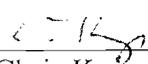


ORP Project Managers Meeting  
2440  
Richland, Washington  
**Meeting Minutes Transmittal**

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Project Managers Meeting.

  
\_\_\_\_\_  
Bob Lober, DOE-ORP

Date: 3/23/2010

  
\_\_\_\_\_  
Chris Kemp, DOE-ORP

Date: 3-23-10

  
\_\_\_\_\_  
Wahed Abdul, DOE-ORP

Date: 3/23/10

  
\_\_\_\_\_  
Jeff Trent, DOE-ORP

Date: 3/23/10

  
\_\_\_\_\_  
Garth Reed, DOE-ORP

Date: 3/23/10

  
\_\_\_\_\_  
J. Lyons, Project Manager,  
Washington State Department of Ecology

Date: 3/23/10

  
\_\_\_\_\_  
J. D. McDonald. Project Manager,  
Washington State Department of Ecology

Date: 3/23/10

Purpose: ORP Project Managers Meeting

**RECEIVED**  
MAR 25 2010

**EDMC**

ORP Project Managers Meeting  
2440  
Richland, Washington  
**Meeting Minutes Transmittal**

**Distribution:**

S. L. Charboneau	ORP	H6-60
D. L. Noyes	ORP	H6-60
C. J. Kemp	ORP	H6-60
R. W. Lober	ORP	H6-60
W. Abdul	ORP	H6-60
G. B. Olsen	ORP	H6-60
J. S. Trent	ORP	H6-60
F. B. Hidden	ORP	H6-60
J. J. Lynch	ORP	H6-60
R. W. Russell	ORP	H6-60
D. McDonald	Ecology	H0-57
J. J. Lyon	Ecology	H0-57
R. E. Piippo	MSA	H8-12

ADMINISTRATIVE RECORD – Heather Childers (two copies): H6-08

Please send comments on distribution list to Woody Russell.

ORP Project Managers Meeting  
2440  
Richland, Washington  
**Meeting Minutes Transmittal**

**1.0 Administrative Items (These can be next PMM agenda)**

The Monthly Milestone Review Meeting Status Report and handouts are provided as Attachment B. The draft status report was provided to Ecology electronically on 1/15/10. No comments were received. Final report provided electronically on 1/25/10.

Action Items. Status of action items was performed, and updates provided. Attachment A Attendees/Delegations - Attachment C is the list of attendees. Representatives from each agency were present to conduct the business of the PMM. Attachment B documents any delegations received from the agencies.

Next PMM is scheduled for 3/23/10

Quarterly Milestone Review Meeting is scheduled for 2/18/10

Administrative Record Items – Minutes of the July 21, 2009 meeting fulfilling obligations under M-45-56 were signed by Ecology and ORP and are attached.

**2.0 Review of the ORP Project Summary Discussion Agreements and Commitments (Attachment B Project Summary/Handouts)**

**Tank Farms**

M-45,-50, -60: SST Corrective Action, discussion deferred until 1/26/10.

M-45-00: SST Retrieval and Closure milestone status remains unchanged with most either missed or to be missed and subject to change in various change requests.

DOE provided a change request to RPP-9937, *SST Functions and Requirements*, Rev 3 replacing reference to manual tapes with ENRAF's in Table B-1. While Ecology agrees replacing manual tapes with ENRAFs, they requested DOE review entire document for further references to manual tapes and ENRAFs prior to signing a change request to this primary document.

M-45-02O and M-45-02O-A: Both are in abeyance and due to be replaced by the forthcoming M-62-40 milestone.

C-104: Issues with the starting retrieval of C-104 have been resolved and retrieval should start today.

Critical Path: Per Ecology request, two handouts of C-Farm retrieval critical path information was provided; a single-page summary (C-Farm Retrieval, Life-Cycle Baseline PMB, 2014 Compliance Case) and a more detailed, multi-page critical path schedule. DOE asked for

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comments on both formats. DOE expressed desire that the critical path data would eventually replace the C-Farm Retrieval Summary Schedule Forecast table currently in the status report,

C-106: The NRC needs for additional performance Assessment (PA) data relative to the Appendix H process ongoing. Anticipate closure in 2012 when PA is published.

M-45-13 and 15 are reported as "at risk". Both are "at risk" to meet the closure requirements (risk assessment, and closure strategy) which must wait for Final TC&WM EIS. Briefing discussed waiting for a better defined schedule to complete the TC&WM EIS before pursuing a change request.

M-45-15, S-102 complete retrieval by 2011 is also at risk due to inability to retrieve further with current retrieval technology. Ecology expects DOE to meet the S-102 retrieval milestone as currently exists, and wants further information/documentation of status.

Interim Stabilization (IS): Documentation supporting the interim stabilization of S-102 is forthcoming. Even though retrieval of S-102 is not complete, DOE believes it has met the IS Consent Decree stabilization criteria.

M-47-00: Nothing to report.

M-90-00: Nothing to report.

### **Waste Treatment Plant**

PTF: DOE continues to be concerned with potential for water damage to steel fireproofing in PT and HLW similar to that which occurred at LAW. To mitigate the risk, the fireproofing plan has been modified to start only when the facilities are substantially roofed-in. In support of this plan, the current fireproofing contract has been cancelled and will be reopened in 2013.

Recovered schedule for all concrete placements.

M-62-20 (proposed milestone) DOE discussed remaining activities necessary to close out the last of the 28 issues identified in the WTP Flowsheet and Throughput Assessment. Closing out remaining issues continues to be a challenge. Parties acknowledged it is more important to satisfactorily resolve all remaining issues regardless of timeframe.

DOE provided a summary level critical path schedule for UFP-1.

HLW: The status report for Consent Decree milestone A-20, *Complete construction of Structural Steel to the +14-ft Elevation*, shows the due date as 31 December 2010. BNI's current scheduled completion date is shown as 28 January 2010. DOE noted that all structural steel between the 0-ft to 14-ft level was completed on 13 January. BNI will be submitting a milestone completion package for the Contract Milestone associated with the HLW structural

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steel in the next 30 days for DOE review and approval. Ecology noted in site visit that all 14-ft elevation steel has not been placed.

BOF: Parties continue to be concerned with WTP electrical demand. Several options under consideration; one additional transformer at the A-6 substation such that two are operational with one as standby or upgrading the 8MW of temporary construction power to permanent power.

**3.0 Agreements: It was agreed that .....**

M-62-40, System Plan: Ecology and DOE will begin to status this milestone at future PMM's and Quarterly meetings.

ORP Project Managers Meeting  
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Richland, Washington  
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**Attachment A: Action Tracking**

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
O	100-167	ORP	W. Russell	General	Develop spreadsheet of document deliverables, scheduling tool of when due, status of Ecology review	
X	100-168	ORP	W. Russell	M-45-56	Provide Ecology scanned copy of signed minutes and enter into AR	Open: 7/31/09; Action: Closed at 1/25/10.
O	100-169	ORP	J. Trent	WTP	Include CPI and SPI in future status report performance charts for WTP.	Open: 1/25/10; Action:

ORP Project Managers Meeting  
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**Attachment B: Presentation Materials**

**ORP TPA Project Summary and  
Handouts**

**Office of River Protection**

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**Tri-Party Agreement  
Monthly Milestone Review Meeting  
January 25, 2010**



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

December 2009

## Agenda

Office of River Protection  
Tri-Party Agreement  
Monthly Milestone Review Meeting  
ORP Conference Room 1200  
January 25, 2010  
12:30 p.m. – 3:30 p.m.

Page	Topic	Leads	Time
30	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	12:30
32	M-45-00, Complete Closure of All Single-Shell Tank Farms	Chris Kemp / Jeff Lyon	12:40
43	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	12:50
44	In Tank Characterization and Summary	John Long / Michael Barnes	12:55
45	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Ben Harp / Les Fort	1:05
47	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 / Dan McDonald	1:15
48	M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	Ben Harp / Dan McDonald	1:25
	<b>BREAK</b>		
3	TPA Milestone Statistics	Woody Russell / Dan McDonald / Jeff Lyon	1:50
25	FY 2009 ORP TPA Cost & Schedule Performance	Janet Diediker / Dan McDonald / Jeff Lyon	2:00
50	BNI Cost & Schedule Performance for Immobilization Plant (WTP) Project	Wahed Abdul / Jeff Trent / Garth Reed / Dan McDonald	2:20

## TPA Milestone Statistics

(Including target milestones)

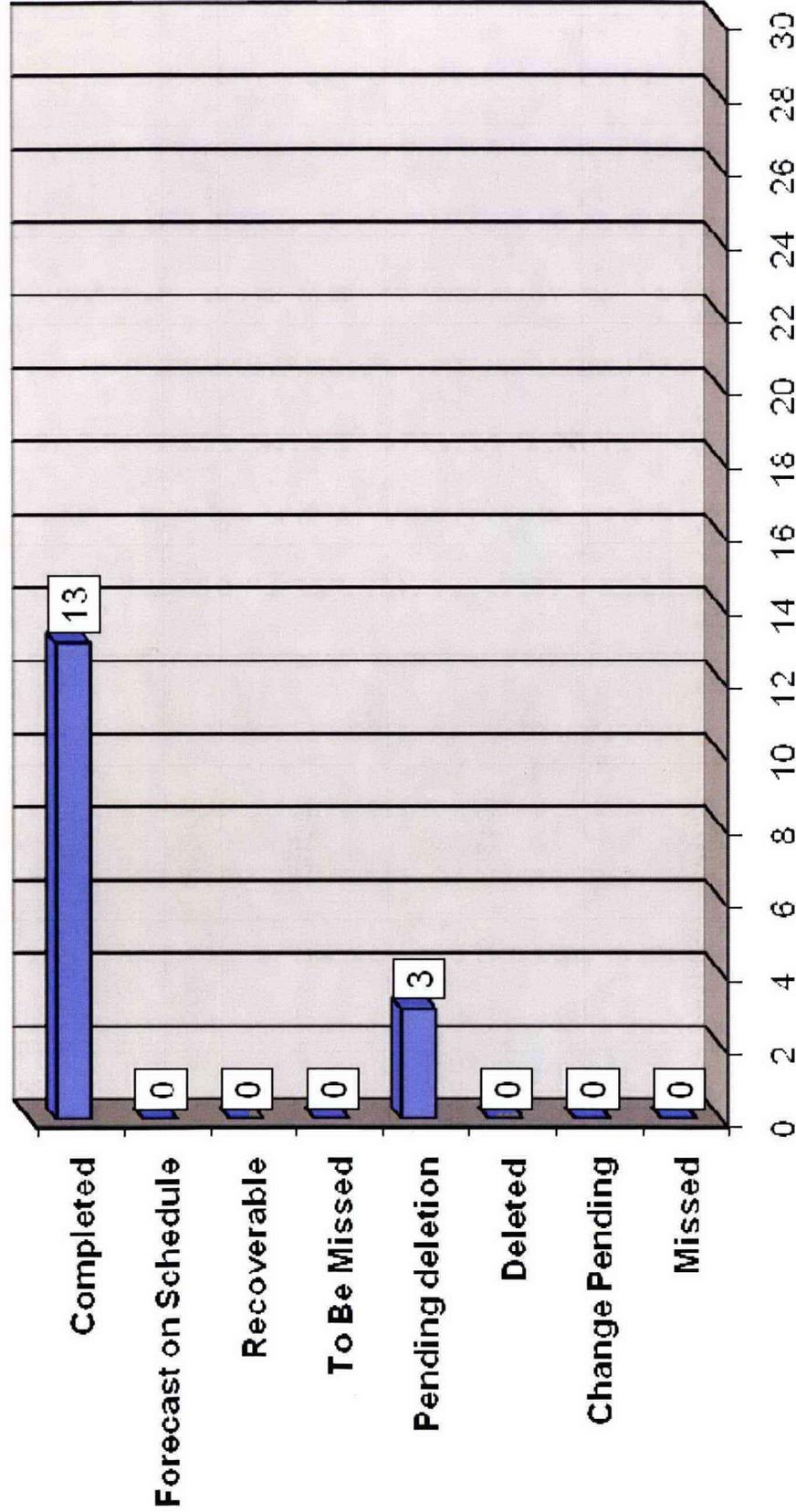
Milestone	Due Date	Total Active as of 10/01/09	Milestone Number	Due Date	Milestone Number	Due Date
<b>M-42-00A</b> , Provide Additional DST Capacity	TBD	1	M-42-00A	TBD		
<b>M-45-00</b> , Complete Closure of all SST Farms	01/31/43	19	M-45-70 M-45-80 M-45-81 M-45-82 M-45-83 M-45-84 M-45-85  M-45-86	12/31/40 01/31/11 09/30/14 09/30/15 06/30/19 01/31/17 01/31/22  12 months after each tank retrieval	<b>M-45-13</b> <b>M-45-15</b> <b>M-45-56</b> <b>M-45-59</b>  <b>M-45-61</b> <b>M-45-62</b>  M-45-90 M-45-91 M-45-92  M-45-100  M-45-101	<b>06/30/11</b> <b>06/30/11</b> <b>TBD</b> <b>TBD</b>  12/31/14 06/30/15  09/30/10 09/30/10 09/30/16  60 days after milestone adoption  60 days after milestone adoption
<b>M-47-00</b> , Complete Work Necessary to Provide Facilities for Management of Secondary Waste from the WTP.	When WTP Achieves Initial Plant Operation	2	<b>M-47-00</b>	When WTP Achieves Initial Plant Operation	<b>M-47-06</b>	06/30/12
<b>M-62-00</b> , Complete Pretreatment Processing and Vitrification of Hanford High Level (HLW) and Low Activity (LAW) Tank Wastes	12/31/47	12	<b>M-62-01T</b> <b>M-62-01U</b>  M-62-20 M-62-21  M-62-30	<b>01/31/10</b> 07/31/10  06/30/10 02/28/23  12 months after milestone adoption	M-62-31-T01 M-62-32-T01 M-62-33-T01 M-62-34-T01 M-62-40 M-62-45 M-62-49	TBD TBD TBD TBD 10/31/10 04/30/15 10/31/11
<b>M-90-00</b> , Interim Storage and Disposal of LAW and Interim Storage of HLW	When WTP Achieves Hot Start	2	<b>M-90-00</b>	When WTP Achieves Hot Start	<b>M-90-11</b>	12/31/12

## TPA Milestone Statistics

(Including target milestones)

Milestone	Due Date	Total Active as of 10/01/09	Milestone Number	Due Date	Milestone Number	Due Date
Interim Stabilization Consent Decree	(D-001-00)	1	D-001-00			
RPP Consent Decree			A-1	12/31/22	A-17	12/31/19
WTP Construction and Startup: Appendix A	12/31/22	19	A-2 Interim	12/31/16	A-18 Interim	12/31/09
			A-3 Interim	06/30/18	A-19 Interim	12/31/14
			A-4 Interim	12/31/19	A-20 Interim	12/31/10
			A-5 Interim	12/31/12	A-21 Interim	12/31/12
			A-6 Interim	12/31/17		
			A-7 Interim	12/31/14		
			A-8 Interim	12/31/18		
			A-9 Interim	12/31/19		
			A-12 Interim	12/31/12		
			A-13 Interim	12/31/15		
			A-14 Interim	12/31/17		
			A-15 Interim	12/31/18		
			A-16 Interim	12/31/19		
Tank Waste Retrievals: Appendix B	9/30/22	4	B-1	09/30/14		
			B-2	09/30/14		
			B-3	12/31/17		
			B-4	09/30/22		
<b>Total Active Milestones:</b>		<b>61</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	10/24/05								
M-046-21	Complete Implementation Of Double Shell Tank Space Optimization Study Recommendations (Tank Space Options Report Document No. RPP-7702, April 12, 2001).	12/31/05	12/15/05								
M-062-01L	Submit Semi-Annual Project Compliance Report.	01/31/06	01/31/06								
M-045-02M	Submit biennial update to SST retrieval sequence document (agreement Appendix 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	12/29/04								
M-45-55-T04	Submit to Ecology for review and comment a draft Field Investigation Report combining the results of field investigations and analysis for WMAs A-AX, C and U. As part of the Phase 2 Vadose Zone project renegotiations being developed, this target milestone scope has been included in M-45-55 Phase 1 rollout documentation due in 1/08.	4/30/06								X	

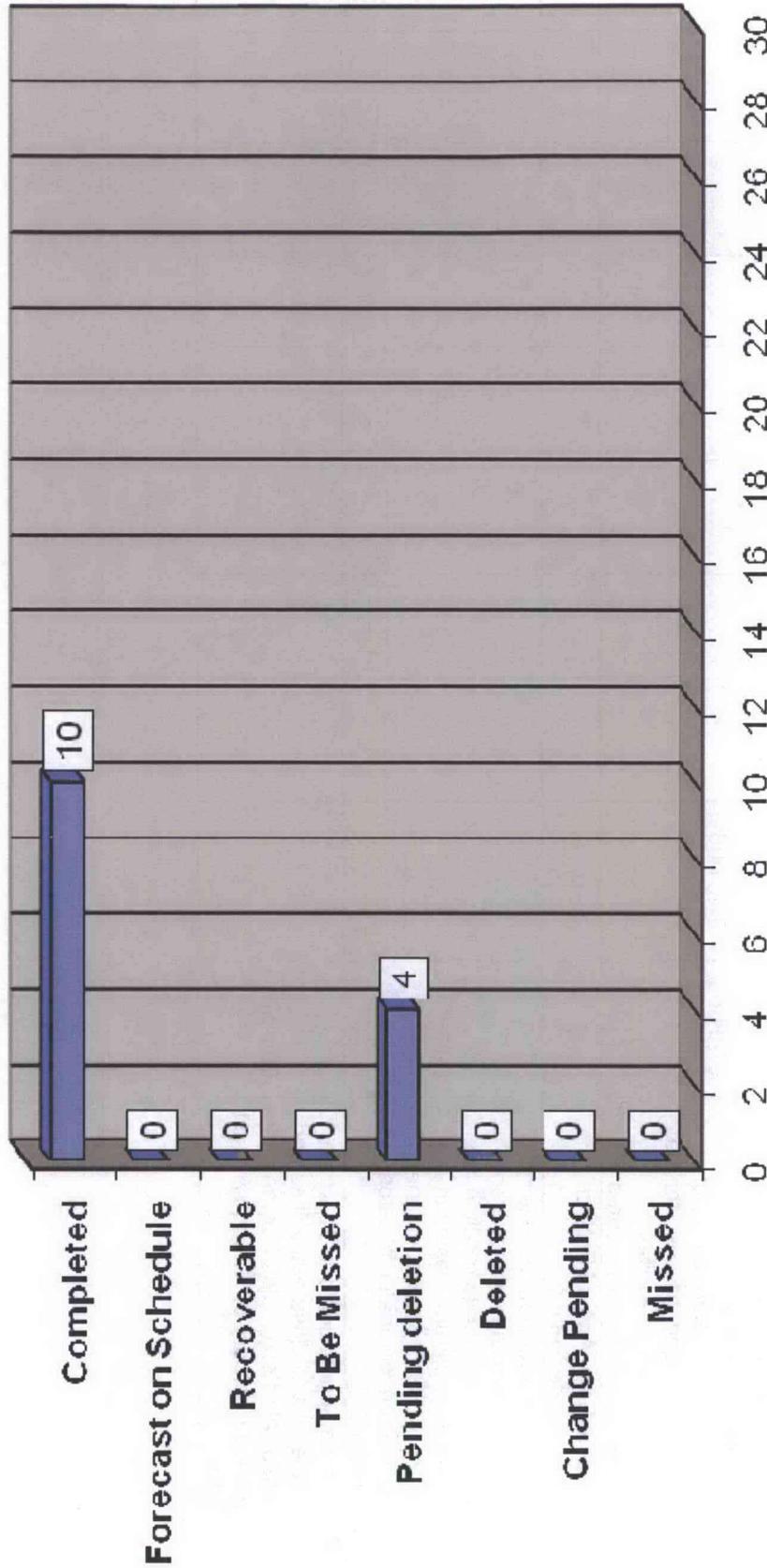
### Fiscal Year 2006 Tri-Party Agreement Milestone Status

