that Management, Feedback and Improvement, Work Planning Control, Nuclear Safety, Occupational Injury and Illness Investigations and Reporting, Engineering Design, Configuration Change Control, and Procurement on Safety Systems will be evaluated.

A Technical Review Group of members from EM-10 (Regulatory Compliance), EM-20 (Engineering and Technology), EM-50 (Acquisition and Project Management), EM-60 (Safety Management and Operations), Office of Civilian Radioactive Waste Management (RW-9), Thomas Jefferson Site Office, and Savannah River Site performed an environmental management review of the WTP Immobilized High Level Waste (IHLW) Waste Form Compliance Plan (WCP). Reviewer comments have been resolved and incorporated into the WCP. The revised WCP was delivered to EM Headquarters and will be transmitted to RW for approval, which is the last action required before issuing the final WCP. The WCP sets forth the plan of strategy of the WTP to document compliance with EM, RW, and RCRA requirements for treatment and disposal of the high-level waste at the Hanford Site, and is the cornerstone of baseline documents for the WTP in demonstrating compliance of the waste form for acceptance for disposal at Yucca Mountain. Additionally, the WCP will be part of the EM/RW Phase 2 surveillance for qualification of the WTP to RW requirements.

The ORP Environmental Safety and Quality (ESQ) division delivered the following permit products to the Washington State Department of Ecology:

- Dangerous Waste Permit Compliance Schedule Item 37 – Mechanical Handling Diagrams and Data Sheets for nine cranes.
- Class 1 prime permit modification 24590-WTP-PCN-ENV-06-005, which updates the Part A Permit Application found in Chapter 1 of the Dangerous Waste Permit.
- Class 1 Prime Modification 24590-WTP-PCN-ENV-06-015, which updates process and instrumentation diagrams for the High-Level Waste Facility Radioactive Liquid Waste Disposal System.

The review phase of the Broad Based Review (BBR) is complete and the BBR Team is working to resolve issues and prepare the final report by December 2008. The review spans seven system designs

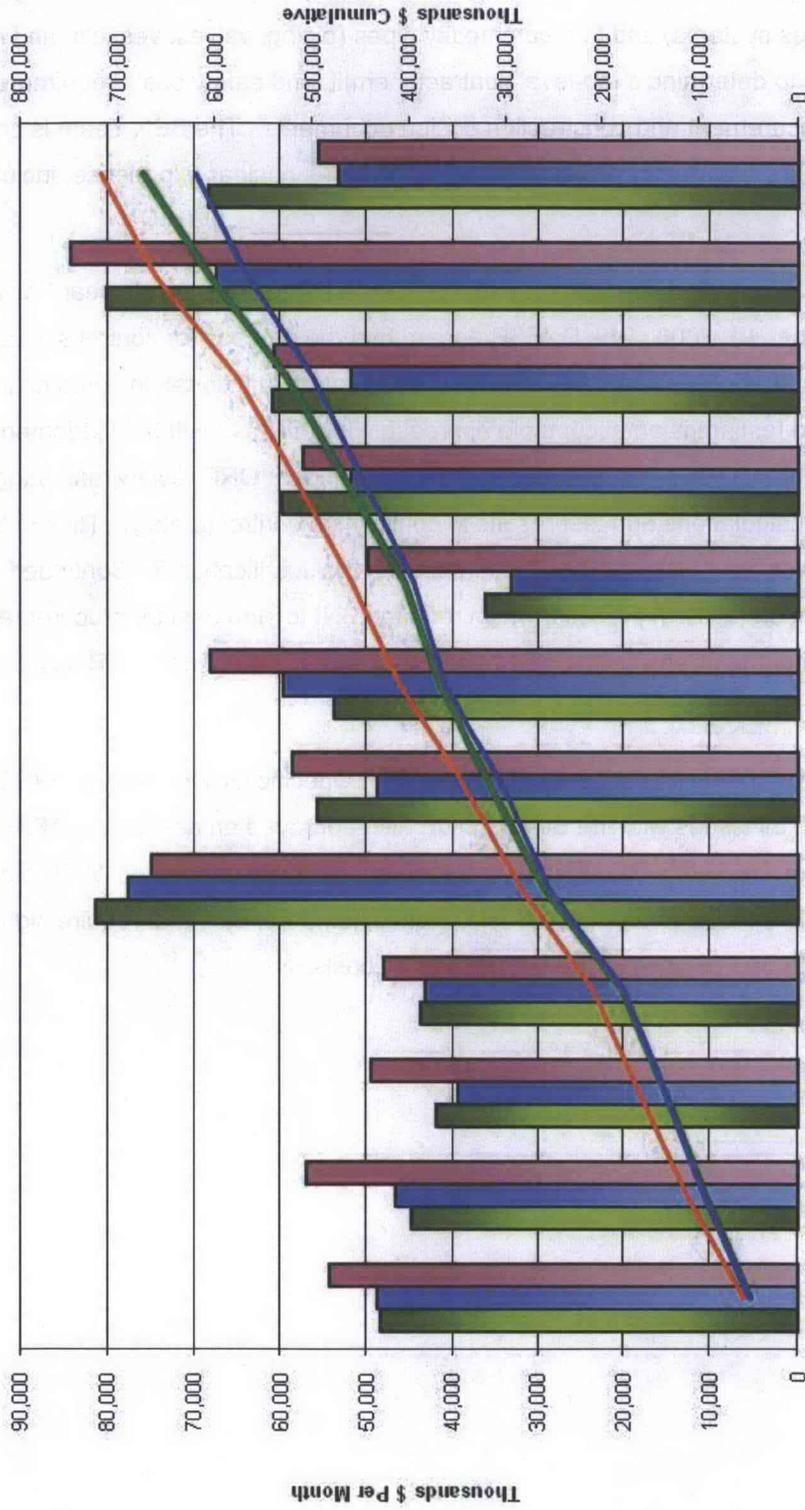
(Low-Activity Waste [LAW] Facility Melter Offgas [primary and secondary systems]; High-Level Waste [HLW] Facility Melter Offgas; HLW Process Vessel Vent, Medium Voltage Electrical, Plant Service Air, and Feed Receipt Process systems) and four commodity types (piping, valves, vessels, and melters). The goal of the review is to determine if top-level contract, permit, and safety basis requirements have been implemented in procurement and construction design documents. The BBR Team is comprised of approximately 45 engineers and quality professionals with previous nuclear experience, including two U.S. DOE personnel.