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

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

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

# FY 2007 MILESTONE PERFORMANCE



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

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R30	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/06	10/31/06								
M-062-03	Submit DOE Petition for RCRA Delisting of Vitrified HLW.	12/31/06	12/22/06								
M-045-00C-A	Ecology and DOE negotiations under this milestone shall be completed within 120 days. In the event the parties do not reach agreement within timeframe, the negotiations will be resolved as a resolution of dispute via final determination. Unless otherwise agreed by Ecology and DOE, this final determination will be issued within 150 days of initiation of negotiations.	01/28/07							X		
M-062-01N	Submit Semi-Annual Project Compliance Report.	01/31/07	01/31/07								
D-001-00-R31	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/07	01/26/07								

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

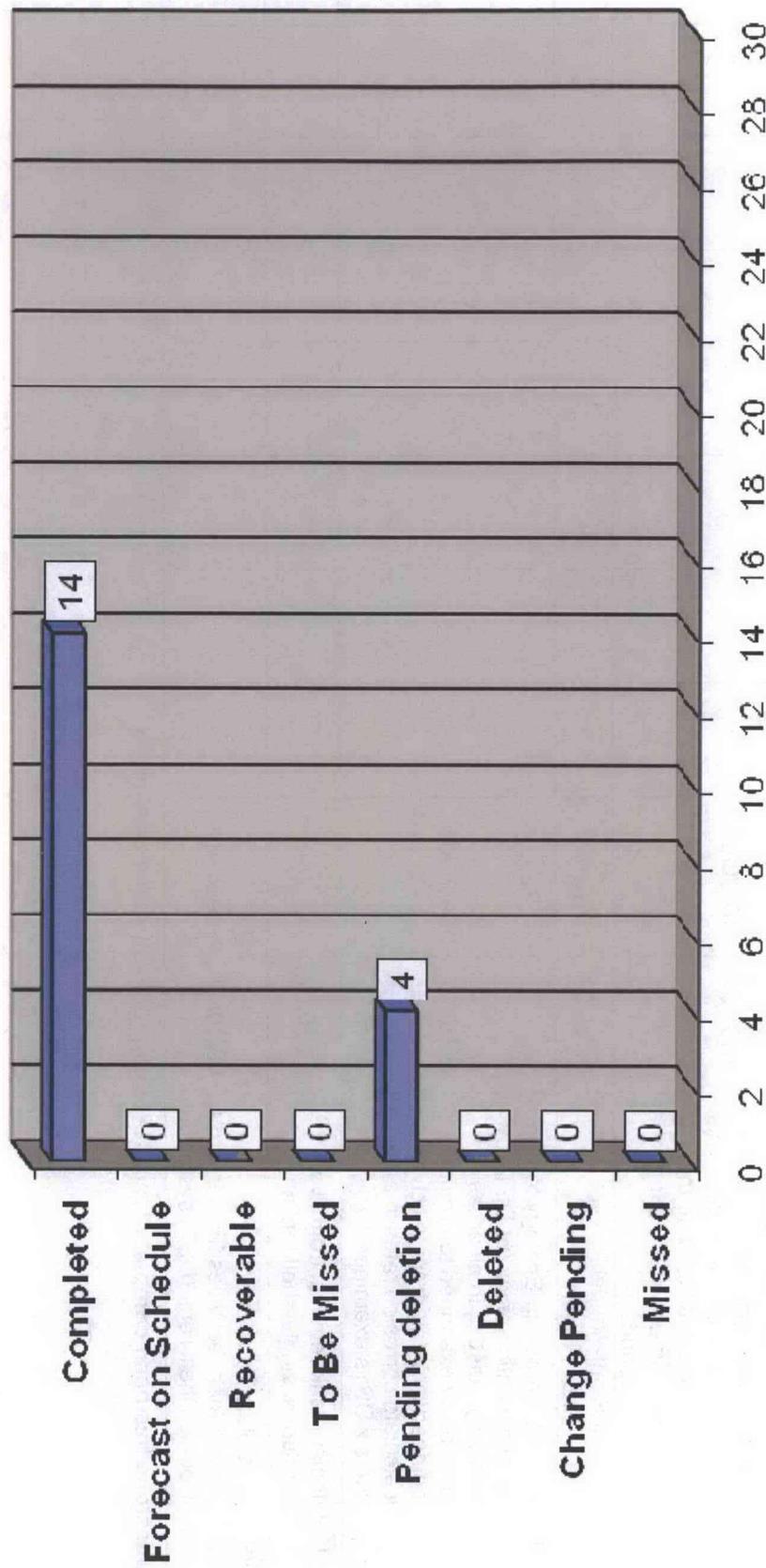
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-05A	Complete Waste Retrieval from S-102.	3/31/07							X		
D-001-00-R32	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/07	04/27/07								
M-062-11	Submit a Final Hanford Tank Waste Treatment Baseline. Following completion of negotiations required by M-62-08, DOE will modify its draft baseline as required and submit its revised, agreed-to baseline for treating all Hanford Tank Waste (HLW, LAW, and TRU) by 12/31/2028.	06/30/07							X		
M-045-56C	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/07	07/24/07								

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

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R33	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/07	07/30/07								
M-062-010	Submit Semi-Annual Project Compliance Report.	07/31/07	07/31/07								
M-048-15	Submit a report to Ecology for the re-examination of six (6) DSTs by ultrasonic testing in all areas previously examined to provide comparative data from which to calculate corrosion rates in each of the six DSTs examined.	09/30/07	09/26/07								
M-045-05-T05	Initiate tank retrieval from five additional single-shell tanks.	09/30/07							X		
M-048-00	Complete Tank Integrity Assessment activities for Hanford's Double Shell Tank (DST) system.	09/30/07	09/26/07								

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

# FY 2008 MILESTONE PERFORMANCE



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

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R34	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/07	10/31/07								
M-045-13-A	Submit to Ecology a Retrieval Data Report for S-112 pursuant to Agreement Appendix I.	12/31/07	12/21/07								
M-045-13-B	Remaining waste has been adequately characterized, and a risk assessment completed for S-112 residuals that remain in the tank.	12/31/07	12/21/07								
M-062-07B	Complete Assembly of LAW 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								

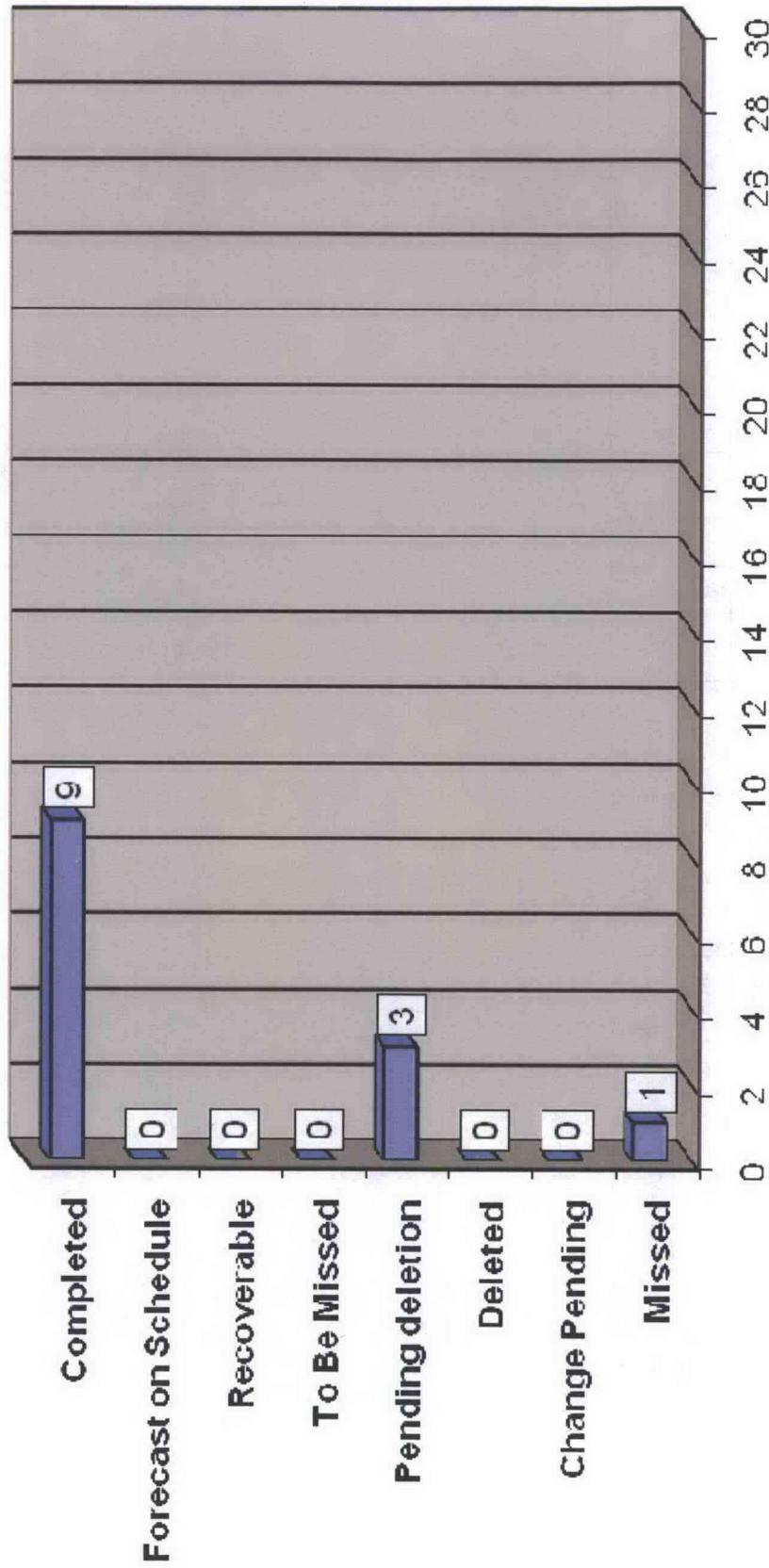
### Fiscal Year 2008 Tri-Party Agreement Milestone Status

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	01/22/09								
D-001-00-R36	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/08	04/30/08								
M-045-00D-A	Negotiations shall be complete within 150 days.	06/29/08							X		
M-045-56D	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/08	07/22/08								
D-001-00-R37	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/08	07/31/08								

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

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-062-01Q	Submit Semi-Annual Project Compliance Report.	07/31/08	07/30/08								
M-090-10	Ready to accept placement of ILAW in ILAW Disposal Facility.	08/31/08	02/13/07								
M-45-05-T06	Initiate tank retrieval from five additional SSTs.	09/30/08							X		
M-045-XX	Remove pumpable liquid from Catch Tank S-302	9/30/08	9/30/08								

# FY 2009 MILESTONE PERFORMANCE



Fiscal Year 2009 Tri-Party Agreement Milestone Status											
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R38	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/08	10/28/08								
M-045-58	Submit to Ecology for Review and Approval as an Agreement Primary Document Phase 2 Master Work Plan that describes the proposed approach for the completion of Corrective Action to meet final closure requirements in the Waste Management Areas as described in Appendix I, Section 2.3	12/31/08	12/18/08								
M-045-60	Submit to Ecology for review and approval as an agreement primary document, DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C.	12/31/08	12/18/08								
M-062-01R	Submit Semi-Annual Project Compliance Report	01/31/09	01/30/09								

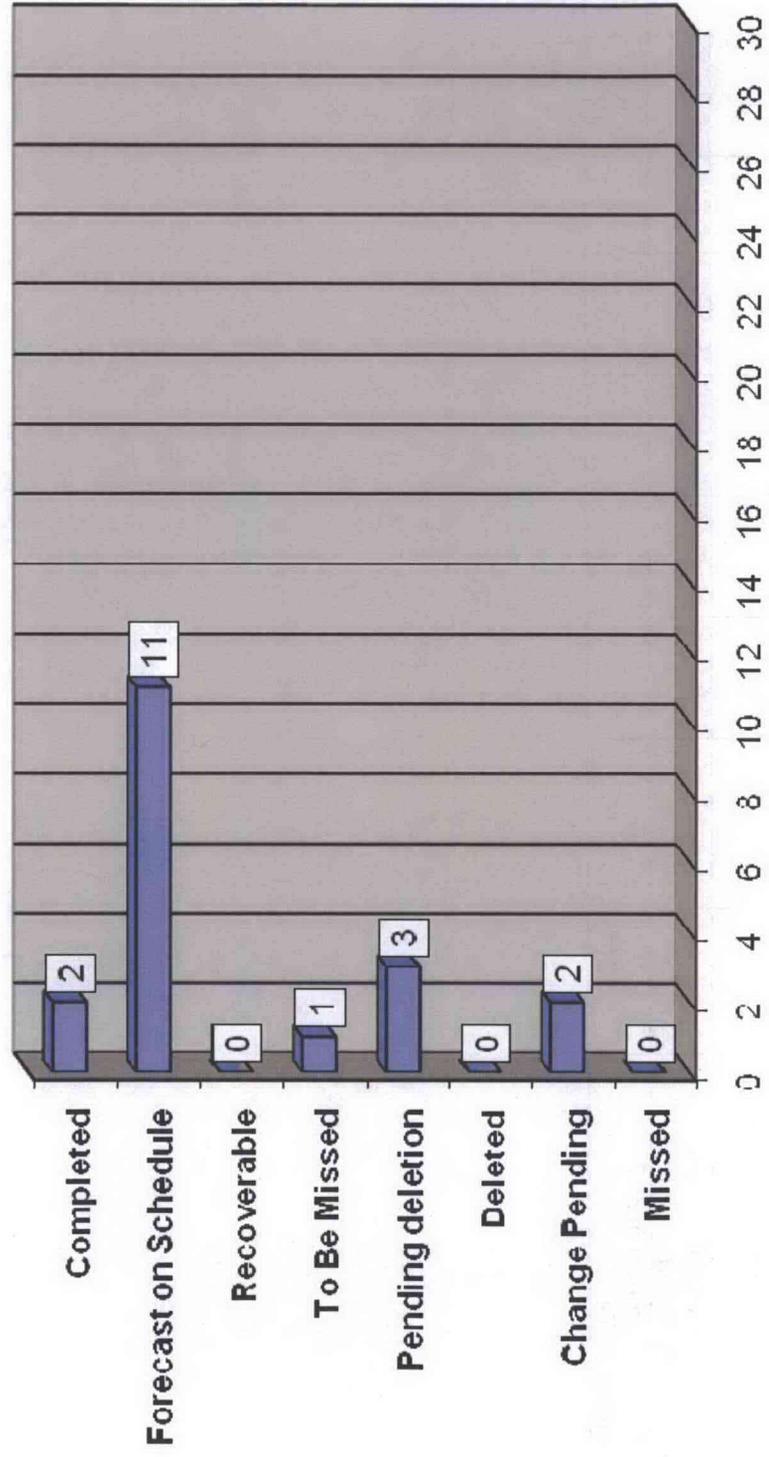
### Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R39	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/09	01/30/09								
M-062-09	Start Cold Commissioning – Waste Treatment Plant	02/28/09							X		
M-47-03A	Complete startup/turnover for waste retrieval mobilization systems for selected initial tank high-level waste feed tank	03/31/09							X		
D-001-00-R40	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/09	04/29/09								
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	07/21/09								

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

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-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	07/31/09								
M-062-01S	Submit Semi-Annual Project Compliance Report	07/31/09	07/31/09								
M-045-05-T07	Initiate tank retrieval from 7 additional SSTs	09/30/09						X	X		

### FY 2010 MILESTONE PERFORMANCE



## Fiscal Year 2010 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-001-00R-42 (existing)	Quarterly Report	10/31/09	10/28/09								
D-001-00R-43 (existing)	Quarterly Report	01/31/09		X							
D-001-00R-44 (existing)	Quarterly Report	04/30/10		X							
D-001-00R-45 (existing)	Quarterly Report	07/31/10		X							
M-45-02O (existing)	Biennial Update to SST Waste Retrieval Sequence	03/01/10							X		
M-45-02O-A (existing)	New SST milestones within 60 days	04/30/10							X		
M-45-05-T08 (existing)	Initiate Tank Retrieval from 8 Additional SSTs	09/30/10							X		
M-45-56F (existing)	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.	07/31/10		X							
M-62-01T (existing)	Submit Semi-Annual Project Compliance Report	01/31/10		X							
M-62-01U (existing)	Submit Semi-Annual Project Compliance Report	07/31/10		X							
M-47-06 (existing)	Complete Negotiation of Agreement Requirements-Treatment Complex	06/30/10									X
M-90-11 (existing)	Complete Canister Storage Facility Construction	08/31/10									X
M-45-90 (CR)	Complete Interim Barrier Demonstration for the T-106 Interim Barrier	09/30/10								X	
M-45-91	Establish a panel and provide a	09/30/10		X							

Fiscal Year 2010 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						
(CR)	report on SST Integrity Assurance Review										
M-45-100 (CR)	Submit to Ecology as an Agreement Primary Document a Catch Tank "assumed leak" response plan.	60 days after milestone adoption		X							
M-45-101 (CR)	Submit report on all Catch Tanks and associated pipelines that are identified in SST System Part A	60 days after milestone adoption		X							
M-62-20 (CR)	Close all 28 issues identified in <i>Comprehensive Review of Hanford Waste Treatment Plant Flowsheet and Throughput Assessment</i> , issued March 2006.	06/30/10		X							
A-18 Interim (CD)	Complete Structural Steel Erection Below Elevation 56' in PT Facility	12/31/09	7/23/09								

**CR – Change Request****CD – Consent Decree**

# Tank Farm Project Executive Summary

## November Reporting

### General

The earned value analysis is a comparison of cost and schedule performance to a 5-year baseline Performance Measurement Baseline (NTB). The earned value analysis is not intended to be a measurement of performance against existing Tri-Party Agreement Milestones.