The ORP presented the fire hazards methodology and schedule to the Defense Nuclear Facilities Safety Board (DNFSB) on October 14, 2008. The DNFSB agreed that the process for control selection (equivalent fire protection that implements DOE-STD-1066-97 safety functions), in combination with confirmatory analysis and testing, is an acceptable approach. The DNFSB withheld judgment without the benefit of a detailed test plan. The DNFSB suggested an independent ORP review, and suggested an aerosol expert to review calculations and test results to confirm the control strategy. Risk to the project during confirmatory analysis and testing is being addressed in the Justification for Continued Design, Procurement and Installation (JCDPI) process, which requires BNI to stop design, procurement, and installation until approval of the JCDPI by the ORP Manager while the Authorization Basis Amendment Request (ABAR) is being processed and approved.

WTP presented the results of studies associated with the WTP Specific Ground Motion (WSGM) spectra to the DNFSB and closed all issues with the Board. DOE also approved an associated ABAR submitted by BNI and modification of the Safety Requirements Document (SRD) is underway. WTP plans to selectively use the WSGM spectra for certain vessels, cranes, jumpers, etc., that require significant modifications if required to be designed to the current design basis.

### 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	80,003	68,230
Mthly Perf (BCWP)	48,646	46,602	39,368	43,187	77,439	48,637	59,681	33,020	51,658	51,885	67,302	53,105
Mthly Actuals (ACWP)	54,226	56,917	49,448	47,904	74,769	58,559	67,938	49,737	57,349	60,678	84,103	55,413
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	605,930	674,161
FY 08 TD Perf (BCWP)	48,646	95,248	134,616	177,804	255,242	303,880	363,561	386,581	448,239	499,924	567,226	620,331
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	661,627	717,041

## 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 in November 2002 with a scheduled construction completion date of October 2014. Overall percent complete is 39%, design is 67% complete, and construction is 25% complete.

Engineering performance continues to fall behind baseline leading to delays in procurement and construction activities. BNI has been developing an engineering recovery plan and is implementing it in their scheduling tools. The final recovery plan is expected to be complete in December 2008.

Mechanical Systems has issued committed PT Facility piping and instrumentation diagrams (P&ID) for all of the systems except some drawings for the Ultrafiltration Process System, which is forecast for issuance in November 2008. The issuance of the P&IDs provides Plant Design with the information needed to produce the piping isometric drawings. To date 5,512 (of 10,432) isometric drawings have been cleared to final RGM criteria. A path forward was established for mechanical handling and operations on manipulator loading to be used in the design and qualification of jumpers and jumper support frames. This confirms the loading used in the Planning Area 1 upper-frame analysis, which will allow qualification to proceed.

Construction forces successfully placed permanent stair-tower 906 at the 0' elevation, a slab over the hot cell (575 cubic yards), and a wall (90 cubic yards) at the 56' elevation. Crews continue building rebar curtains with embeds, abrasive blasting and repairing welds in beam seats in the hot cell; installing piping in the south side and embeds at the hot cell shield door; and building a temporary work platform. At the 28' elevation, workers continue to erect structural steel at the east and southeast corners of the facility and routing temporary gas piping. At the 56' elevation, crews are making progress installing forms, rebar, and commodities for slabs and walls. The subcontractor is also making progress coating hangers and structural steel in the north corridor.

Most of the technical issues from the External Flowsheet Review Team (EFRT) have been resolved with the exception of two issues. Resolution of issue M-3, "Inadequate Mixing" has been significantly behind schedule, and may impact some of the vessel designs. Analysis of the data from Phase 1 testing and the assessment report of the mixing adequacy by vessels were submitted to DOE for review in October 2008. This report will be the basis for the plan for Phase 2 testing using complex simulants. Resolution of issue M-12, "Demonstration of the Adequacy of Ultrafiltration and Leaching Process" is progressing well. The Pretreatment Engineering Platform (PEP) has been fabricated to perform a quarter-scale test of the capability of WTP ultrafiltration system and leaching processes. Currently, the PEP is undergoing integrated water testing to be followed by simulant functional testing in November 2008, once