The earned value performance reporting reflects the format, Work Breakdown Structure (WBS) reporting levels, and variance thresholds as agreed to with the Tank Farms Operations Contractor (TOC) for monthly performance reporting.

The following information is a summary of cumulative-to -date earned value performance.

### PROJECT BASELINE PERFORMANCE STATUS

WRPS November Project Performance - (\$k)								
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC
CM	31,266.8	27,086.0	28,940.8	(4,180.7)	(1,854.7)	0.87	0.94	
CTD	342,998.8	329,062.1	310,409.0	(13,936.6)	18,653.1	0.96	1.06	2,065,467.2
Red shaded cells indicates any SPI/CPI less than .90; Green shaded cells indicate any SPI/CPI between .90 and .99; and Blue shaded indicates any SPI/CPI greater than or equal to 1.								

The Current Month (CM) Schedule Variance (SV) was **-\$4,181K** with a Schedule Performance Index (SPI) of 0.87; the CM Cost Variance (CV) was **-\$1,854.7K** with a Cost Performance Index (CPI) of 94. The Cumulative to Date (CTD) SV was **-\$13,936.6K** with an SPI of 0.96; the CTD CV was **\$18,653.1K** with a CPI of 1.06.

#### TOC CM unfavorable SV of **(\$4,181k)** is driven by:

- 1) **Retrieval and Closure, (\$2,594k):** 1) C-104, delays in starting retrieval operations as a result of problems with AN-101 supernatant pump over-pressurization protection and repair of the Pressure/Flow Indicators in the POR138 Valve Box. 2) C Farm Infrastructure, due to delays of C-Farm trailers and facility improvements.
- 2) **WFD/Treatment Planning/DST Retrieval/Closure, (\$852k):** Early Transition LAW/BOF/LABS, work cancelled by ORP. A baseline change request has been prepared to realign the budget with the revised direction.

- 3) **Base Operations, (\$699k):** 1) *RA-SST/TSR Basic Maintenance* SST Electrical System Upgrades project has an extremely aggressive schedule to complete.

**Note:** Schedule Recovery Plans are in place and are being reviewed on a weekly basis.

**TOC CM unfavorable CV of (\$1,855k) is driven by:**

- 1) **Retrieval and Closure, (\$1,640k):** 1) *C-104* problems during startup and readiness activities associated with the C-104 OAT including rework of the flow and pressure instruments in the POR138 valve box and the additional cost associated with emergency preparedness drills. 2) 244-CR Vault, additional subcontractor cost to complete installation of the riser extension and the four (4) pumping assemblies, and additional labor cost occurred to winterize the pumping system. 3) *C Farm Infrastructure*, delays in the completion of the field portion of AN-101 OAT, and the subsequent development of the OAT Test Review Report (TRR), which resulted in increased cost in the current month.

**TOC CTD unfavorable SV of (\$13,937k) is driven by**

- 1) **Retrieval and Closure, (\$5,961k):** 1) *C-104 Retrieval* delays in starting retrieval operations as a result of problems with AN-101 supernatant pump over-pressurization protection and repair of the Pressure/Flow Indicators in the POR138 Valve Box. 2) *C Farm Infrastructure* delays in initiating the development of non-proprietary HRR/LDM equipment software and procedures, and delays with the C Farm Facility enhancements. 3) *Interim Barriers*, delays in procurement of direct push materials resulting from changes in procurement requirements, additional performance recorded for ground penetrating radar (GPR), and delays in receiving Regulatory approval to begin construction in TY Farm.
- 2) **Recovery Act, (\$2,650k):** 1) *RA- DST Infrastructure Upgrades* Cathodic Protection Upgrades are deferred into FY10, and the delay of issuing a Statement of Work (SOW) for architecture and engineering support. 2) *RA- SST/TSR Maintenance* resulting from the need for key engineering resources to assemble project team. 3) *RA- DST Value Assembly Upgrades* is due to ECN to replace valve funnels for AP-02A and AP-02D requiring rework to show new funnel with split collar design; re-design of funnels led to delays in completion of fabrication; and re-design of funnels to allow incorporation of the new split collar funnel for AZ-01A, AZ-VP and AW-A pits and re-design of the jumpers for AN-A, AN-B and AP-VP have delayed completion of this work scope.
- 3) **WFD/Treatment Planning/DST Retrieval/Closure, (\$1,616k):** 1) *Early Transition LAW/BOF/LABS*, work cancelled by ORP. BCR RPP-10-015 has been prepared to realign the budget with the revised direction. This BCR is being implemented in December and the overall SV will be reduced. 2) *East Area WRF Project Support* is due to hiring delays and key resources working on Strategic Initiatives.
- 4) **Business Services, (\$1,562k):** *Facility and Property Management* is resulting from the delays in awarding and procuring items for the 2704HV Mobile Office project.
- 5) **Tank Farm Projects, (\$1,310k):** 1) *Tank Waste Sampling*, due to re-sequencing work scope to support additional samples required for the C-108 Grab Sample and the AN-106 Caustic Addition PBIs in June, and critical resources being reassigned to support Retrieval PBIs and RA scope at the end of September 2009. 2) *DST Infrastructure Upgrades*, Base Operations, and farm outages drawing critical resources delayed the Cathodic Protection Upgrades due to the late completion of the annual Cathodic Protection System adjustment. 3) *Tank Chemistry Control*, delays of the SST Visual Inspection Sequence development. 4) *SST Integrity Project* delays of the SST Visual Inspection Sequence development.

**Note:** Schedule Recovery Plans are in place and being reviewed on a weekly basis.

**TOC CTD CV of \$18,937k is driven by:**

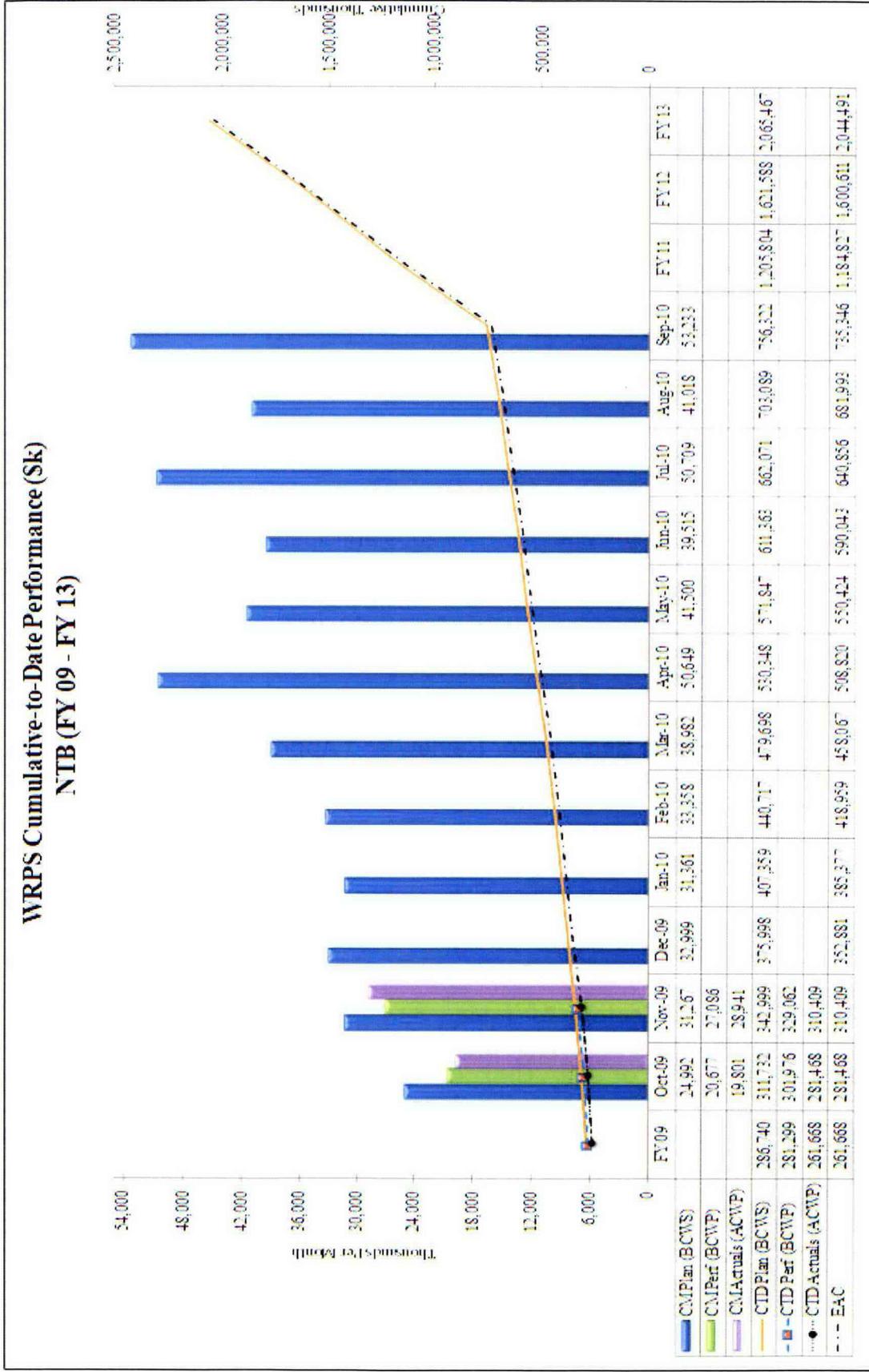
- 1) **Recovery Act, \$13,386k:** 1) *RA- Finance Support*, \$3,917k: due to lower than anticipated allocation of applicable G&A/COP costs than planned. 2) *RA- DST Farm Upgrades* due to efficiencies captured during the Vent Reliability Study which found the AN exhauster evaluation bounds all the HVAC systems, and efficiently resolving National Electric Code (NEC) issues in SY Farm due to the assignment of a dedicated team. 3) *RA- Program Management*, related to lower labor rates than initially estimated. 4) *RA- WFD Tank Mixing & Sampling* is resulting from cost transfers to Savannah River National Labs (SRNL) for the Bench Scale Demonstration.
- 2) **Business Services, \$7,015k:** 1) *Facility and Property Management*, due to vacant positions in carpenters and janitors and the cost related to the delayed 2704HV Mobile Office Project. 2) *Finance Support*, due to the elimination of Business & Operating (B&O) tax related to the high tech tax credit. 3) *Information Resource Management* is due to purchasing fewer computers and workstations as a result a RA staffing delays and the cost reductions from buying printers and plotters from Yucca Mountain.

**CONTRACT-TO-DATE PERFORMANCE MEASUREMENT - 10/2008 - 11/2009**

**BY WORK BREAKDOWN STRUCTURE**

Dollars in Thousands

WBS	TITLE	Budgeted Cost			Actual Cost			Variance			Budget at Completion (BAC)
		Work Scheduled	Work Performed	Work Performed	Work Scheduled	Work Performed	Schedule	SV%	SV%	Cost	
<b>5.1 BASE OPERATIONS</b>											
5.1.1	Base Operations	86,706.8	84,623.0	84,665.0	(2,083.8)	-2.4%	-342.0	-0.4%	406,081.4		
5.1.2	DST Space Management	6,884.8	6,795.1	8,889.4	(89.7)	-1.3%	-2,094.3	-30.8%	41,413.2		
5.1.3	TOC Facility Operations	26,434.9	26,389.1	24,368.1	(45.8)	-0.2%	2,023.0	7.7%	148,432.6		
5.1.4	Tank Farm Upgrades	14,033.7	11,817.7	7,918.9	(2,216.0)	-15.8%	3,898.8	33.0%	105,653.3		
5.1.5	Project Support	113,921.8	111,921.8	96,268.2	(2,000.0)	-1.8%	13,653.6	12.2%	518,479.7		
	<b>TOTAL</b>	<b>247,982.0</b>	<b>241,546.7</b>	<b>224,407.6</b>	<b>(6,435.3)</b>	<b>-2.6%</b>	<b>17,139.1</b>	<b>7.1%</b>	<b>1,220,070.2</b>		
<b>5.2 RETRIEVE AND CLOSE SSTs</b>											
5.2.1	Retrieve/Closure Program	36,869.9	36,387.3	33,170.4	(1,462.6)	-4.0%	2,216.9	6.3%	159,683.7		
5.2.2	SST Retrieval East Area	28,421.9	23,881.9	30,388.9	(4,540.0)	-16.0%	-6,507.0	-27.2%	205,309.5		
5.2.3	SST Retrieval West Area	752.5	822.8	688.8	70.3	9.3%	136.0	16.5%	3,338.8		
5.2.4	Closure Program	1,615.9	1,616.1	1,266.7	0.2	0.0%	329.4	20.4%	8,964.9		
5.2.5	SST Closure	827.9	819.0	423.7	(8.9)	-1.1%	395.3	48.3%	23,181.9		
	<b>TOTAL</b>	<b>68,488.1</b>	<b>62,527.1</b>	<b>65,956.5</b>	<b>(5,961.0)</b>	<b>-8.7%</b>	<b>-3,429.4</b>	<b>-5.5%</b>	<b>400,476.8</b>		
<b>5.3 WFD/TREATMENT PLNG/DST RETRIEVAL/CLOSURE</b>											
5.3.1	WTP Feed Delivery Program	12,714.5	12,645.5	9,943.0	(69.0)	-0.5%	2,702.5	21.4%	92,230.1		
5.3.2	Construct DST Retrieval Systems	3,522.5	3,476.5	3,301.7	(46.0)	-1.3%	174.8	5.0%	102,254.4		
5.3.3	RA - Transfer System/Mod Project	649.2	898.6	760.8	249.4	38.4%	137.8	15.3%	20,732.2		
5.3.6	Immobilization Program	1,804.2	1,771.6	1,264.9	(32.6)	-1.8%	506.7	28.6%	55,065.2		
5.3.7	WTP Operational Readiness	2,876.7	2,048.9	1,731.7	(827.8)	-28.8%	317.2	15.5%	17,280.4		
5.3.8	East Area Waste Receiving Facility	446.7	97.5	3.1	(349.2)	-78.2%	94.4	96.8%	490.8		
5.3.9	Tank Waste Pretreatment Project	564.2	433.8	415.1	(130.4)	-23.1%	18.7	4.3%	30,836.3		
5.3.10	Secondary Waste Treatment/ETF	2,073.1	2,118.0	1,640.3	44.9	2.2%	477.7	22.6%	37,291.1		
5.3.11	Next Generation Projects	1,560.4	1,376.1	925.1	(184.3)	-11.8%	451.0	32.8%	23,500.7		
	<b>TOTAL</b>	<b>26,211.5</b>	<b>24,866.5</b>	<b>19,985.7</b>	<b>(1,345.0)</b>	<b>-5.1%</b>	<b>4,880.8</b>	<b>19.6%</b>	<b>379,681.2</b>		
<b>5.4 SUPPLEMENTAL TREATMENT</b>											
5.4.1	Supplemental Treatment	317.1	130.7	59.2	(186.4)	-58.8%	71.5	54.7%	23,500.7		
5.5											
5.5.2	Waste Treatment Facility	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%	13,452.20		
	<b>TFC TOTAL</b>	<b>342,998.8</b>	<b>328,062.1</b>	<b>310,409.0</b>	<b>(13,936.6)</b>	<b>-4.1%</b>	<b>18,653.1</b>	<b>5.7%</b>	<b>2,065,467.20</b>		



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

### I. Near-Term Deliverables:

- **M45-45-55, Submit to Ecology for Review and Approval as an Agreement primary document a Phase 1 RFI Report**  
Due: 1/31/08  
Status: RFI in primary document revision process. DOE revised RFI, based on Ecology comments and resubmitted to Ecology on 10/07/09. Additional revisions have been identified and agreed upon. Additional changes to Chapter 1, Chapter 25, Chapter 27, Chapter 29, Appendix A and Appendix B will be provided formally to Ecology by February 28, 2010, with an update to Appendix G to follow by April 30, 2010.
- **M-45-56F, Complete Implementation of Agreed to Interim Measures**  
Due: 07/31/09  
Status: Complete. ORP and Ecology met on July 21, 2009 to discuss completed FY2008 interim measures and future FY2009 anticipated activities. July 2009, meeting minutes drafted and jointly reviewed with signature expected at January 2010 PMM. Consistent with FY2009 identified efforts, Ecology's TY Interim Barrier Public comment period closed January 22, 2010 and PMM will have approval request submittal.
- **M45-45-58, Submit to Ecology for Review and Approval as an Agreement primary document, a phase 2 CMS Master Work Plan**  
Due: 12/31/08  
Status: Master Work Plan is in the Primary document revision process. DOE provided comment resolutions to Ecology on 10/13/09. Ecology provided clarification to comments by letter on December 10, 2009. ORP and Ecology have met to discuss and plan additional revisions to address the clarifications. No issues identified.
- **M-45-60, Submit to Ecology for review and approval as an Agreement primary document DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C**  
Due: 12/31/08  
Status: Complete. ORP updated RFI/CMS Workplan and Sampling and Analysis Plan based on Ecology comments and resubmitted to Ecology, with approved Ecology RCRs on November 2, 2009. ORP is anticipating either a final approval letter or approval and documentation in PMM TPA record of Ecology approval of revisions.

- **M-45-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RCRA Facility Investigation/Corrective Measures Study Report for WMA C**  
Due: 12/31/10  
Status: At Risk. See issues below.
- **M-45-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Implementation Work Plan for WMA C**  
Due: 7/31/12  
Status: At Risk. See issues below.

## II. Significant Accomplishments:

- T-Farm interim barrier monitoring continues.
- Continued direct push characterization in C Farm per the Phase 2 RFI/CMS work plan and SAP for WMA C.
- Continued the joint process with Ecology and other regulatory agencies and stakeholders to define the inputs, approaches, assumptions and methods that will be used for development of a performance assessment for Waste Management Area C.