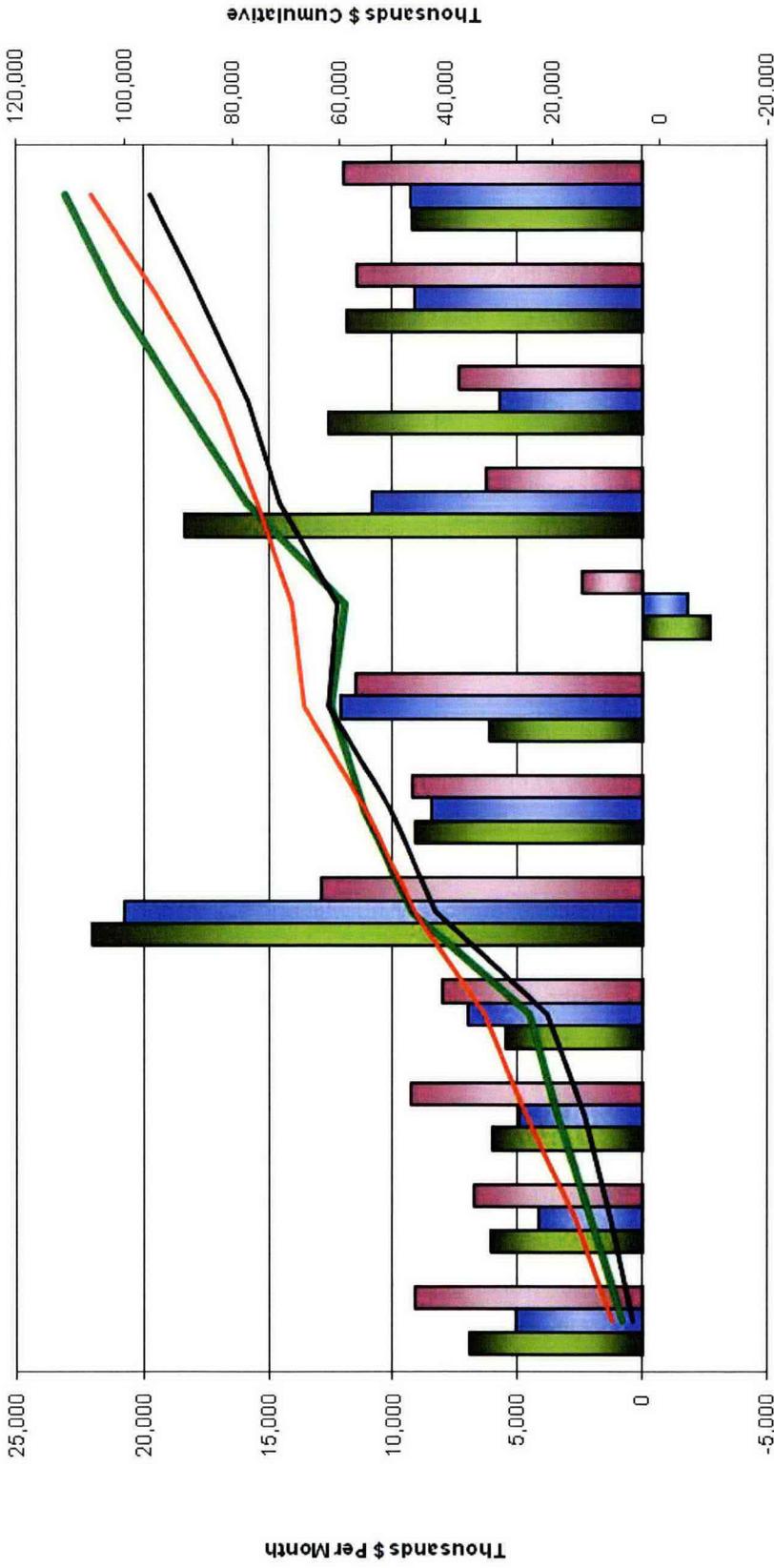
a successful management readiness assessment is complete. Simulant functional testing is forecasted to be complete in January 2008.

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>
<b>Complete Installation of Structural Steel (56' elevation, Southwest Side)</b>	<b>11/08</b>	<b>11/08 A</b>
<b>Issue IFC Drawings for PSA Rack</b>	<b>11/08</b>	<b>11/08</b>
<b>Complete Wall Concrete Placements to 56' Elevation</b>	<b>12/08</b>	<b>12/08</b>

### 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)	6,335	6,054	6,010	5,475	22,025	9,118	6,159	-2,747	18,422	12,575	11,888	9,194
Mthly Perf (BCWP)	5,028	4,153	4,908	6,993	20,744	8,410	12,095	-1,863	10,866	5,899	9,105	9,285
Mthly Actuals (ACWP)	9,100	6,756	9,297	7,989	12,875	9,248	11,510	2,406	6,260	7,368	11,483	11,982
FYTD Plan (BCWS)	6,335	12,990	19,000	24,475	46,500	55,617	61,776	59,030	77,452	90,027	101,915	111,109
FYTD Perf (BCWP)	5,028	9,182	14,090	21,083	41,827	50,237	62,332	60,469	71,336	77,035	86,140	95,425
FYTD Actuals (ACWP)	9,100	15,856	25,153	33,142	46,017	55,266	66,776	69,181	75,442	82,809	94,292	106,274

## High-Level Waste (HLW) Facility

The HLW Facility will receive the high-level waste fraction from the PT Facility. The waste will be mixed with glass formers, converted to glass, and placed in stainless steel canisters, which will be initially stored in the Hanford onsite Canister Storage Building. Final disposal is slated for the national geologic repository. HLW design and construction completions are 85% and 21%, respectively. Overall, facility completion is 42%.