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

- Continue direct push campaign in C Farm.
- Initiate SGE data collection at one additional UPR site in C Farm.
- Initiate well-to-well SGE survey of A and AX Farms to support evaluation of a potential future barrier site.
- Initiate additional direct push sampling in S Farm based on findings of SGE analysis of SX data, to support evaluation of a potential future barrier site.
- Initiate construction of an interim surface barrier at TY farm.
- Initiate remedial technology assessments in support of a Corrective Measures Study for WMA C.

## IV. Issues

- The transmittal letter for M-45-50 (WMA C work plan and SAP) indicated that the scope of characterization activities identified in the plan could not be completed in time to support the currently scheduled dates for M-45-61 and M-45-62. (The draft consent decree has been modified to include changes to the dates for these milestones.)

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

### **I. Deliverables**

- **M-45-00, Complete Closure of all Single-Shell Tank Farms**  
Due: 9/30/24  
Status: To Be Missed (based on current DOE Baseline planning).
  
- **M-45-00B, Complete Specified “Near-Term” SST Waste Retrieval and Interim Closure Activities, to Result in the Retrieval of all Tank Wastes in WMA-C SSTs Pursuant to the Agreement Criteria in Milestone M-45-00**  
Due: 9/30/06 (Or as otherwise indicated within the descriptive text of this milestone.)  
Status: Missed.
  - Completion of four limits of technology retrieval demonstrations:
    - Saltcake dissolution (S-112): Completed (M-45-03C).
    - Modified sluicing (C-106): Completed.
    - Vacuum retrieval (C-200s): Completed; C-203 field retrieval operations completed on March 24, 2005; C-202 retrieval completed on August 11, 2005; C-201 retrieval completed on March 23, 2006; C-204 retrieval completed on December 11, 2006.
    - Mobile retrieval (C-101, C-105, C-110 or C-111): Not completed. C-101 start of retrieval is currently projected for FY 2011. (Note: C-110 retrieval commenced using modified sluicing in compliance with a TWRWP approved by Ecology on 7/3/08. C-111 will have retrieval performed using modified sluicing in compliance with a TWRWP submitted to Ecology on 5/28/09.)
  
  - Implementation of full-scale leak detection monitoring and mitigation (LDMM) technologies for the first three 100-series tank retrievals following Tank S-112:
    - Tank S-102: High Resolution Resistivity System (HRR) installed; supporting retrieval operations.
    - Tank C-103: HRR demonstration complete.
    - Tank C-108: HRR installed; supporting retrieval operations.
    - Completed HRR injection tests at S-102.
    - Submitted HRR evaluation report and recommendation for further deployment.
  
  - Submittal of Tank Waste Retrieval Work Plans (TWRWP):
    - Tanks C-201, C-202, C-203, and C-204: Completed on April 8, 2004.
    - Two (2) 100-series tanks by July 31, 2004: Completed on July 29, 2004 (C-103 and C-109).

- Four (4) 100-series tanks by 10/31/04: Completed on October 8, 2004 (C-102, C-104, C-107, C-108, and C-112).
- Five (5) 100-series tanks by January 31, 2005: Completed on January 24, 2005 (C-101, C-105, C-110, and C-111).
  
- **M-45-00C, Initiate Negotiation of SST Waste Retrieval and Closure Activities and Associated Schedules (for the period February 2007 through August 2008)**  
Due: 9/30/06  
Status: Missed.
  
- **M-45-00D, Initiate Negotiation of the SST Waste Retrieval and Closure Activities (for the period September 2008 to September 2013)**  
Due: 1/31/08  
Status: Missed.
  
- **M-45-00D-A, Ecology and DOE Negotiations Shall Be Completed within 150 days.**  
Due: 06/28/08  
Status: Missed
  
- **M-45-00E, Initiate Negotiation of SST Waste Retrieval and Closure Activities for the Remainder of the SST Program**  
Due: 10/31/12  
Status: To Be Missed (based on current DOE Baseline planning).
  
- **M-45-00E-A, Ecology and DOE Negotiations Shall Be Completed within 120 Days.**  
Due: 02/27/13
  
- **M-45-05, Retrieve Waste from all Remaining Single-Shell Tanks**  
Due: 9/30/18  
Status: To Be Missed (based on current DOE Baseline planning).
  
- **M-45-05-T05, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**  
Due: 9/30/07  
Status: Missed.
  
- **M-45-05-T06, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**  
Due: 9/30/08  
Status: Missed.
  
- **M-45-05-T07, Initiate Tank Retrieval from Seven Additional Single-Shell Tanks**  
Due: 9/30/09  
Status: Missed

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

## **II. Significant Accomplishments**

- Continued C-108 heel sample analysis at 222S laboratory.
- Continued MARs Phase II testing at Cold Test Facility.
- Continued C-104 trouble shooting and repair of flow and pressure elements in Valve Box.
- Initiated design for C-108 Hard Heel Retrieval System.

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

- Begin retrieval of C-104.
- Analyze C-108 heel.
- Complete phase II testing of MARs.
- Commence design of C-107 Waste Retrieval System (MARs deployment)
- Achieve 'interim stabilized' liquid levels on S-102. Issue interim stabilization documentation.
- Complete design for C-108 Hard Heel Retrieval system, and initiate procurement and construction activities.
- Complete C-111 construction and initiate retrieval.

## **IV. Issues**

- Milestones M-45-00B (retrieve all C Farm tanks), M-45-00C (initiate negotiations on SST retrievals for 2007-2008), and M-45-00D (initiate negotiations on SST retrievals for 2008-2013) were missed. TPA negotiations to address these and other milestones will be completed sometime after December 11, 2009, when public review and comment on the newly proposed Consent Decree is complete.

## 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	4/1/11	3/23/12	4/8/12	5/8/12	8/11/14	7/11/14	1/13/15
C-102	9/30/11	9/20/12	10/2/12	11/2/12	8/19/14	7/19/14	4/16/15
C-103	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-104	Complete	Complete	Complete	(1/12/10)	4/15/12	3/15/12	12/7/12
C-105	6/28/11	6/18/12	7/1/12	8/1/12	8/19/14	7/19/14	4/8/15
C-106	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-107	6/29/10	3/25/11	4/7/11	5/7/11	1/7/13	12/7/12	8/29/13
C-108 <sup>c</sup>	Complete	Complete	Complete	Complete	12/3/10	10/15/10	7/8/11
C-109 <sup>cd</sup>	Complete	Complete	Complete	Complete	12/21/11	11/21/11	8/16/12
C-110	Complete	Complete	Complete	Complete	8/21/11	7/21/11	4/17/12
C-111	Complete	7/1/10	7/29/10	8/29/10	1/21/13	12/21/12	9/13/13
C-112	8/16/10	8/5/11	8/20/11	9/20/11	4/22/13	3/22/13	2/13/14
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 December month-end Integrated Mission Execution Schedule (IMES) as of 12/31/09 and the Near Term Baseline Schedule (NTBS) and are subject to change as efforts continue to identify and implement schedule efficiencies.
- c. Sluicing was performed to the limits of the sluicing system technology.
- d. 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: Complete. On May 15, 2008, Ecology transmitted comments on the M45-02N deliverable. On July 23, 2008, ORP transmitted letter 08-TF-049 to Ecology with a plan for responding to Ecology comments on and updating the Retrieval Sequence Document (RPP-21216). The revised document was submitted to Ecology on September 12, 2008, by letter 08-TF-062. Ecology approved the document on January 22, 2009, by letter 0900343.
- **M-45-02O, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (see text of M-45-02M for further details)**  
Due: 3/1/10 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: To be missed. See discussion below under "Issues".
- **M-45-02O-A, 3 Parties Shall Meet To Establish New Milestones Within 60 Days**  
Due: 04/30/10  
Status: To be missed.
- **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: In negotiation. See discussion below under "Issues".

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

## II. Significant Accomplishments

None.

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

None.

## IV. Issues

The proposed TPA milestone, M-62-40, appears to supersede and provide an expanded set of information and data when compared to the requirements of the M-45-02 series milestones. To develop and submit the M-45-02O deliverable requires the same resources that are required to develop and submit the M-62-40 deliverable. In order to meet the proposed M-62-40 milestone due date, resources must be allocated to the development of the deliverable at this time, which would preclude the development of the M45-02O deliverable. Ecology and ORP are discussing a resolution to this issue.

## **TANK RETRIEVALS WITH INDIVIDUAL MILESTONES**

### **Tank 241-C-106**

#### **I. Deliverables**

- **M-45-05M-T01, Submit C-106 Waste Retrieval Results, Analysis of Residual Waste(s), and (if appropriate) Request for Exception to the Criteria Pursuant to Agreement Appendix H**  
Due: 2/27/04  
Status: Complete.

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

- None.

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

- Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A Request for Additional Information (RAI) was received from the NRC in February 2009. (It has been discussed with the NRC that much of the additional information requested is dependent upon development of C-Farm residual waste PA and, therefore, cannot be provided until the PA is published.)
- Continue PA workshops with Ecology, EPA, NRC, and DOE HQ focused on residual waste in C Farm tanks and pipelines following retrieval.

#### **IV. Issues**

- C-106 Closure Plan approval and SST radiological Categorical Notice of Construction (NOC) Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement (EIS) and associated Record of Decision (ROD); forecast completion for the final EIS ROD is in the Fall of 2011.

### **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 was restarted on July 25, 2007 and halted on July 26, 2007 when an aboveground waste spill occurred. Retrieval is estimated to be approximately 93.3% complete with 433,000 gallons of total waste removed.

- **M-45-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**  
Due: 6/30/11  
Status: At Risk. See discussion below under "Issues". 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: At risk. See discussion below under "Issues".
- **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: At risk. See discussion below under "Issues".
- **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: At risk. See discussion below under "Issues".
- **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: At risk.

## II. Significant Accomplishments

- Continued to operate the S-102 exhauster to reduce the volume of supernatant liquid in the tank. An October 20, 2009, video review of the tank has shown that the supernatant liquid volume is approximately 3,000 to 4,000. This is below the criteria for interim stabilization of less than 5000 gallons supernatant liquid.

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

- Continue to operate the S-102 exhauster. Issue interim stabilization documentation.

## IV. Issues

- Retrieval of Tank 241-S-102 was not completed by TPA milestone date of March 31, 2007, due to pump failure. It is technically imprudent to attempt to accelerate retrieval of S-102, at this time, because of the rheological nature of the waste.

- In a letter dated August 15, 2006, Ecology stated that submittal of Component Closure Activity Plans, for retrieved tanks, should continue to be suspended until June 30, 2009, or within 120 days after the Final Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS) Record Of Decision (ROD) is issued, whichever is earlier. In a letter dated November 12, 2009, Ecology extended its suspension until 180 days after the issuance of the final TC&WM EIS. It is anticipated that the final TC&WM EIS will not be issued until the Spring of 2011. Submittal of the Closure Plan could not occur, then, until several months after the M-45-15 milestone is due.

## **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: At risk. See discussion below under "Issues". Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.
- **M-45-13A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**  
Due: 12/31/07  
Status: Completed (ORP letter, 07-TPD-066, dated December 21, 2007). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.
- **M-45-13B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank**  
Due: 12/31/07  
Status: Completed (ORP letter, 07-TPD-066, dated December 21, 2007). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.
- **M-45-13C, Embedded Milestone, An update to the S-112 Component Closure Activity Plan has been submitted by DOE**  
Due: 6/30/11  
Status: At risk. See discussion below under "Issues".

- **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: At risk. See discussion below under "Issues".

## **II. Significant Accomplishments**

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

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

- None.

## **IV. Issues**

In a letter dated August 15, 2006, Ecology stated that submittal of Component Closure Activity Plans, for retrieved tanks, should continue to be suspended until June 30, 2009, or within 120 days after the Final Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS) Record Of Decision (ROD) is issued, whichever is earlier. In a letter dated November 12, 2009, Ecology extended its suspension until 180 days after the issuance of the final TC&WM EIS. It is anticipated that the final TC&WM EIS will not be issued until the Spring of 2011. Submittal of the Closure Plan could not occur, then, until several months after the M-45-15 milestone is due.

## Interim Stabilization Consent Decree

### I. Near-Term Deliverables:

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

Due: 09/30/04

Status: Completed on March 31, 2004, with discontinuation of pumping in U-108 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 is held in abeyance by third amendment to the Consent Decree. ORP's obligation to interim stabilize S-112 was satisfied upon completion of retrieval operations. Retrieval of S-102 has been impacted by the spill at this tank. An October 20, 2009, video review of the tank has shown that the supernatant liquid volume is approximately 3,000 to 4,000. This is below the criteria for interim stabilization of less than 5000 gallons supernatant liquid.

### II. Significant Accomplishments:

Continued to operate the S-102 exhauster to reduce the volume of supernatant liquid in the tank.

### III. Significant Planned Actions in the Next 6 Months:

Continue to operate the S-102 exhauster. Issue S-102 interim stabilization documentation.

### IV. Issues

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

## In Tank Characterization and Summary

For the period from December 1 – December 31, 2009:

### I. Accomplishments:

- Completed liquid grab sampling of tank 241-AZ-102 on December 18, 2009.
- Completed revision 4 of RPP-23403, *Single-Shell Tank Component Closure Data Quality Objectives*, on December 3, 2009.
- Completed revision 0 of RPP-43551, *Tank Farm Interim Barrier Data Quality Objectives*, on December 8, 2009.
- Completed revision 0 of RPP-43883, *Tank 241-AN-101 Grab Sampling and Analysis Plan in Support of Corrosion Mitigation During Tank 241-C-104 Retrieval*, on December 21, 2009.
- Completed revision 1 of RPP-40578, *Tank 241-AY-101 Grab Sampling and Analysis Plan in Support of Corrosion Mitigation for Fiscal Year 2010*, on December 21, 2009.
- Completed revision 1 of RPP-40837, *Tank 241-AP-107 Grab Sampling and Analysis Plan in Support of Evaporator Campaign for Fiscal Year 2010*, on December 21, 2009.

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

- Tank Sampling
  - Tank 241-AP-107 evaporator grab samples scheduled for March 2009.
  - Tank 241-AY-101 liquid grab samples scheduled for January 2010.
  - Tank 241-AN-101 mid C-104 retrieval scheduled for January 2010.
  - Tank 241-AN-101 post C-104 retrieval scheduled for May 2010.
  - Tank 241-AZ-101 corrosion mitigation liquid grabs scheduled for February 2010.
  - Tank 241-AN-103 corrosion mitigation liquid grabs scheduled for March 2010.
  - Tank 241-AN-104 corrosion mitigation liquid grabs scheduled for March 2010.
  - Tank 241-AN-107 corrosion mitigation liquid grabs scheduled for February 2010.
- BBI Updates
  - Five tank updates were completed for the first quarter of fiscal year 2010 and changed in the TWINS database.
  - Twelve tank updates are planned for the second quarter of fiscal year 2010.
- Data Quality Objectives (DQO)
  - Complete revision 11 of the Chemistry Control DQO in February 2010.
  - Complete revision 16 of the Compatibility DQO in January 2010.
  - Complete revision 0 of the Mission Analysis/Strategic Planning DQO in April 2010.

### 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: Missed.
- **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)

242-A Campaign strategy:

- FY10. 1 campaign using AW-106 as the feed and slurry tank. This waste requires 2 passes to achieve forecast waste volume reduction.
- FY11. 2 campaigns with feed from AP-107 and AZ-102. Slurry tanks will be AP-104/AP-107.
- FY12. 1 campaign with feed from AY-101 and slurry to AP-107. This campaign replaces a Cold Run in the baseline.

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY09	09-01	AP-101/ AP-105	AP-104	Entered OPERATION MODE on 3/17/09 and returned to SHUTDOWN MODE on 6/25/09. Campaign 09-01/09-02
FY09	09-02	AP-101/ AP-105	AP-104/ AP-101	processed approximately 2.1mgal of DST waste achieving 948kgals (45%) waste volume reduction.
FY10	10-01	AW-106	AW-106	Planned start March 2010.
FY11	11-01	AP-107	AP-104	Planned start March 2011. Campaigns 11-01 and 11-02 to be performed back-to-back
FY11	11-02	AZ-102	AP-104/ AP-107	
FY12	12-01	AY-101	AP-017	Planned start March 2012.

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

**I. Near-Term Deliverables:**

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

**II. Significant Accomplishments:**

- None to report.

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

- None to report.

**IV. Issues**

- None to report.

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

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

- **M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes**  
Due: 12/31/2028  
Status: To Be Missed.
- **M-62-00A, Complete WTP Pretreatment Processing and Vitrification of Hanford HLW and LAW Tank Wastes**  
Due: 02/28/2018  
Status: To Be Missed.
- **M-62-01R, Submit Semi-Annual Project Compliance Report**  
Due: 01/31/2009  
Status: Complete.
- **M-62-01S, Submit Semi-Annual Project Compliance Report**  
Due: 07/31/2009  
Status: 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.
- **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:**

- None to report.

**IV. Issues:**

- None

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

There are about 3,150 FTE equivalent contractor [Bechtel National Inc. (BNI)] and subcontractor personnel working on the WTP Project, with about 900 craft (an increase of about 100 from last month), 400 non-manual, and about 285 subcontractor personnel FTE equivalents working at the WTP construction site (all facilities). Overall project percent complete through November 2009 is 52%, design and engineering is 77% complete, and construction is 48% complete.

The overall WTP Project schedule variance was slightly negative in November, (\$0.2M); however, the cost variance was a positive \$1.4M. The monthly cost performance was positive for construction; however, the cost performance for Engineering and R&T which was mostly negative.

Following is the status through the end of December for current project issues:

### Material at Risk (MAR)

The Safety Evaluation Report (SER) was approved by the ORP Manager on October 31, 2009, with four Conditions of Acceptance (COA). The four COAs address the following subject areas: (1) Hydrogen in Piping and Ancillary Vessels (HPAV) piping design criteria; (2) BNI to develop a plan and schedule for resolving technical comments on six primary reports referenced in the SER (Note Completed in December 2009); (3) Develop a plan and schedule for resolving the uncertainties identified in PDSA Addendum Section 2.7 (Note the COA will not be closed until the uncertainties are adequately resolved and approved by ORP; and (4) BNI will recommend application of seismic criteria for piping performing a safety significant confinement function. The COAs will be closed as work is completed, with a completion of all COAs estimated in June 2010. The ICP approval enables elimination of many active process controls located outside of the hot cell and reclassification of several Safety Class controls to Safety Significant, while retaining a core set of Safety Class controls sufficient to ensure safety for the public and the workers. ORP considers these changes essential to ensuring a more reliable Pretreatment Facility that is critical to fulfilling the tank waste treatment mission, the cornerstone to the cleanup of tank waste at Hanford. The schedule for completion of the COAs aligns with critical design and procurement need dates, so overall construction schedules are not affected.