Progress on the project has been slowed by late implementation of changes to plant material and equipment resulting in schedule delays. The HLW Workable Backlog Program (WBP) was implemented to improve both schedule and cost variances. The HLW workforce will be held at present construction trades levels through February 2009. During this timeframe, engineering and procurement priorities will be established and expedited to obtain the sequence and quantities necessary to supply construction with a rolling six-month backlog. These materials, engineering releases, and work packages will allow for the acceleration of future construction activities and the workforce increased to bring facility progress and costs in line with baseline schedule requirements. Construction activities will lag behind the baseline schedule for the next three months and then mobilize to meet or exceed scheduled progress.

The schedule baseline "lag/gap" is estimated to be closed by February 2010.

Construction activities in October included placement of 180 cubic yards of concrete for wall, slab, and platforms. Crews at the -21' elevation continue to erect winterization temporary walls; install Non-Radioactive Liquid Waste Disposal System piping, electrical tray, and piping supports; and install structural steel and supports. Crews at the 0' elevation continue installing structural steel and decking; applying coating on steel supports and connections; and installing wall and slab rebar and commodities at several locations at the east side of the facility. Crews at the +14' elevation west end continue installing decking, rebar, and commodities for slabs. Subcontractors are installing ducting system and fire water piping as well as coating structural steel supports and walls in the bogie maintenance area.

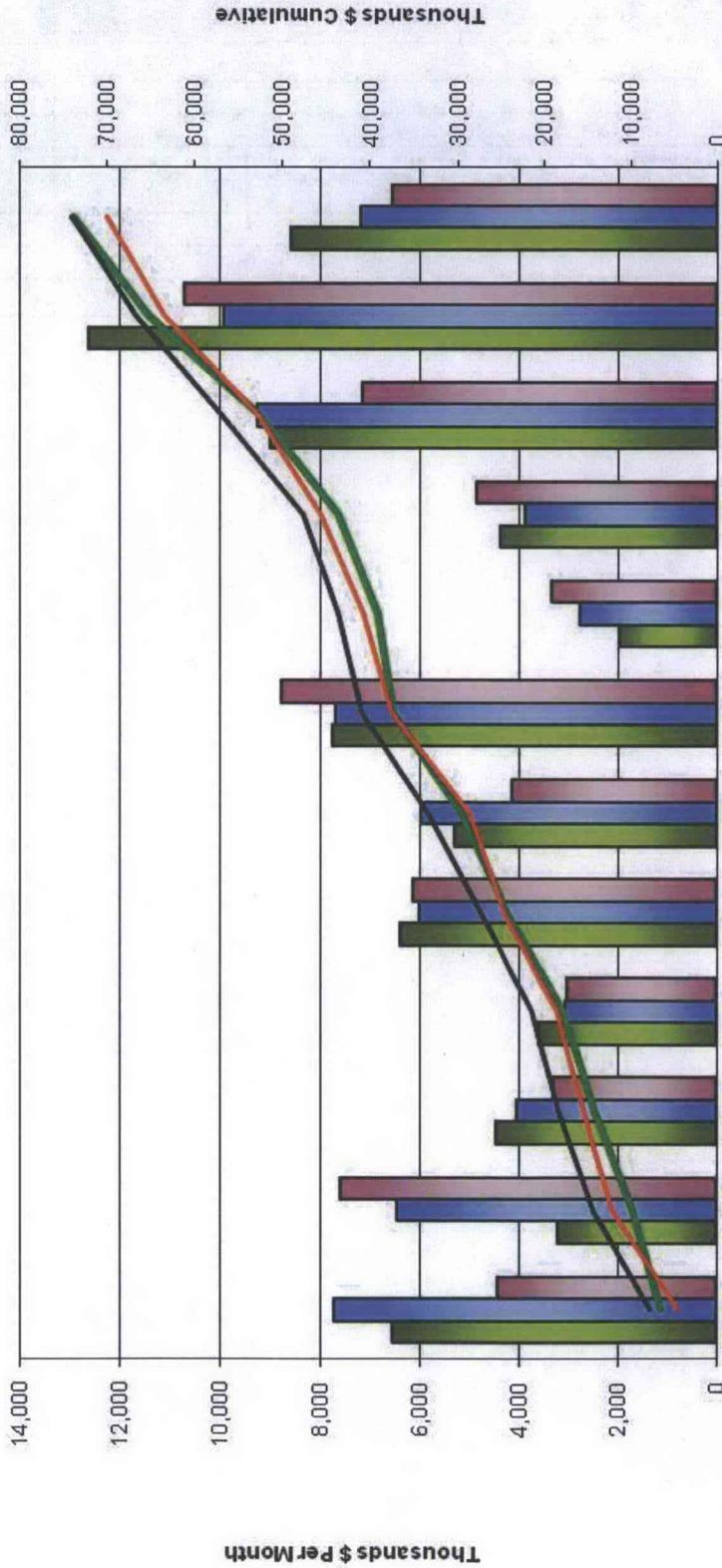
Engineering activities this month included the issuance of revised drawings for the HLW in-cave vacuum system, plans and schedules for the +21 elevation, rebar calculations for the +37 to +58 elevations, and steel framing drawings for +58 elevation. Over 40 isometric drawings were reviewed along with schematic drawings for system fans and solid waste handling doors, hatches, and lids. Numerous vendor submittals were also reviewed this month for general arrangement tubing and fittings, magnetic flow meters, closed circuit television (CCTV), the Autosampling System, and the melter cave support handling system. Initial setup activities were also initiated for factory acceptance testing of the first melter handling caves shield door at Oregon Iron Works.