### Hydrogen in Piping and Ancillary Vessels (HPAV)

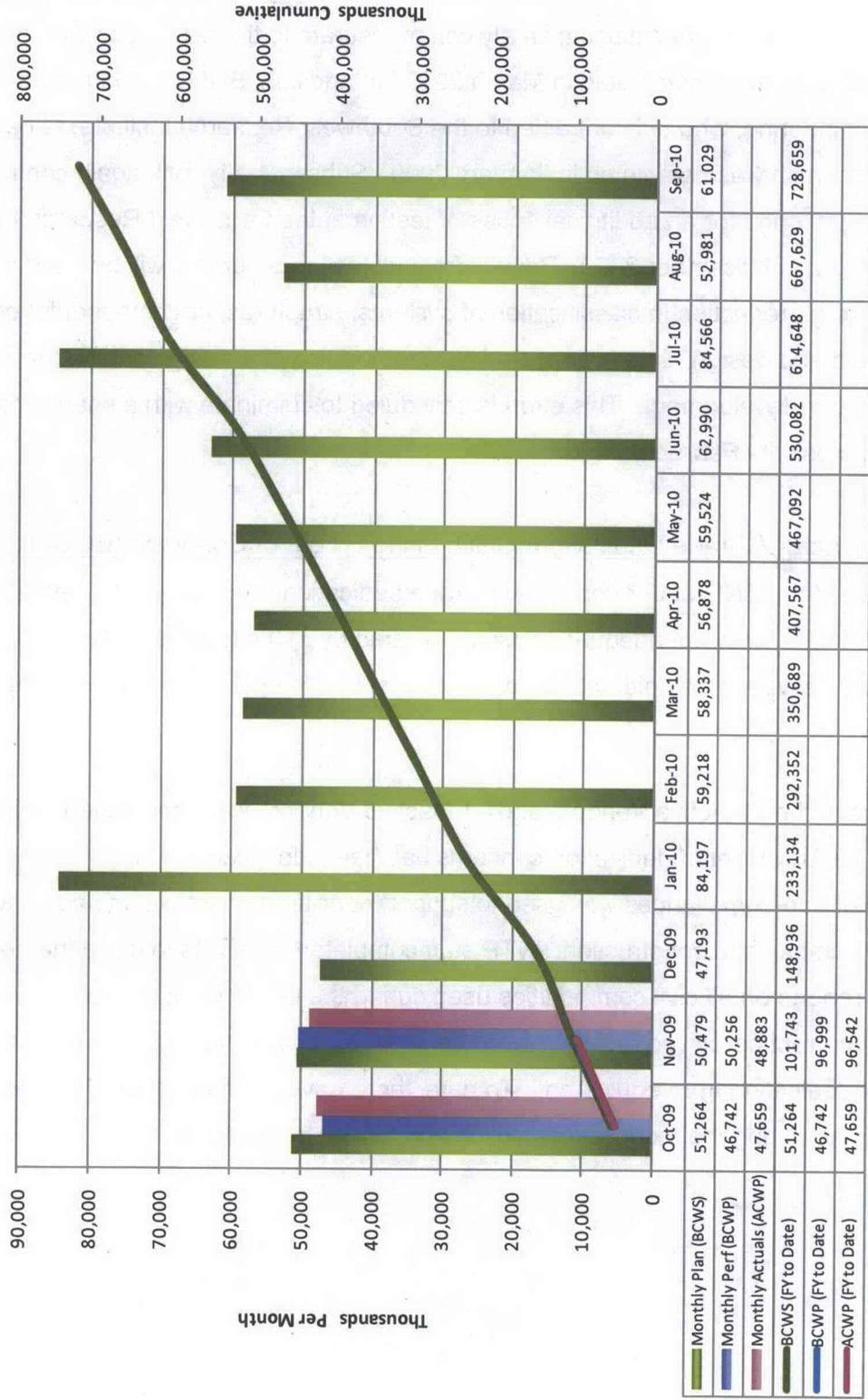
Based on recommendations by the HPAV team chartered in February 2009, ORP and BNI have evaluated team recommendations that could result in removing unnecessary complexity in the control strategy, while still maintaining safety commensurate to the risk. Follow-on testing at CalTech continues, to be completed in March 2010. In addition, BNI had contracted with Dominion Engineering, who subcontracted to the Southwest Research Institute, to perform HPAV testing which was completed in January 2009. Subsequently, BNI again contracted with Dominion Engineering for an additional scope of testing at the Southwest Research Institute which completed in December 2009. Results from all testing programs will be used to evaluate any impacts (e.g., reduction in classification of systems, structures, or components) on the safety analysis and design. In addition, analysis methodology for design criteria for piping systems is under development. This effort is scheduled to culminate with a change to the WTP authorization basis by February 2010.

#### Vendor Commercial Grade Dedication (CGD) Issue Extent of Condition (EOC) Review

An evaluation of the BNI vendor commercial grade dedication program (CGD) revealed that CGD requirements were not adequately communicated by BNI suppliers to their sub-suppliers. BNI placed all deliveries on hold and performed a systematic evaluation of all suppliers and their sub-suppliers.

EOC reviews of the 56 Active Vendors and 31 Inactive Vendors were completed by December 10, 2010. The full extent of dedication concerns has been identified, and a strategy of interim dispositions of non-compliances was used to support near-term construction needs, which resulted in no impacts to construction. WTP staff completed its efforts to close the non-compliance reports on all civil commodities used during the last 9 years of construction, and continues to correct perceived deficiencies in dedication programs of its suppliers, and clearing questions of dedication from equipment. To date, there have been no reports of failures for any materials tested during the extensive sampling and testing of materials.

### WTP – Fiscal Year To-Date Performance



**Pretreatment (PT) – Dec 2009 (Nov 09 EVM Data)**

The PT Facility will separate radioactive tank waste into high-level waste (HLW) and low-activity waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Overall facility percent complete is 48%, engineering/design is 76% complete, and construction is 28% complete.

Construction installations for the month included: 780 cubic yards (CY) of concrete, 192 tons of rebar, 31,000 lbs of embeds and 150 tons of structural steel above 56-ft elevation slabs. Concrete placement has recovered schedule and met the baseline placements this month ahead of schedule. Slab placement efforts on the 77-ft elevation are going well, and providing opportunities for commodity installation in the enclosed areas of the 56-ft elevation. Slab placements for the 56-ft elevation are complete except for the slabs above the cells required to remain open for vessel installations through the cell tops. Rebar installation continues to support additional slab placements at the 77-ft elevation. Structural steel installations and concrete wall placements are ongoing at the 56-ft elevation. Installation of piping in Black Cells commenced in October, and it is currently focused in the North-West corner. Installation of HVAC ductwork, fabrication of rebar curtains, application of Special Protective coatings, and the installation of grounding are key on-going efforts.

For engineering, 2,400 ft of piping isometric drawings have been issued this month exceeding the cumulative baseline. Structural steel design drawings are complete for the main structure of the PT Facility. Engineering performance continues to benefit from the process improvement in the method of development of data sheets. This helped improving the efficiency in the mechanical systems discipline, and just started to benefit the Controls and Instrumentation (C&I) discipline performance too.

The vendor review for the previously identified concerns with their Commercial Grade Dedication (CGD) program was completed on December 10<sup>th</sup>, three weeks ahead of schedule. The majority of vendors evaluated have been released with no restrictions. BNI assist teams are working with remaining vendors as needed to resolve identified CGD issues by June 2010. No impacts to construction have been realized.

Development of key documentation in support of the analysis and testing of vessels for the validation of mixing capability and closure of M3 is ongoing. Testing has been performed for two of the twelve vessels that may need design modifications to provide adequate mixing capabilities. Test results and its evaluation are ongoing. Methods for scaling up from the 1/10<sup>th</sup>

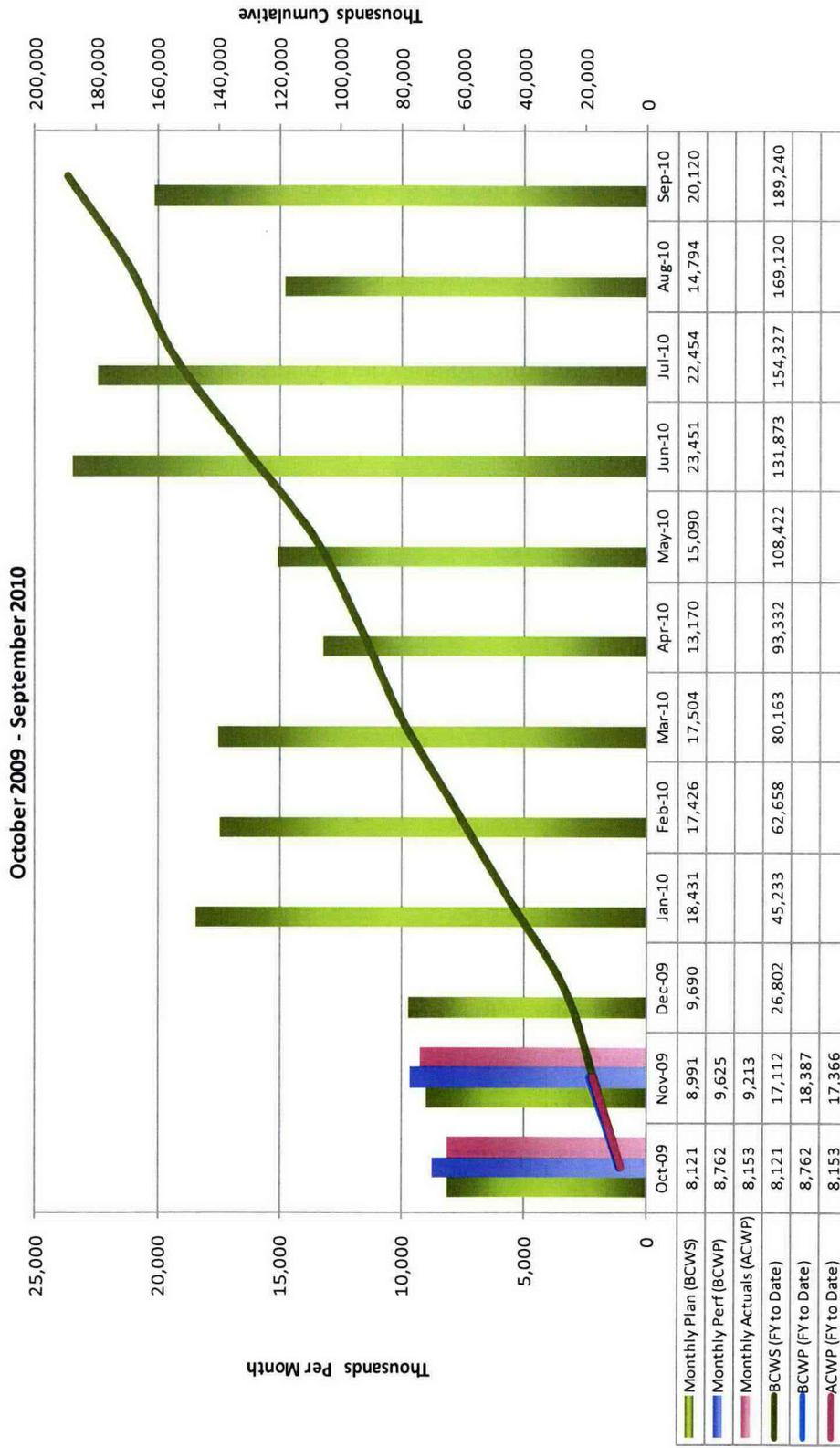
scale test stands are also being developed to resolve this issue by the consent decree milestone of June 2010. BNI is working closely with ORP to develop documentation and test plans for these issues for timely closure of M3. The ORP assessment is that, if the required vessel modifications are not significant (i.e., change of nozzle sizes, addition of passive improvements such as diverters, suction dilution piping), the overall impact to the critical path could be accommodated without significant work around.

Two alternative options for the mitigation of solids formation in the Cesium Ion Exchange Process (CXP) system was developed and presented to ORP in November 2009. One of the options have a higher capital cost; however, it provides substantial life-cycle benefits by reduction in sodium, which are being evaluated for a decision by early January 2010.

Pretreatment Facility - Fiscal Year To-Date Performance

Pretreatment Facility - Fiscal Year to Date Performance (\$x1,000)

All Functions



### **High-Level Waste (HLW) Facility Status for December 2009 (Nov. 09 EVM Data)**

The HLW Facility will receive the high-level waste fraction from the Pretreatment (PT) Facility. The concentrate is sampled and analyzed to determine the optimum blend of glass formers to add to the waste that will produce a vitrified waste form that is compliant with disposal requirements and also meets the required production rate. The blended slurry is converted into molten glass in one of the two HLW melters, and then it is poured into cylindrical stainless steel canisters for cooling. The canisters are sealed and moved to a decontamination cell where any surface contamination is removed prior to shipment to interim or final storage. HLW engineering/design is 83% complete and construction is 24% complete. The overall facility completion is 49% complete.

Efforts to relocate the Second-stage C5V filters from the Filter Cave continue. Two stages of HEPA filtration are still provided, but the second stage of HEPAs is being relocated out-cave to a safe-change configuration. This, as well as a first stage bypass duct to be used to maintain ventilation post-fire or crane failure, provides more operational flexibility and reduces dependence on the crane in a fire scenario. The Filter Cave's large offgas components, support steel, and large-bore ducting will be placed via crane "over the top" of the surrounding Filter Cave walls before the structural steel and decking installation for the slab overhead (slab 3027 at the +40-ft elevation) may be started in May 2012. In order to track the multiple, concurrent design engineering- procurement-construction activities and monitor the schedule, the HLW Team uses a detailed Level-5 schedule which is reviewed on a weekly basis.

In December, engineering completed the remaining 16 rebar drawings for the elevation +58' elevation. This releases approximately 1,050 tons of rebar and completes the elevation +58' design. In addition, all of the calculations for the +58-ft elevation concrete slab design were completed. Nearly 350 piping isometric drawings were completed, equating to over 2,000 lineal-feet of piping design. Late in December, the 50-ton Melter Cave #1 C5 shield door was delivered by the vendor. This shield door is nearly 15-feet tall, 17.5-feet wide, and 12-inches thick.

Construction forces completed two slabs and two walls for a total of 489 cubic yards (CY) of concrete placements in December. The four placements exceeded the December baseline of one placement. Construction continues to maintain their production goals and has completed 28 placements in the last six months, July through December, since the recovery plan was initiated.

In January, construction expects to complete five concrete placements, three more than scheduled in the baseline. In addition, construction forces completed the installation of 122 tons of rebar, over 20,000 pounds of embeds, 47 tons of steel, and nearly 3,000 square-feet of metal decking.

- At the -21-ft elevation, Construction crews continued: the installation of cable tray and large and small bore piping; installing rails in the Canister Storage Transfer and Cask Handling tunnels; and installing HVAC ductwork and fire dampers.
- At the +0-ft elevation, crews continued to: install and tune grillage; apply coatings; install cable tray supports and conduit, and install pipe and pipe supports.
- At the +14-ft elevation, crews continued to: erect structural steel and decking; install wall and slab rebar; and install piping modules, embeds, joggles and formwork for multiple walls and slabs.
- At the +37-ft elevation, crews began the installation of structural steel and decking for slabs 3001, 3002 and 3003 at the north end of the annex.

Near-Term *Proposed* Consent Decree Milestones:

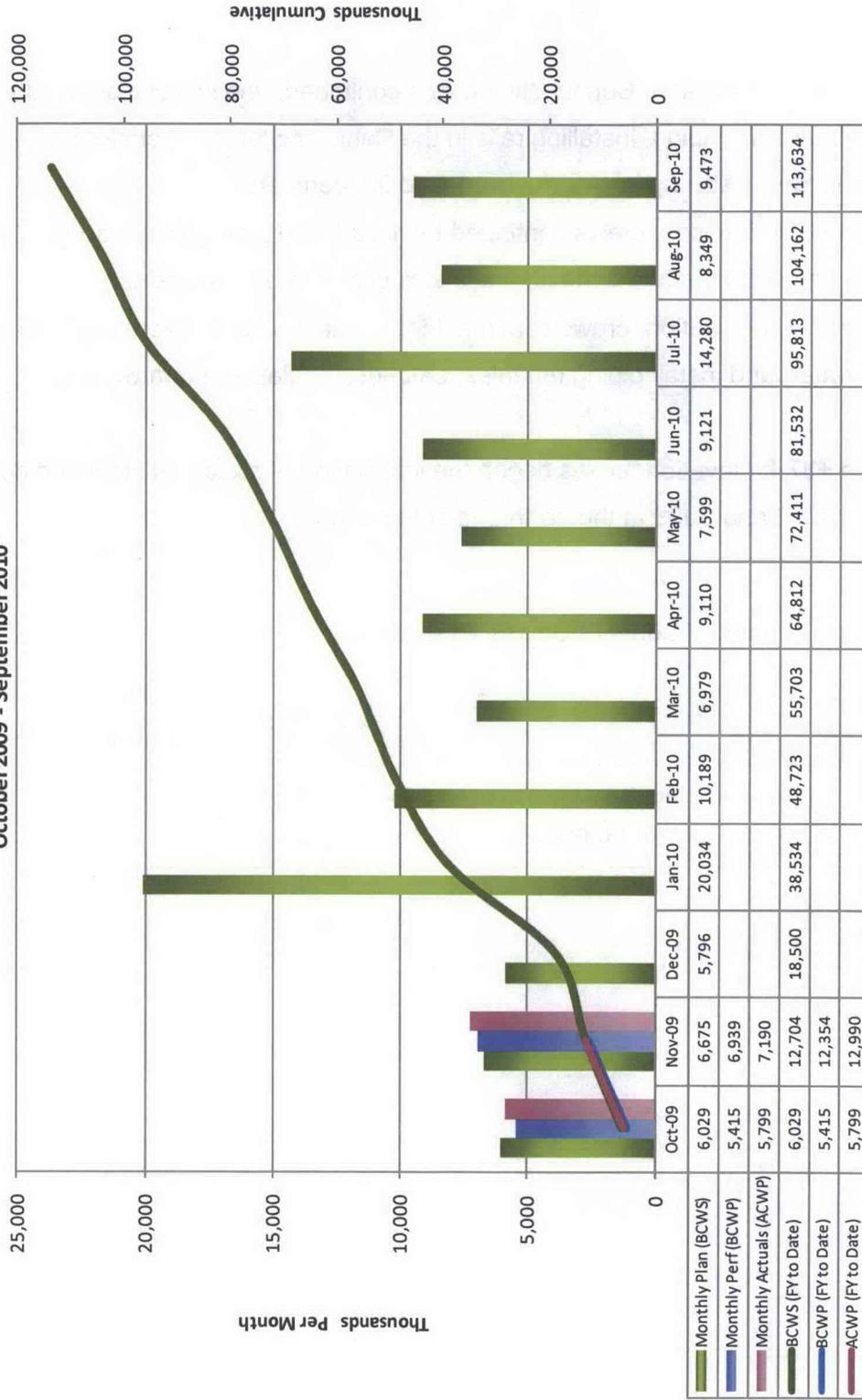
Project	Description	Specified Completion Date	Current Schedule Date
A-20 Interim	Complete Construction of Structural Steel to the +14-ft Elevation in HLW Facility	12/31/2010	1/28/2010

### High-Level Waste Facility - Fiscal Year To-Date Performance

#### High Level Waste Facility - Fiscal Year to Date Performance (\$x1,000)

All Functions

October 2009 - September 2010



**Low-Activity Waste (LAW) Facility – Dec. 2009 Accomplishments (Nov. EVM Data)**

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel containers that will be disposed on site in the Integrated Disposal Facility. Overall facility percent complete is 67%, design is 91%, and construction is 57%.

In the month of December, Construction completed installing partition wall supports for the elevator chase. Construction continued: installing framing for the C2V system fan coil units, piping and hangers, conduit, cable tray, gypsum wallboard, perimeter sealants, panels and transformers and metal-stud framing.

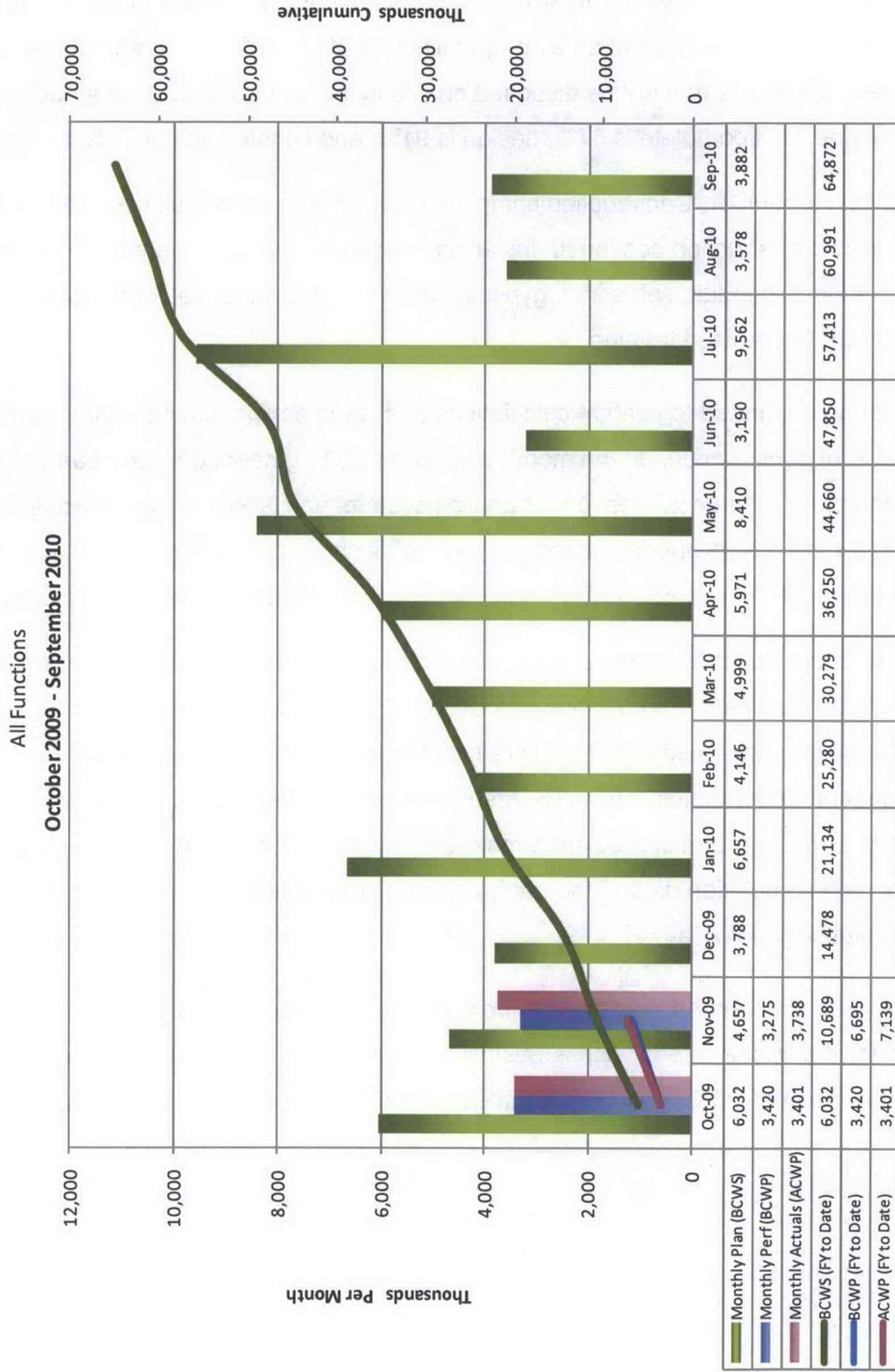
BNI Engineering continued to confirm calculations and issue drawings for completion of design and in support of construction. In the month of December, Engineering issued part two of the system description for the container pour handling system, and issued system description parts one and two for the miscellaneous gases system. Additionally one confirmed calculation for the radioactive liquid waste disposal system was issued and 25 P&IDs for the autosampling system.

Resolution of technical issue for excessive heat retention in some Melter Pour Cave equipment continued. A high temperature condition has been calculated to occur in certain container handling equipment that could significantly reduce the yield stress of these items.

Computational Fluid Dynamics calculation results will be analyzed for equipment stresses by a subcontractor and if a potential problem remains, design changes will be made to rectify the issue. Expected completion date of the analysis has shifted due to early March 2010 due to set backs at the subcontractor level.

Upcoming significant planned accomplishments for January include issuing part II of the System Description for the Melter Feed Process System and Primary Offgas System, Autosampling system confirmation of P&IDs, and Liquid Effluent System P&IDs and Calculations.

### Low-Activity Waste Facility - Fiscal Year To-Date Performance



**Analytical Laboratory (LAB) – Dec 2009 Accomplishments (Nov 09 EVM Data)**

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 48%, design is 79%, and construction is 58%.

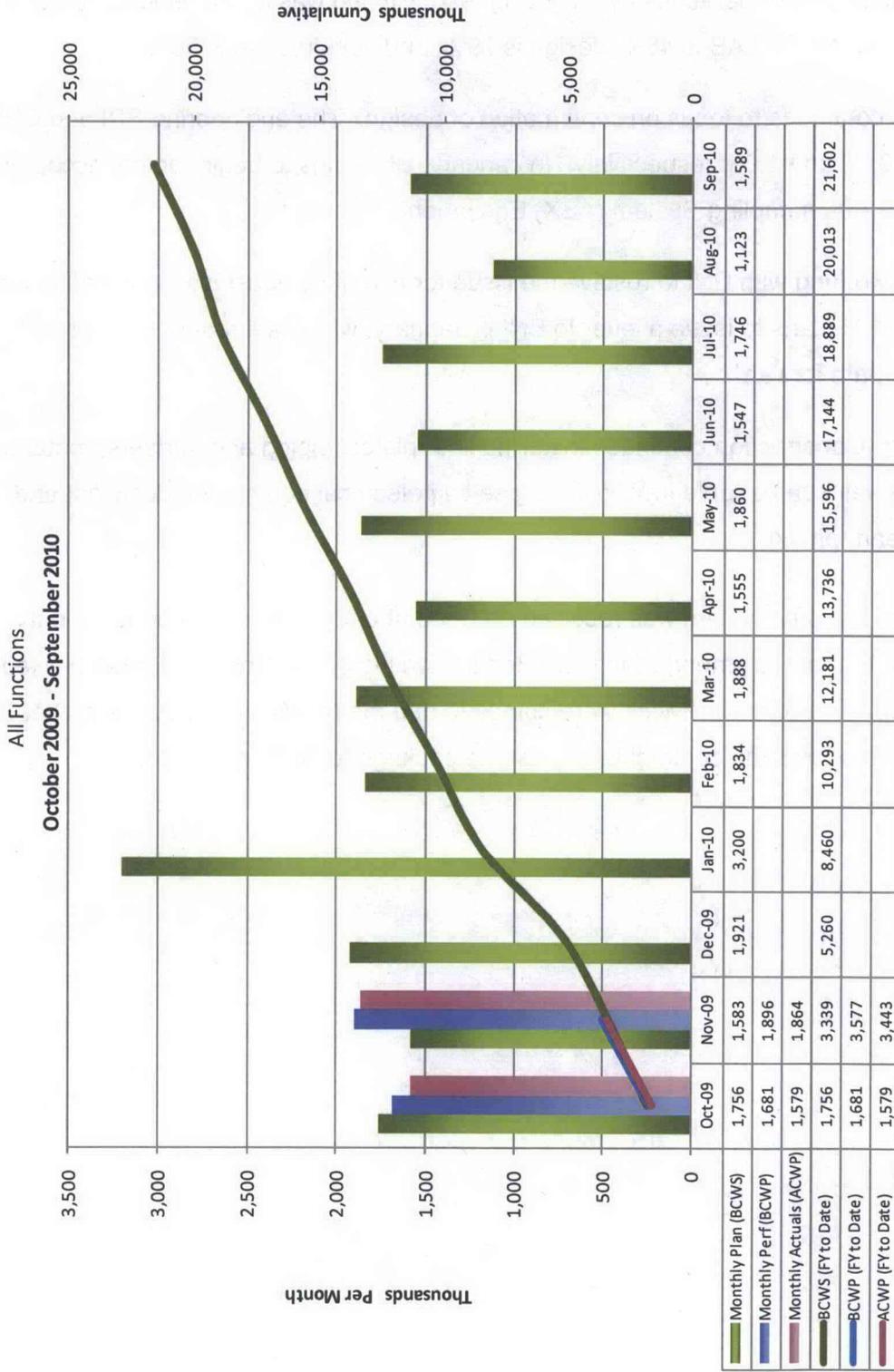
LAB engineering continues to focus on confirmation of design. The engineering SPI and CPI for November were 0.79 and 1.05, respectively. In January, BNI plans to begin factory acceptance testing of the LAB Autosampling System (ASX) Equipment.

ORP is currently working with BNI to resolve the issue for use of combustible insulation in the LAB roof assembly. ORP plans to issue a letter to BNI in January, which will request BNI provide to ORP a proposed path forward.

During December, Construction continued installing liner plates, piping and hangers, metal-stud framing, gypsum wall board, cable tray, installing/setting electrical equipment, ductwork and supports, and steam piping.

The hot cell waste transfer system was received on December 30, 2009. BNI performed the receipt inspection of the equipment, which included the writing of two Non-Conformance Reports (NCRs). All receipt inspection activities were complete and the NCRs closed by December 31, 2009. BNI plans to submit the contract fee milestone package to ORP in January.

### Analytical Laboratory - Fiscal Year To-Date Performance



**Balance of Facilities (BOF) – Dec 2009 Accomplishments (Nov 09 EVM Data)**

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 52%, design/engineering is 79%, and construction is 56%.

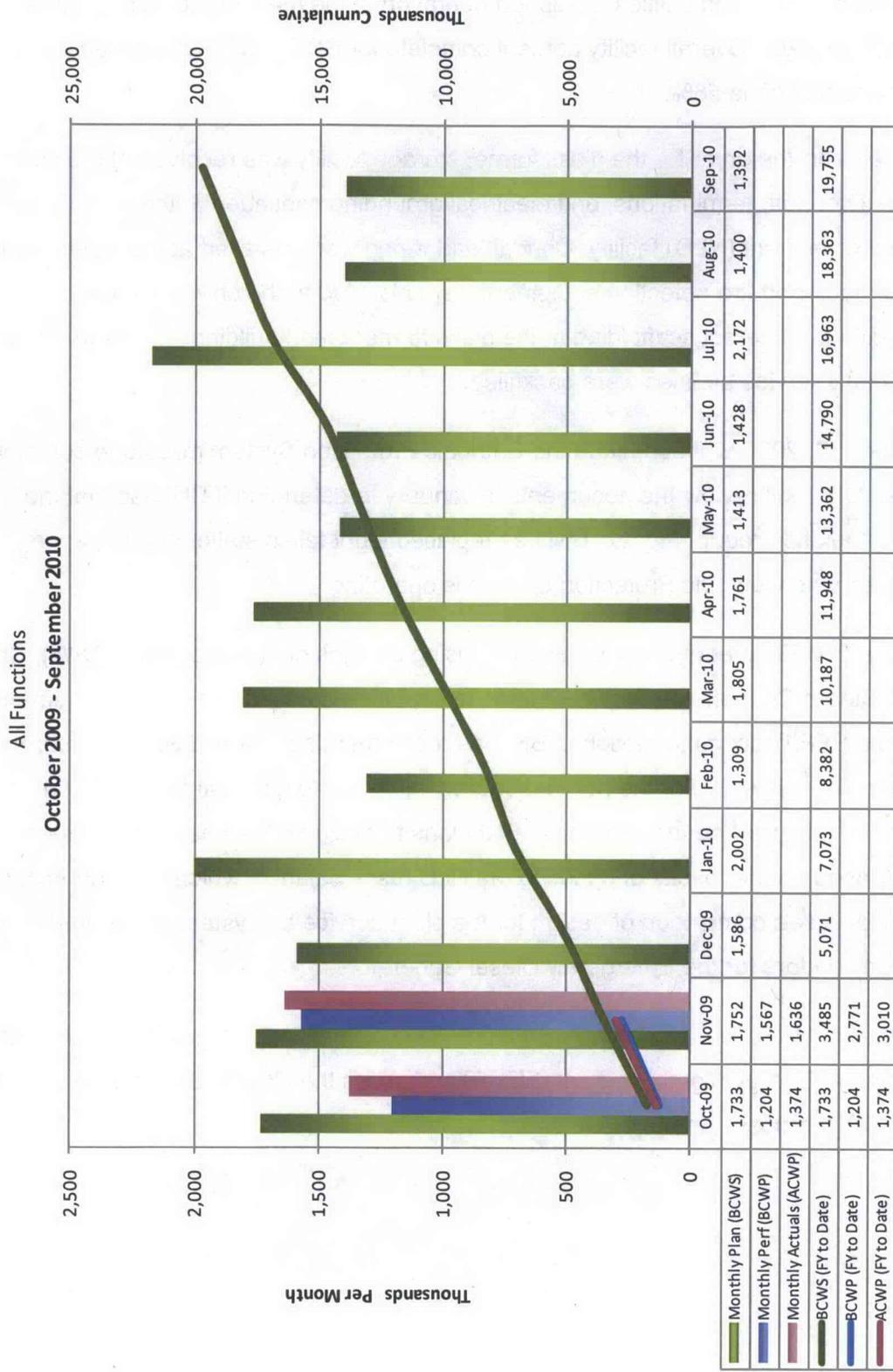
During December, the dryer for the glass former storage facility was received at the site. Installation of conduit, terminations, and electrical grounding continued at the non-dangerous, non-radioactive effluent (NLD) facility. Conduit and wiring were installed at the water treatment building. Conduit and fire detection equipment were installed at the chiller compressor plant. Workers continued to erect scaffolding at the glass former blend building. Three trenches containing plant service air lines were backfilled.

On December 30, 2009 BNI submitted the Cathodic Protection System milestone completion documents. ORP will review the documents in January to determine if BNI has met the milestone completion requirements. BNI has replaced eight failed stationary reference electrodes, and the Cathodic Protection System is operating.

In December, BNI Engineering focus was on revising designs of Distilled Water (DIW), Chilled Water, and Steam Condensate Water systems to support increased Pretreatment demand resulting from EFRT recommendations. BNI has recommended that additional membranes be added to the DIW system. For the non-radioactive liquid waste disposal facility (NLD), in December BNI analyzed needs and gaps. BNI plans to evaluate the need for additional equipment based on the results of updating the NLD mass balance, which will start in January. January will also see completion of design for the plant service air system and a pre-bid meeting with qualified vendors for the Emergency Diesel Generators.

On December 4, ORP, RL, and Mission Support Alliance personnel met with a representative from the Federal Energy Mgmt Program (FEMP) to discuss the Energy Savings Performance Contract (ESPC) process and possible energy savings.

### Balance of Facilities - Fiscal Year To-Date Performance



Waste Treatment Plant Project - Percent Complete Status Through November 2009									
(Dollars - Millions)	Overall Facility Percent Complete Allocated Dollars			Design/Engineering Unallocated Dollars			Construction Unallocated Dollars		
	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	1,675.1	1,127.3	67%	205.8	187.8	91%	293.0	166.2	57%
Analytical Lab	632.7	302.7	48%	48.6	38.6	79%	85.8	49.4	58%
Balance of Facilities	987.0	514.0	52%	68.1	53.7	79%	216.7	120.4	56%
High-Level Waste	2,574.6	1,248.7	49%	314.5	260.7	83%	508.0	120.0	24%
Pretreatment	4,083.8	1,945.2	48%	584.9	446.8	76%	817.4	230.5	28%
Shared Services	incl. above	incl. above	incl. above	1,065.1	780.5	73%	1,336.0	862.8	65%
Undistributed Budget	9.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Total WTP</b>	<b>9,962.2</b>	<b>5,137.9</b>	<b>52%</b>	<b>2,287.0</b>	<b>1,768.1</b>	<b>77%</b>	<b>3,256.9</b>	<b>1,549.3</b>	<b>48%</b>

Source: WTP Contract Performance Report

Note: Starting with the June 2009 report, facility construction percent complete values decreased significantly, and a couple of Design/Engineering facility percent complete values went down as well. The decrease in values was tied to Phase I of BNI's elimination of WBS 1.08, Plant Wide EPCC; scope from WBS 1.08 was moved to facilities as appropriate or to WBS 1.90, Shared Services. This resulted in an increase in the facility construction budgets, which has correspondingly reduced the to-date percent complete values.