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	11/08
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
Autosampling System Design Complete	12/08	4/09
Install Transfer Bogie Maintenance Crane Steel/Rails	1/09	11/08

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

October 2007 - September 2008



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	6,569	3,208	4,498	3,594	6,415	5,310	7,772	1,972	4,387	9,013	12,620	8,601
Mthly Perf (BCWP)	7,740	6,457	4,060	3,074	6,030	5,991	7,709	2,762	3,888	9,252	9,931	7,204
Mthly Actuals (ACWP)	4,466	7,623	3,309	3,015	6,156	4,130	8,786	3,347	4,864	7,147	10,726	6,555
FYTD Plan (BCWS)	6,569	9,777	14,275	17,869	24,284	29,594	37,366	39,337	43,725	52,737	65,357	73,958
FYTD Perf (BCWP)	7,740	14,197	18,257	21,331	27,362	33,353	41,061	43,824	47,711	56,963	66,894	74,098
FYTD Actuals (ACWP)	4,466	12,089	15,399	18,413	24,569	28,699	37,486	40,833	45,697	52,844	63,570	70,125

## Low-Activity Waste (LAW) Facility

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel containers that will be disposed on site in the IDF. Overall facility percent complete is 70%, design is 95%, and construction is 62%. Title II engineering design is substantially complete with some minor electrical and control and instrumentation design remaining to vendor furnished components.

Late equipment and material deliveries as well as engineering inefficiencies continue to challenge project objectives. The critical path to the construction complete milestone is driven by the procurement of specialized, one-of-a-kind, secondary offgas equipment (thermal catalytic oxidizer [TCO]). BNI is working with the vendor as well as providing quality assurance, engineering, and materials procurement expertise.

Efforts to improve construction performance include streamlining field change procedures, increasing bulk materials availability, and ordering components in a timely manner. A piping Super Process Improvement Project (PIP) identified many changes that can be incorporated into standard work. This will not only help piping installation, but other craft work. Most of the Super PIP actions are expected to be complete by the end of the calendar year.

Construction activities in October included placement of 75 cubic yards of concrete for the receiving dock mud mat annex and installation of reinforcement steel for the dock basemat on the northeast corner of the facility. At the +3 elevation, crews installed the sampler ports in the concrete wall of the finish line swabbing cell and railing and protective sheetmetal covers for the melters. Crews also erected structural steel framing that will support the C2 ventilation ductwork on the northwest corner. On the -21' elevation, crews successfully installed scheduled conduit between pour caves 3C and 3D, as well as between pour caves 3D and 3E and workers; continue to install winterization doors; apply fireproof coatings on the annex second floor structural steel; and the consumable bagging station on the melter platform at the +22' elevation. Installation of ductwork on the +48' elevation, partition walls on the +3' and +28' elevations; piping on the +3', +28', and +48' elevations, and grating, handrail, and stairs for platforms on all levels of the facility also continues. Fireproofing repairs on the +3' and +28' elevations are ongoing and crews continue to install grillage clips for the attachment of insulation (insulation installation is scheduled to start late November) in the pour caves.

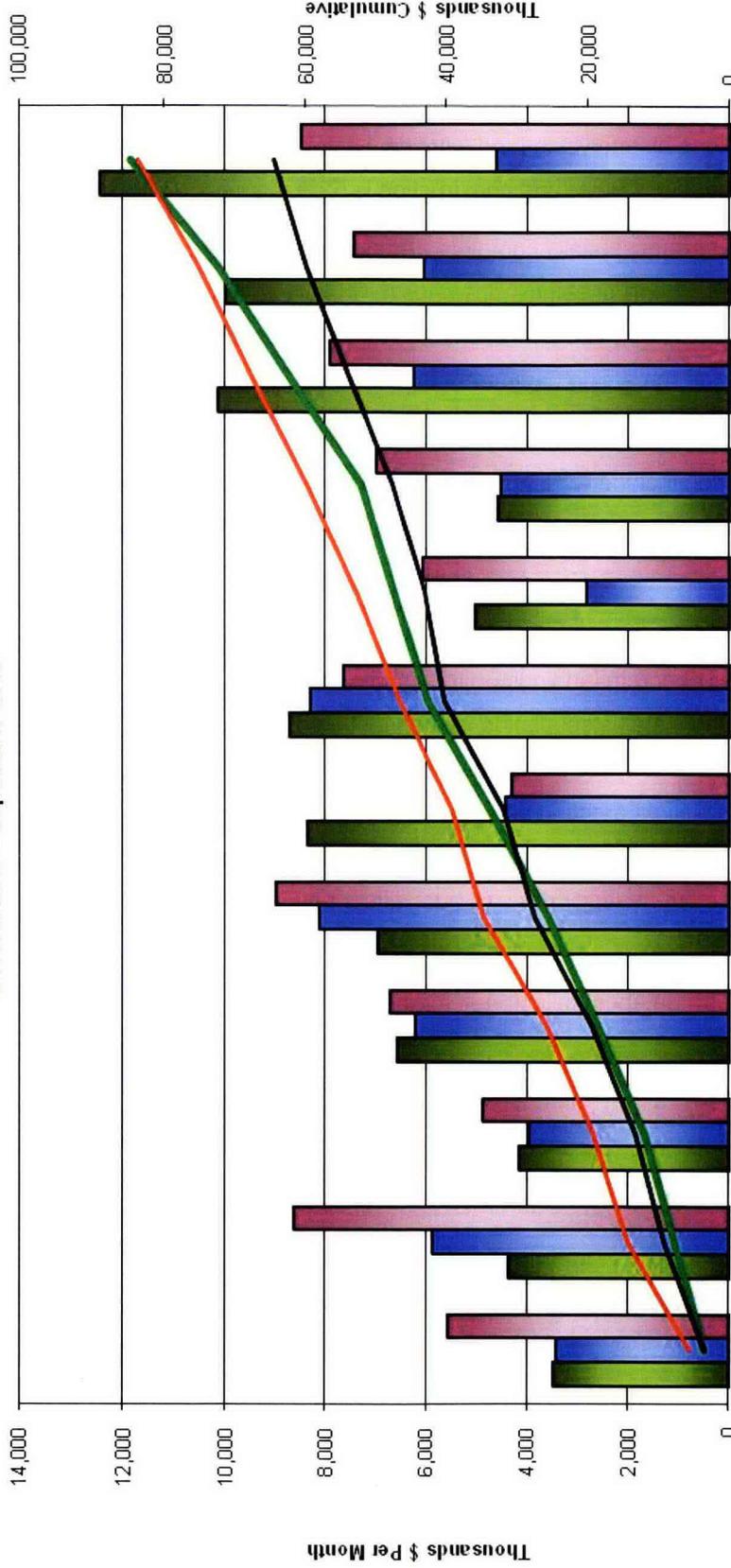
Engineering activities included removal of one isometric drawing from hold, issuance of datasheets for the chilled water, high-pressure steam, primary offgas, and plant cooling water systems. Diagrams and calculations were also issued for the C2 and C5 ventilation systems, uninterruptible power electrical system, and low voltage electrical systems.