**WTP Project - KEY COMMODITY QUANTITY PROGRESS**

<b>Commodity</b>	<b>Unit of Measure</b>	<b>Current Forecast at Completion Quantity</b>	<b>Installed through November 2009</b>	<b>Percent Complete</b>
Concrete	1000 cy	262.30	192.61	73.4%
Structural Steel	1 ton	39,590	14,720	37.2%
Piping (in buildings)	1000 lf	912.96	167.83	18.4%
Piping (underground)	1000 lf	116.01	95.67	82.5%
HVAC Duct	1000 lbs	4,298.96	1,064.35	24.8%
Cable Tray	1000 lf	97.79	20.49	21.0%
Conduit (in buildings)	1000 lf	1,001.64	107.29	10.7%
Conduit (underground)	1000 lf	191.90	176.16	91.8%
Cable and Wire	1000 lf	4,933.07	251.26	5.1%

Office of River Protection, State of Washington Department of Ecology  
 Single-Shell Tank System Leak Detection and Monitoring Functions and Requirements Document Modification  
 Notice  
 (Per Hanford Federal Facility Agreement and Consent Order Section 9.3)

1. Document Title and Number: RPP-9937 SST Functions and Requirements, Rev 3		
2. Minor Field Change: (Section 12.4 HFFACO Action Plan) <input type="checkbox"/> Yes: (WRPS Signature Only – Attach signed form to Primary Document for record purposes)  <input checked="" type="checkbox"/> NO: Proceed to Box 3	3. Document Issue Date:  May 10, 2008  4. Document Modification Notice Date: January 14, 2010	5. Notice Number: 2010-1
6. Do proposed changes require schedule changes? (Would this extend completion of retrieval beyond 12 months from date of initiation?)  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7. Do proposed changes include specific additions, deletions, or modification to scope and/or requirements which affect the overall intent of the plan?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	8. (Check only one box) <input type="checkbox"/> Significant Modification (Check if the answer to question in <u>either</u> section 6 or 7 is “yes”. Significant modifications require revision of the primary document.) Minor Modification Requires modification of the document <input checked="" type="checkbox"/> Can be accomplished with Modification Notice.
9. Description and Justification of Change:  <b>Description:</b> Revise Table B-1 of RPP-9937 to address replacement of manual tapes with ENRAFS on tanks BY-101, BY-104, BY-105, BY-106, BY-107, BY-108, BY-112, U-112, U-201, and U-202. Delete MT at the end of the table since it is no longer listed in the table. (Revised Table B-1 attached.)  <b>Explanation:</b> As part of upgrades to the SSTs the manual tapes are being replaced by ENRAFS. This will provide continuous monitoring of tank levels and be an improvement over the use of manual tapes.		
10. Impact of Change:  No impact.		
11. Additional Requirements and/or Provisions <sup>1</sup> :		

**Office of River Protection, State of Washington Department of Ecology**  
**Single-Shell Tank System Leak Detection and Monitoring Functions and Requirements Document Modification**  
**Notice**  
**(Per Hanford Federal Facility Agreement and Consent Order Section 9.3)**

<u><b>Approvals</b></u>		
Washington River Protection Solutions, LLC.	Office of River Protection	State of Wash., Dept. of Ecology
<input type="checkbox"/> Provisional Approval <sup>2</sup> Date	<input type="checkbox"/> Provisional Approval <sup>2</sup> Date	<input type="checkbox"/> Provisional Approval <sup>2</sup> Date
<input type="checkbox"/> Final Approval Date	<input type="checkbox"/> Final Approval Date	<input type="checkbox"/> Final Approval Date

**Notes**

1 - For use by Ecology to identify any additional information needed to make a decision regarding the request for modifications. In addition, Ecology will identify actions, if any, regarding the modification request that DOE may take pending Ecology's final decision

2 - Provisional approval allows DOE and it's contractors to take specific actions identified in section 10, prior to final approval of this modification.

### B3.0 LEAK DETECTION AND LIQUID INTRUSION MONITORING

Single-shell tanks are subject to leak detection and liquid intrusion monitoring as described in this section. The basis for requirements for LDM for SST components is provided in this section.

#### B3.1 LIQUID INTRUSION MONITORING

Intrusions are detected using the same devices and instruments used for detecting leaks. However, with intrusions the system is set up to detect liquid level increases rather than decreases. The only difference between leak detection and liquid intrusion detection is that the surface level device can always be used for intrusion detection, even on a dry surface. While the dry surface will not decrease in response to a leak, it will register an increase if a large enough intrusion occurs. Once a liquid surface is re-established, the gauge will show a continued increase, and the intrusion will be detected. Table B-1 shows all surface level equipment installed and the comments indicate which gauges are currently used for intrusion detection only.

**Table B-1. Surface Level In-Tank Liquid Detection Instrumentation (6 Sheets)**

Tank	Surface Level Gauge	LOW Installed?	Comments
A-101	E	Yes	LOW used for intrusion only
A-102	E	--	ENRAF™ used for intrusion only
A-103	E	Yes	LOW used for LDM
A-104	E	--	ENRAF™ used for intrusion only
A-105	E	--	ENRAF™ used for intrusion only
A-106	E	Yes	LOW used for intrusion only
AX-101	E	Yes	LOW used for intrusion only
AX-102	E	--	ENRAF™ used for intrusion only
AX-103	E	Yes	ENRAF™ used for intrusion only
AX-104	E	--	ENRAF™ used for intrusion only
B-101	E	Yes	LOW used for intrusion only
B-102	E	--	ENRAF™ used for intrusion only
B-103	E	--	ENRAF™ used for intrusion only
B-104	E	Yes	LOW used for intrusion only
B-105	E	Yes	LOW used for intrusion only
B-106	E	--	ENRAF™ used for intrusion only
B-107	E	Yes	LOW used for intrusion only
B-108	E	Yes	LOW used for intrusion only
B-109	E	Yes	LOW used for intrusion only

Table B-1. Surface Level In-Tank Liquid Detection Instrumentation (6 Sheets)

Tank	Surface Level Gauge	LOW Installed?	Comments
B-110	E	Yes	LOW used for intrusion only
B-111	E	Yes	LOW used for intrusion only
B-112	E	--	ENRAF™ used for intrusion only
B-201	E	--	ENRAF™ used for intrusion only
B-202	E	--	ENRAF™ used for intrusion only
B-203	E	--	ENRAF™ used for intrusion only
B-204	E	--	ENRAF™ used for intrusion only
BX-101	E	--	ENRAF™ used for intrusion only
BX-102	E	--	ENRAF™ used for intrusion only
BX-103	E	--	ENRAF™ used for LDM
BX-104	E	--	ENRAF™ used for intrusion only
BX-105	E	--	ENRAF™ used for intrusion only
BX-106	E	--	ENRAF™ used for intrusion only
BX-107	E	--	ENRAF™ used for intrusion only
BX-108	E	--	ENRAF™ used for intrusion only
BX-109	E	Yes	LOW used for intrusion only
BX-110	E	Yes	LOW used for intrusion only
BX-111	E	Yes	LOW used for intrusion only
BX-112	E	--	ENRAF™ used for intrusion only
BY-101	<u>EMF</u>	Yes	LOW used for intrusion only
BY-102	E	Yes	LOW used for intrusion only
BY-103	E	Yes	LOW used for LDM
BY-104	<u>EMF</u>	Yes	LOW used for intrusion only
BY-105	<u>EMF</u>	Yes	LOW used for intrusion only
BY-106	<u>E-</u>	Yes	LOW used for intrusion only
BY-107	<u>EMF</u>	Yes	LOW used for intrusion only
BY-108	<u>EMF</u>	Yes	LOW used for intrusion only.
BY-109	E	Yes	LOW used for intrusion only
BY-110	E	Yes	LOW used for intrusion only
BY-111	E	Yes	LOW used for intrusion only
BY-112	<u>EMF</u>	Yes	LOW used for intrusion only
C-101	E	--	ENRAF™ used for intrusion only
C-102	--	--	ENRAF™ used for intrusion only
C-103	E	--	Waste retrieval has been completed. ENRAF™ used for intrusion only

Table B-1. Surface Level In-Tank Liquid Detection Instrumentation (6 Sheets)

Tank	Surface Level Gauge	LOW Installed?	Comments
C-104	E	--	ENRAF™ used for intrusion only
C-105	E	--	ENRAF™ used for intrusion only
C-106	E	--	ENRAF™ used for intrusion only. Waste retrieval has been completed
C-107	E	--	ENRAF™ used for intrusion only
C-108	E	--	ENRAF™ used for intrusion only
C-109	E	--	ENRAF™ used for intrusion only
C-110	E	--	ENRAF™ used for intrusion only
C-111	E	--	ENRAF used for intrusion only
C-112	E	--	ENRAF™ used for intrusion only
C-201	E	--	Waste retrieval has been completed. ENRAF used for intrusion only
C-202	E	--	Waste retrieval has been completed. ENRAF™ used for intrusion only
C-203	E	--	Waste retrieval has been completed. ENRAF™ used for intrusion only
C-204	E	--	Waste retrieval has been completed. ENRAF used for intrusion only
S-101	E	Yes	LOW used for intrusion only
S-102	E	Yes	LOW is not accessible due to retrieval activity. ENRAF installed in stilling well for monitoring.
S-103	E	Yes	LOW used for intrusion only
S-104	E	Yes	LOW used for intrusion only
S-105	E	Yes	LOW used for intrusion only
S-106	E	Yes	LOW used for intrusion only
S-107	E	Yes	LOW used for intrusion only
S-108	E	Yes	LOW used for intrusion only
S-109	E	Yes	LOW used for intrusion only
S-110	E	Yes	LOW used for intrusion only
S-111	E	Yes	LOW used for intrusion only
S-112	E	--	Waste retrieval in progress
SX-101	E	Yes	LOW used for intrusion only
SX-102	E	Yes	LOW used for intrusion only.
SX-103	E	Yes	LOW used for intrusion only
SX-104	E	Yes	LOW used for intrusion only
SX-105	E	Yes	LOW used for intrusion only

Table B-1. Surface Level In-Tank Liquid Detection Instrumentation (6 Sheets)

Tank	Surface Level Gauge	LOW Installed?	Comments
SX-106	E	Yes	LOW used for intrusion only
SX-107	E	--	ENRAF™ used for intrusion only
SX-108	E	--	ENRAF™ used for intrusion only
SX-109	E	--	ENRAF™ used for intrusion only
SX-110	E	--	ENRAF™ used for intrusion only
SX-111	E	Yes	LOW used for intrusion only
SX-112	E	Yes	LOW used for intrusion only
SX-113	E	--	ENRAF™ used for intrusion only
SX-114	E	--	ENRAF™ used for intrusion only
SX-115	E	--	ENRAF™ used for intrusion only
T-101	E	Yes	LOW used for intrusion only
T-102	E	--	ENRAF™ used for LDM
T-103	E	--	ENRAF™ used for intrusion only
T-104	E	Yes	LOW used for intrusion only
T-105	E	--	ENRAF™ used for intrusion only
T-106	E	--	ENRAF™ used for intrusion only
T-107	E	--	ENRAF™ used for intrusion only
T-108	E	--	ENRAF™ used for intrusion only
T-109	E	Yes	LOW used for intrusion only
T-110	E	Yes	LOW used for intrusion only
T-111	E	Yes	LOW used for intrusion only
T-112	E	--	ENRAF™ used for LDM
T-201	E	--	ENRAF™ used for intrusion only
T-202	E	--	ENRAF™ used for intrusion only
T-203	E	--	ENRAF™ used for intrusion only
T-204	E	--	ENRAF™ used for intrusion only
TX-101	E	--	ENRAF™ used for intrusion only
TX-102	E	Yes	LOW used for intrusion only
TX-103	E	Yes	LOW used for intrusion only
TX-104	E	Yes	LOW used for intrusion only
TX-105	E	Yes	LOW used for intrusion only
TX-106	E	Yes	LOW used for intrusion only
TX-107	E	--	ENRAF™ used for intrusion only
TX-108	E	Yes	Interstitial Liquid Level (ILL) to low for LOW use, ENRAF™ used for intrusion only

Table B-1. Surface Level In-Tank Liquid Detection Instrumentation (6 Sheets)

Tank	Surface Level Gauge	LOW Installed?	Comments
TX-109	E	Yes	LOW used for intrusion only
TX-110	E	Yes	LOW used for intrusion only
TX-111	E	Yes	LOW used for intrusion only
TX-112	E	Yes	LOW used for intrusion only
TX-113	E	Yes	LOW used for intrusion only
TX-114	E	Yes	LOW used for intrusion only
TX-115	E	Yes	LOW used for intrusion only
TX-116	E	Yes	LOW used for intrusion only
TX-117	E	Yes	LOW used for intrusion only
TX-118	E	Yes	LOW used for intrusion only
TY-101	E	--	ENRAF™ used for intrusion only
TY-102	E	--	ENRAF™ used for intrusion only
TY-103	E	Yes	LOW used for intrusion only
TY-104	E	--	ENRAF™ used for intrusion only
TY-105	E	Yes	LOW used for intrusion only
TY-106	E	--	ENRAF™ used for intrusion only
U-101	E	--	ENRAF™ used for intrusion only
U-102	E	Yes	LOW used for intrusion only
U-103	E	Yes	LOW used for intrusion only
U-104	E	--	MT used for intrusion only
U-105	E	Yes	LOW used for intrusion only
U-106	E	Yes	LOW used for intrusion only
U-107	E	Yes	LOW used for intrusion only
U-108	E	Yes	LOW used for intrusion only
U-109	E	Yes	LOW used for intrusion only
U-110	E	Yes	LOW used for intrusion only
U-111	E	Yes	LOW used for intrusion only
U-112	EMF	--	MF used for intrusion only <i>Enraf</i>
U-201	EMF	--	MT used for intrusion only <i>Enraf</i>
U-202	EMF	--	MT used for intrusion only <i>Enraf</i>
U-203	E	--	ENRAF™ used for intrusion only
U-204	E	--	ENRAF™ used for intrusion only

**Table B-1. Surface Level In-Tank Liquid Detection Instrumentation (6 Sheets)**

Tank	Surface Level Gauge	LOW Installed?	Comments
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Adapted from RPP-9645, Rev. 0.

Level Gauge

E = ENRAF™ Gauge<sup>1</sup>

~~MT = Manual Tape~~

LOW = liquid observation well

<sup>1</sup>ENRAF is a trademark of the ENRAF Corporation, Houston, Texas.

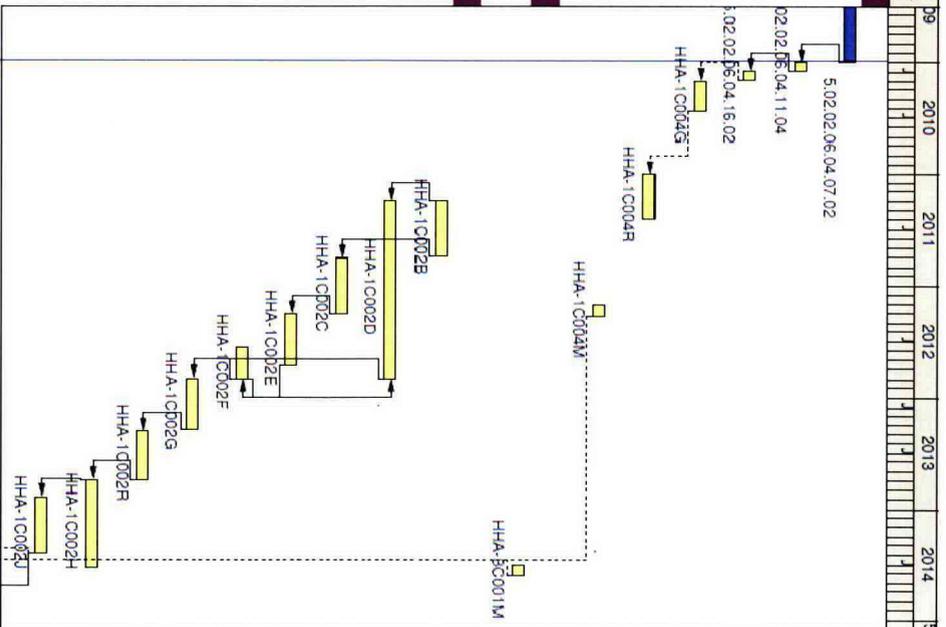
# M-B-1

# Complete C Farm Retrieval

M-TPA CP M-B-1 Complete C Farm Retrieval

11-Jan-2010 09:44

Activity Name	Forecast Start	Forecast Finish	BL Project Start	BL Project Finish	Days Ahead + or Behind -
<b>104</b>	<b>11-Feb-2009 A</b>	<b>15-Apr-2012</b>	<b>29-Apr-2009</b>	<b>15-Apr-2012</b>	<b>5388</b>
C-104 Retrieval Start-up Testing Support	11-Feb-2009 A	31-Dec-2009	29-Apr-2009	30-Jun-2009	898
C-104 Retrieval Operations to 25%	30-Dec-2009	27-Jan-2010	01-Oct-2009	28-Oct-2009	898
C-104 Acceleration Tank Retrieval Ops (Supplemental)	28-Jan-2010	26-Feb-2010	29-Oct-2009	04-Dec-2009	898
C-104 Retrieval Operations (MS)	01-Mar-2010*	07-Jun-2010	09-Jan-2010	09-Apr-2010	898
C-104 Sample for HHR Decision	03-Jan-2011*	02-Jun-2011	03-Jan-2011	02-Jun-2011	898
C-104 Hard Heel Rinvl Operations	07-Mar-2012	15-Apr-2012	07-Mar-2012	15-Apr-2012	898
<b>101</b>	<b>03-Jul-2014</b>	<b>11-Aug-2014</b>	<b>03-Jul-2014</b>	<b>11-Aug-2014</b>	<b>50</b>
C-101 Hard Heel Rinvl Operations	03-Jul-2014	11-Aug-2014	03-Jul-2014	11-Aug-2014	50
<b>102</b>	<b>01-Apr-2011</b>	<b>19-Aug-2014</b>	<b>01-Apr-2011</b>	<b>19-Aug-2014</b>	<b>504</b>
C-102 Retrieval Design	01-Apr-2011*	30-Sep-2011	01-Apr-2011	30-Sep-2011	42
C-102 Engineering Support	01-Apr-2011	01-Nov-2012	01-Apr-2011	01-Nov-2012	42
C-102 Retrieval Procurement	03-Oct-2011	02-Apr-2012	03-Oct-2011	02-Apr-2012	42
C-102 Retrieval System Installation	03-Apr-2012	20-Sep-2012	03-Apr-2012	20-Sep-2012	42
C-102 Retrieval Startup and Readiness	26-Jul-2012	01-Nov-2012	26-Jul-2012	01-Nov-2012	42
C-102 Retrieval Operations (MS)	02-Nov-2012	20-Apr-2013	02-Nov-2012	20-Apr-2013	42
C-102 Sample for HHR Decision	22-Apr-2013	30-Sep-2013	22-Apr-2013	30-Sep-2013	42
C-102 Hard Heel Rinvl Design & Engineering Support	01-Oct-2013	10-Jul-2014	01-Oct-2013	10-Jul-2014	42
C-102 Hard Heel Rinvl Procurement	26-Nov-2013	28-May-2014	26-Nov-2013	28-May-2014	42



Status: C-104 was scheduled to have retrieved close to 50% during November, but continued problems with the AN-101 supernatant pump over-pressurization protection and repair of the Pressure/Flow Indicators in the POR138 Valve Box for C-104, have delayed the start of retrieval operations. C-104 Retrieval is now scheduled to start on 1/8/2010.