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>
Deliver Repaired RLD Process Bulge	8/08	8/08A
Civil/Structural Design Complete	9/08	7/08A
Electrical Design Complete	9/08	7/08A
Deliver Melter Power Supply Equipment PA #5A	9/08	12/08
Deliver Melter Off-Gas Spools 1B&1C	10/08	12/08
Complete Remaining Iso Design	12/08	5/09
Deliver Melter #1 Base	12/08	11/08
Install Roof and Wall Liner Plate, PA#3C&D	1/09	3/09

### 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
Monthly Plan (BCWS)	3,471	4,358	4,163	6,565	6,976	8,351	8,707	5,039	4,593	10,136	9,989	12,443
Monthly Perf (BCWP)	3,408	5,851	3,964	6,207	8,115	4,426	8,309	2,829	4,514	6,260	6,052	4,623
Monthly Actuals (ACWP)	5,554	8,632	4,887	6,713	8,973	4,318	7,654	6,081	7,005	7,919	7,451	8,477
FYTD Plan (BCWS)	3,471	7,830	11,993	18,558	25,533	33,885	42,592	47,631	52,224	62,360	72,349	84,793
FYTD Perf (BCWP)	3,408	9,259	13,224	19,431	27,546	31,972	40,281	43,110	47,624	53,884	59,936	64,559
FYTD Actuals (ACWP)	5,554	14,186	19,073	25,786	34,759	39,077	46,730	52,811	59,816	67,735	75,186	83,663

## Analytical Laboratory (LAB)

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 42%, design is 90%, and construction is 52%.

Title II design activities for the LAB are essentially complete. Additional Engineering activities include the approval and issuance of over 100 support drawings, drawings for the waste transfer system (needed to support fabrication and shipment activities), and operations and maintenance manuals for the cell-to-cell trolley system (needed to release the remaining equipment for shipment).

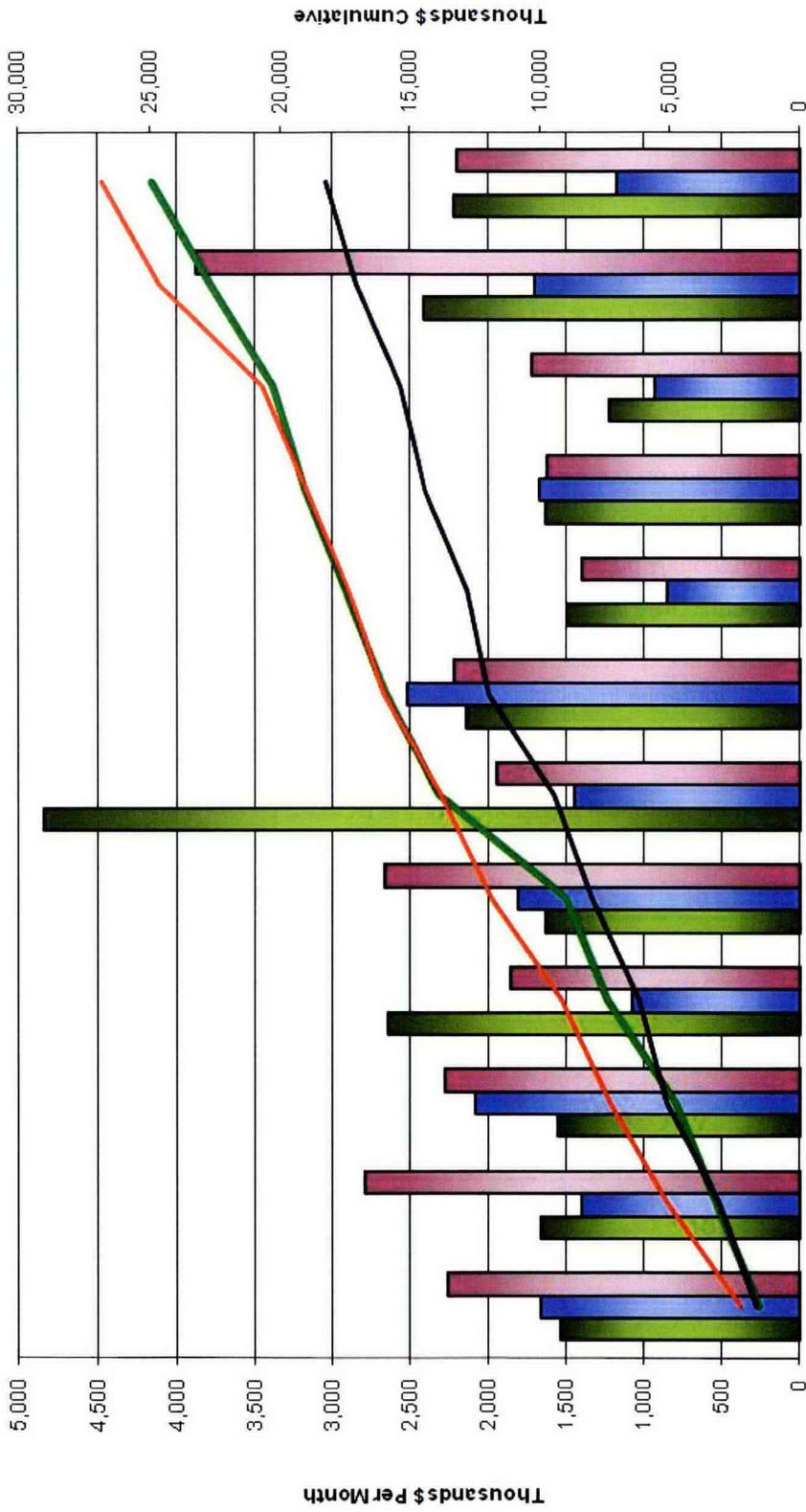
The LAB construction complete critical path is driven by procurements (high-integrity fans for hot cell ventilation). Efforts toward resolution include working with the vendor on technical exceptions, revising the fabrication schedule (which is improving over the original forecast), and performing construction workarounds where possible.

Construction forces finished pouring grout under and behind the center and northern sections of troughs in the hot cell and placed two small concrete landings on the southwest side of the facility. At the south end of the hot cell, work continues to install steel plating for connection of the jib crane. At the 0' elevation, crews are installing jib crane hinge plates, cable tray supports east of the hot cell, piping, ductwork, and fire water piping, as well as erecting and installing metal stud partition walls and windows. At the +17' elevation, pipefitters continue to fabricate and pressure test steam piping that will supply low-pressure steam for use in HVAC steam heating coils and humidifiers and install lightning protection on the roof.

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>
<b>Deliver Master Slave Manipulators</b>	<b>4/08</b>	<b>12/08</b>
<b>Complete Laser Ablation Site Accept Testing</b>	<b>7/08</b>	<b>7/08 A</b>
<b>Complete 65% HVAC QL Ducts &amp; Support Installation</b>	<b>9/08</b>	<b>9/08 A</b>
<b>Complete C5 Tank Pit Elevated Concrete</b>	<b>11/08</b>	<b>6/09</b>
<b>Complete 55% HVAC CM Duct and Support Installation</b>	<b>12/08</b>	<b>1/09</b>

**Analytical Laboratory - Fiscal Year to Date Performance (\$ In Thousands)**  
 October 2007 - September 2008



## 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 64%.

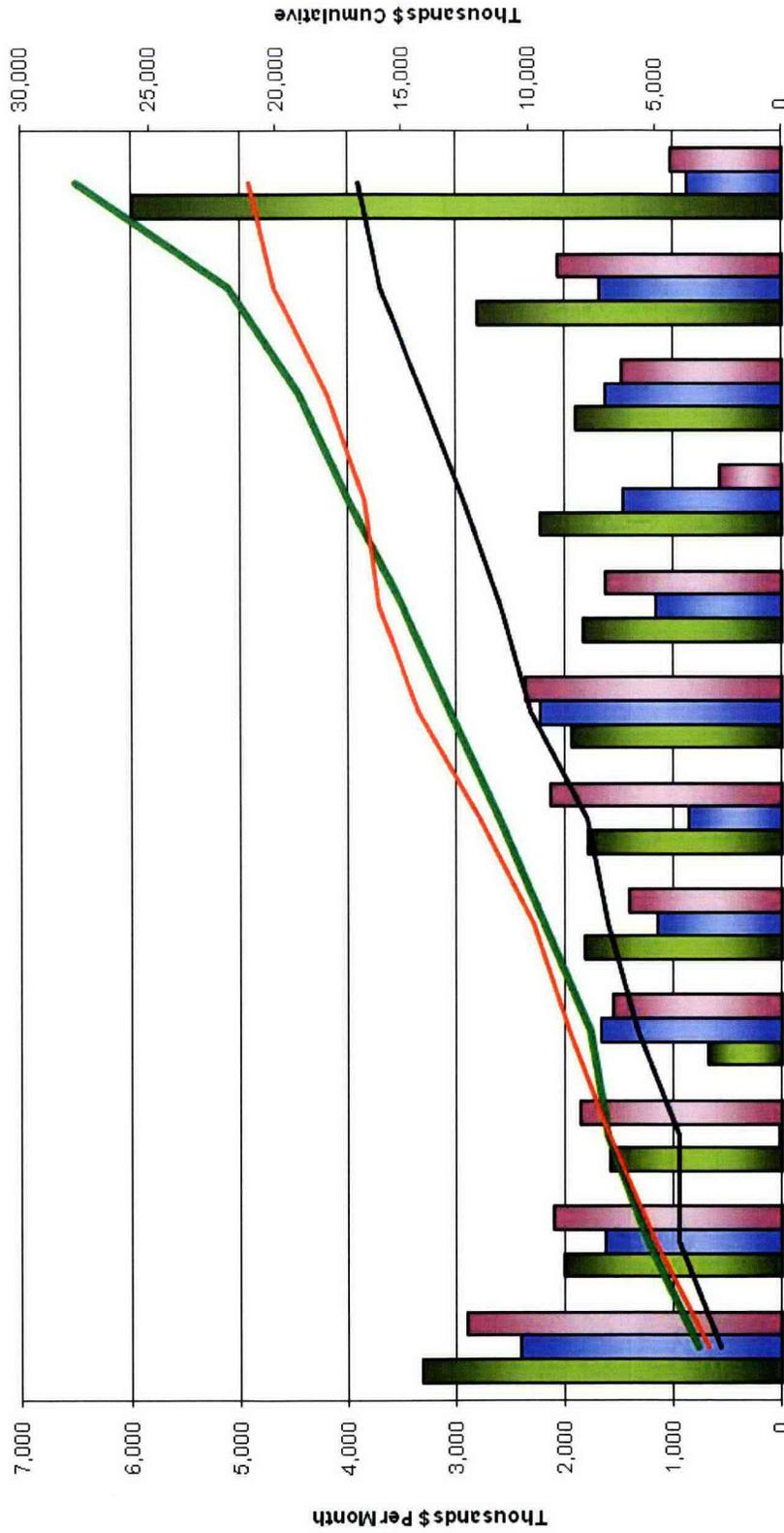
Construction forces completed the turnover package for the Cathodic Protection System (CPS) to the Startup organization. Startup testing has begun and will continue for approximately three months. The CPS provides corrosion protection for the underground plant service air lines, waste transfer lines between facilities, and the important-to-safety air lines. This is the second BOF system to be turned over to the Startup organization. The turnover of systems for the 13 BOF buildings will total approximately 130 systems.

Work to install underground temporary propane piping for the PT and HLW facilities is underway. In the Chiller Compressor Plant, crews are working on catwalk handrails; installing Plant Service Air System piping; and terminating cables previously pulled in for building services. At the Water Treatment Plant, electricians continue to work on cable tray installation in the Motor Control Center. Crews continue to install the transporter for the sucrose silo in the Glass Former Facility. At the Clayton Coatings Buildings, vacuum trucks are clearing areas for fence installation; some fence posts are currently being installed with a concrete base and workers are backfilling around concrete transformer pads west of the LAB.

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	10/08 A
Complete GFSF Silo/Tanks (17) Sets	5/07	10/08 A
Complete Steam Plant Construction	9/08	4/08 A
Award 4.16KV Emergency Diesel Generator PO	10/07	4/09
Complete 90% Chiller Compressor Pipe Installation	12/08	10/08A

**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	2,810	5,998
Mthly Perf (BCWP)	2,408	1,619	20	1,663	1,145	861	2,224	1,162	1,465	1,630	1,683	875
Mthly Actuals (ACWP)	2,904	2,102	1,854	1,564	1,406	2,127	2,366	1,629	572	1,479	2,070	1,021
FYTD Plan (BCWS)	3,305	5,311	6,898	7,574	9,393	11,185	13,119	14,953	17,176	19,072	21,882	27,880
FYTD Perf (BCWP)	2,408	4,028	4,048	5,711	6,856	7,717	9,941	11,102	12,568	14,198	15,881	16,756
FYTD Actuals (ACWP)	2,904	5,006	6,860	8,424	9,830	11,957	14,322	15,951	16,524	18,003	20,073	21,094

<b>KEY COMMODITY QUANTITY PROGRESS</b>				
<b>Commodity</b>	<b>Unit of Measure</b>	<b>Current Planned at Completion Quantity</b>	<b>Installed through September 2008</b>	<b>Percent Complete</b>
Concrete	1000 cy	260,050	178,550	68.7%
Structural Steel	1 ton	35,915	12,261	34.1%
Piping (in buildings)	1000 lf	888,820	137,190	15.4%
Piping (underground)	1000 lf	125,100	95,290	76.2%
Conduit (in buildings)	1000 lf	782,650	88,490	11.3%
Conduit (underground)	1000 lf	187,810	177,780	94.7%
Cable Tray	1000 lf	96,180	17,570	18.3%
Cable and Wire	1000 lf	4,743,230	210,890	4.4%

### Waste Treatment Plant Project - Percent Complete Status Through September 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	1,430.7	1,001.4	70%	124.0	117.2	95%	226.6	141.5	62%
Analytical Lab	558.7	236.3	42%	35.5	32.1	90%	62.5	32.7	52%
Balance of Facilities	919.9	464.0	50%	61.0	45.4	74%	173.4	110.8	64%
High-Level Waste	2,480.6	1,049.1	42%	196.9	168.1	85%	437.9	91.2	21%
Pretreatment	4,062.2	1,571.9	39%	328.0	218.7	67%	725.8	182.0	25%
Plant Wide/Gen Services	incl. above	incl. above	incl. above	622.5	444.5	71%	1,664.7	721.1	43%
Undistributed Budget	6.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Total WTP</b>	<b>9,458.7</b>	<b>4,322.7</b>	<b>46%</b>	<b>1,367.9</b>	<b>1,026.0</b>	<b>75%</b>	<b>3,290.9</b>	<b>1,279.3</b>	<b>39%</b>

Source: WTP Contract Performance Report