Recovery Action: AN-101 Supernatant Pump issues have been resolved. The first of two DST-DST transfers is complete and the second is underway. Testing of the POR138 Valve Box is underway with completion of the C-104 OAT to follow

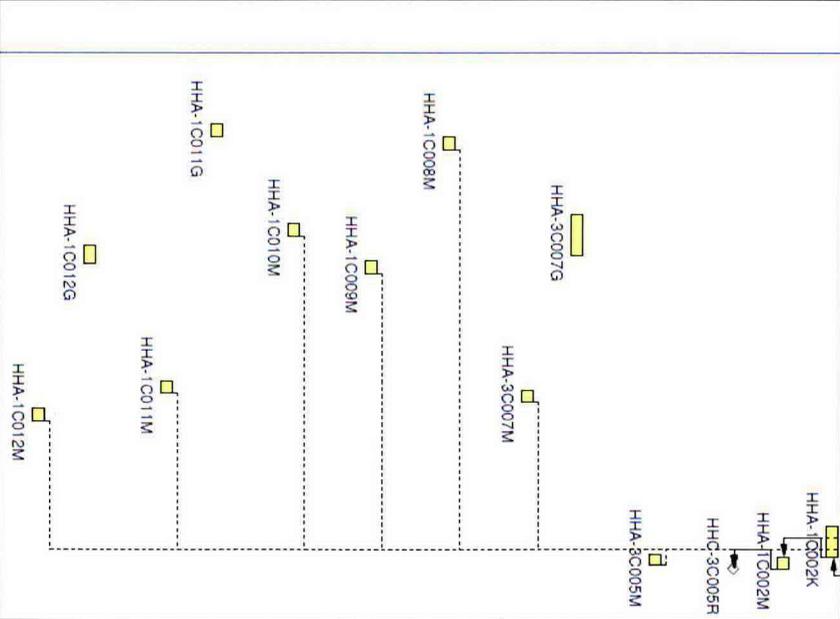
# M-B-1

# Complete C Farm Retrieval

M-TPA CP M-B-1 Complete C Farm Retrieval

11-Jan-2010 09:44

Activity Name	Forecast Start	Forecast Finish	BU Project Start	BU Project Finish	Days Ahead + of Behind -	2010	2011	2012	2013	2014	15
C-102 Hard Heel Rmvl Installation	02-Apr-2014	10-Jul-2014	02-Apr-2014	10-Jul-2014	42						
C-102 Hard Heel Rmvl Operations	11-Jul-2014	19-Aug-2014	11-Jul-2014	19-Aug-2014	42						
Complete C-Farm Retrieval		19-Aug-2014		19-Aug-2014	42						
<b>105</b>	<b>03-Jul-2014</b>	<b>11-Aug-2014</b>	<b>03-Jul-2014</b>	<b>11-Aug-2014</b>	<b>50</b>						
C-105 Hard Heel Rmvl Operations	03-Jul-2014	11-Aug-2014	03-Jul-2014	11-Aug-2014	50						
<b>107</b>	<b>11-Jun-2011</b>	<b>16-Feb-2013</b>	<b>07-May-20...</b>	<b>07-Jan-2013</b>	<b>1182</b>						
C-107 Retrieval Operations (MRS)	11-Jun-2011	23-Oct-2011	07-May-20...	18-Sep-2011	591						
C-107 Hard Heel Rmvl Operations	08-Jan-2013	16-Feb-2013	29-Nov-2012	07-Jan-2013	591						
<b>108</b>	<b>01-Oct-2010</b>	<b>09-Nov-2010</b>	<b>01-Oct-2010</b>	<b>09-Nov-2010</b>	<b>1421</b>						
C-108 Hard Heel Rmvl Operations	01-Oct-2010	09-Nov-2010	01-Oct-2010	09-Nov-2010	1421						
<b>109</b>	<b>12-Nov-2011</b>	<b>21-Dec-2011</b>	<b>12-Nov-2011</b>	<b>21-Dec-2011</b>	<b>1014</b>						
C-109 Hard Heel Rmvl Operations	12-Nov-2011	21-Dec-2011	12-Nov-2011	21-Dec-2011	1014						
<b>110</b>	<b>13-Jul-2011</b>	<b>21-Aug-2011</b>	<b>13-Jul-2011</b>	<b>21-Aug-2011</b>	<b>1136</b>						
C-110 Hard Heel Rmvl Operations	13-Jul-2011	21-Aug-2011	13-Jul-2011	21-Aug-2011	1136						
<b>111</b>	<b>20-Aug-2010</b>	<b>21-Jan-2013</b>	<b>03-Jul-2010</b>	<b>21-Jan-2013</b>	<b>1234</b>						
C-111 Retrieval Operations (MS)	20-Aug-2010	01-Oct-2010	03-Jul-2010	13-Aug-2010	617						
C-111 Hard Heel Rmvl Operations	13-Dec-2012	21-Jan-2013	13-Dec-2012	21-Jan-2013	617						
<b>112</b>	<b>20-Sep-2011</b>	<b>22-Apr-2013</b>	<b>20-Sep-2011</b>	<b>22-Apr-2013</b>	<b>1052</b>						
C-112 Retrieval Operations (MS)	20-Sep-2011	22-Nov-2011	20-Sep-2011	22-Nov-2011	526						
C-112 Hard Heel Rmvl Operations	14-Mar-2013	22-Apr-2013	14-Mar-2013	22-Apr-2013	526						



Status: C-104 was scheduled to have retrieved close to 50% during November, but continued problems with the AN-101 supernatant pump over-pressurization protection and repair of the Pressure/Flow Indicators in the POR138 Valve Box for C-104, have delayed the start of retrieval operations. C-104 Retrieval is now scheduled to start on 1/8/2010.

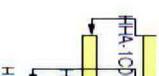
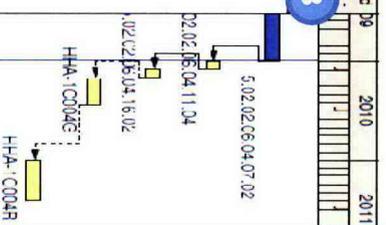
Recovery Action: AN-101 Supernatant Pump issues have been resolved. The first of two DST-DST transfers is complete and the second is underway. Testing of the POR138 Valve Box is underway with completion of the C-104 OAT to follow

# TPA Critical Path Schedule Template

## TPA Reporting Format Primer

V:\TPA CF M-B-1 Complete C Farm Retrieval

Activity Name	Forecast Start	Forecast Finish	BL Project Start	BL Project Finish	Days Ahead + or Behind -
<b>104</b>	<b>11-Feb-2009 A</b>	<b>31-Apr-2012</b>	<b>29-Apr-2009</b>	<b>30-Jun-2012</b>	<b>538</b>
C-104 Retrieval Start-up/Testing Support	11-Feb-2009 A	31-Dec-2009	29-Apr-2009	30-Jun-2009	898
C-104 Retrieval Operations to 25%	30-Dec-2009	27-Jan-2010	01-Oct-2009	28-Oct-2009	898
C-104 Acceleration Tank Retrieval Ops (Super-critical)	28-Jan-2010	26-Feb-2010	29-Oct-2009	04-Dec-2009	898
C-104 Retrieval Operations (MS)	01-Mar-2010	07-Jul-2010	09-Jan-2010	04-Apr-2010	898
C-104 Sample for HHF Decs on	03-Jan-2011	02-Jun-2011	03-Jan-2011	02-Jun-2011	898
C-104 Hard Hheel Rmvl Operations	07-Mar-2012	15-Apr-2012	07-Mar-2012	15-Apr-2012	898
<b>101</b>	<b>05-Jul-2014</b>	<b>11-Aug-2014</b>	<b>03-Jul-2014</b>	<b>11-Aug-2014</b>	<b>50</b>
C-101 Hard Hheel Rmvl Operations	05-Jul-2014	11-Aug-2014	03-Jul-2014	11-Aug-2014	50
<b>102</b>	<b>01-Apr-2011</b>	<b>19-Aug-2014</b>	<b>01-Apr-2011</b>	<b>19-Aug-2014</b>	<b>504</b>
C-102 Retrieval Design	01-Apr-2011	30-Sep-2011	01-Apr-2011	30-Sep-2011	42
C-102 Engineering Support	01-Apr-2011	01-Nov-2012	01-Apr-2011	01-Nov-2012	42
C-102 Retrieval Procurement	03-Oct-2011	02-Apr-2012	03-Oct-2011	02-Apr-2012	42
C-102 Retrieval System Installation	03-Apr-2012	20-Sep-2012	03-Apr-2012	20-Sep-2012	42
C-102 Retrieval Startup and Readiness	26-Jul-2012	01-Nov-2012	26-Jul-2012	01-Nov-2012	42
C-102 Retrieval Operations (MS)	02-Nov-2012	20-Apr-2013	02-Nov-2012	20-Apr-2013	42
C-102 Sample for HHF Decs on	22-Apr-2013	30-Sep-2013	22-Apr-2013	30-Sep-2013	42
C-102 Hard Hheel Rmvl Design & Engineering Support	01-Oct-2013	10-Jul-2014	01-Oct-2013	10-Jul-2014	42
C-102 Hard Hheel Rmvl Procurement	26-Nov-2013	28-May-2014	26-Nov-2013	28-May-2014	42



**1 Forecast start & finish** reflect the status of major project activities as of the last full month of performance.

**2 Baseline start & finish** reflect the planned or target start and finish established by the contractor and DOE, which may be in advance of TPA required dates.

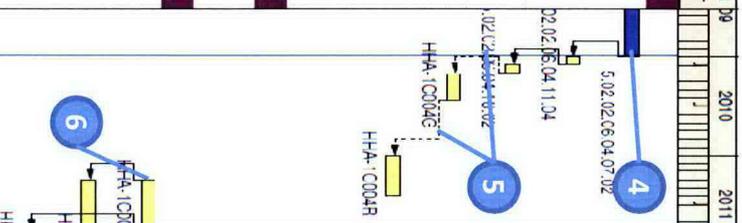
**3 Days Ahead + or Behind -, or float,** shows how current completion dates compare to TPA commitments . Positive values indicate behind ahead of the TPA schedule. This value changes from month to month and is actively managed by project teams. When negative trends are noticed, WRPS implements recovery plans as needed.

# TPA Critical Path Schedule Template

## TPA Reporting Format Primer

V:TPA CF M-B-1 Complete C Farm Retrieval

Activity Name	Forecast Start	Forecast Finish	BL Project Start	BL Project Finish	Days Ahead + or Behind
<b>104</b>	<b>11-Feb-2009 A</b>	<b>15-Apr-2012</b>	<b>29-Apr-2009</b>	<b>15-Apr-2012</b>	<b>5388</b>
C-104 Retrieval Start-up Testing Support	11-Feb-2009 A	31-Dec-2009	29-Apr-2009	30-Jun-2009	898
C-104 Retrieval Operations to 25%	30-Dec-2009	27-Jan-2010	01-Oct-2009	28-Oct-2009	898
C-104 Acceleration Tank Retrieval Ops (Supplemental)	28-Jan-2010	26-Feb-2010	29-Oct-2009	04-Dec-2009	898
C-104 Retrieval Operations (MS)	01-Mar-2010	07-Jul-2010	09-Jan-2010	09-Apr-2010	898
C-104 Sample for H-F Decision	03-Jan-2011	02-Jun-2011	03-Jan-2011	02-Jun-2011	898
C-104 Hard Hael Rmvl Operations	07-Mar-2012	15-Apr-2012	07-Mar-2012	15-Apr-2012	898
<b>101</b>	<b>05-Jul-2014</b>	<b>11-Aug-2014</b>	<b>03-Jul-2014</b>	<b>11-Aug-2014</b>	<b>50</b>
C-101 Hard Hael Rmvl Operations	05-Jul-2014	11-Aug-2014	03-Jul-2014	11-Aug-2014	50
<b>102</b>	<b>01-Apr-2011</b>	<b>19-Aug-2014</b>	<b>01-Apr-2011</b>	<b>19-Aug-2014</b>	<b>504</b>
C-102 Retrieval Design	01-Apr-2011	30-Sep-2011	01-Apr-2011	30-Sep-2011	42
C-102 Engineering Support	01-Apr-2011	01-Nov-2012	01-Apr-2011	01-Nov-2012	42
C-102 Retrieval Procurement	03-Oct-2011	02-Apr-2012	03-Oct-2011	02-Apr-2012	42
C-102 Retrieval System Installation	03-Apr-2012	20-Sep-2012	03-Apr-2012	20-Sep-2012	42
C-102 Retrieval Startup and Readiness	26-Jul-2012	01-Nov-2012	26-Jul-2012	01-Nov-2012	42
C-102 Retrieval Operations (MS)	02-Nov-2012	20-Apr-2013	02-Nov-2012	20-Apr-2013	42
C-102 Sample for H-F Decision	22-Apr-2013	30-Sep-2013	22-Apr-2013	30-Sep-2013	42
C-102 Hard Hael Rmvl Design & Engineering Support	01-Oct-2013	10-Jul-2014	01-Oct-2013	10-Jul-2014	42
C-102 Hard Hael Rmvl Procurement	26-Nov-2013	26-May-2014	26-Nov-2013	26-May-2014	42



**4** **Current Status** provides a forecast finish for major project tasks being worked. As projects come within the near term execution window, and for those sets of activities on the most critical path, additional detail is filtered into status reports.

**5** **Logical ties** exist between project activities so that WRPS can monitor the impact of acceleration or delay of in progress activities on future milestones.

**6** **Resource loaded activities** allow WRPS to monitor and plan for critical resources such as engineers, electricians, HPTs, and field work supervisors.

# TPA Critical Path Schedule Template

## TPA Reporting Format Primer

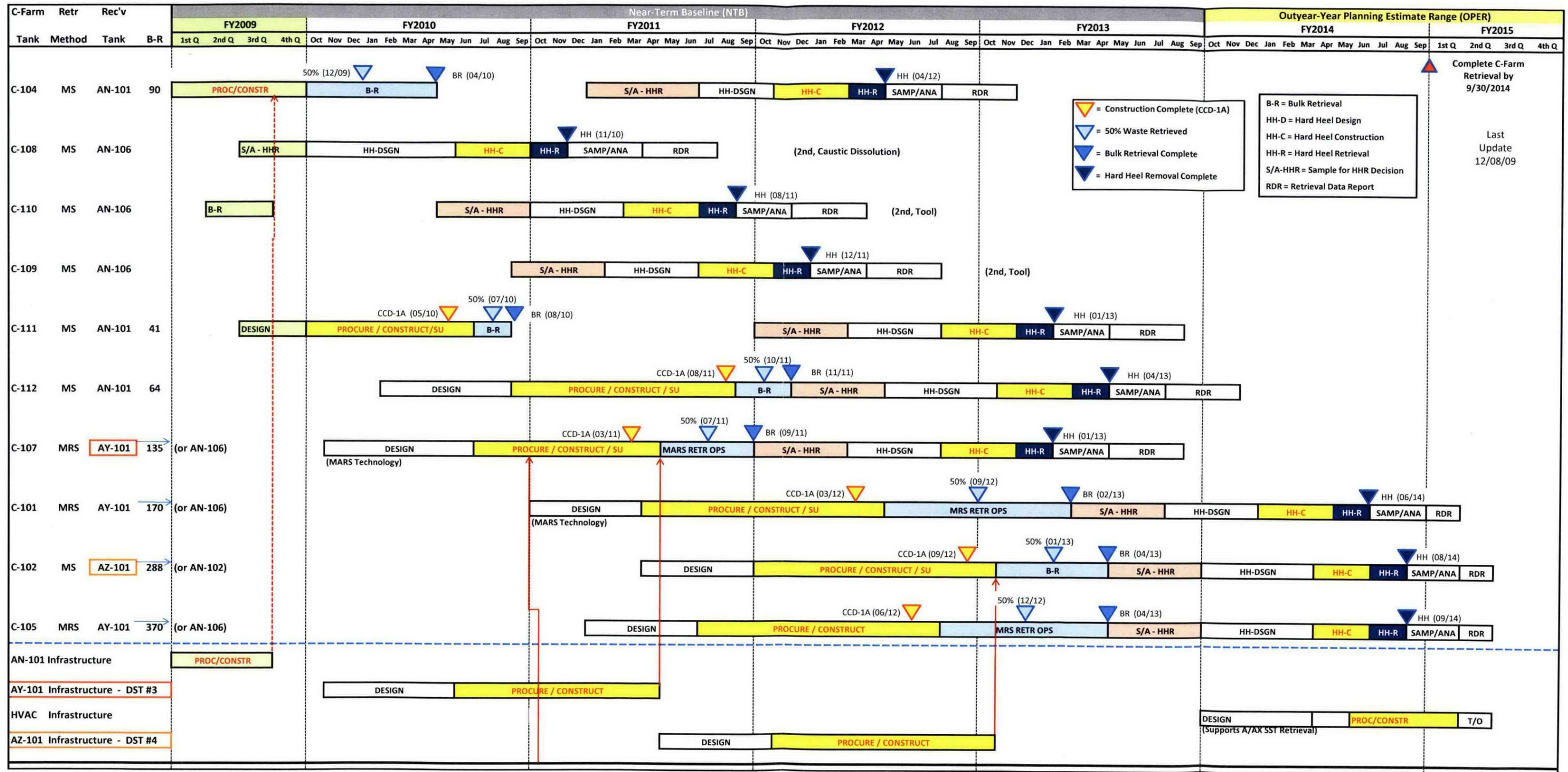
V:\TPA CF M-B-1 Complete C Farm Retrieval

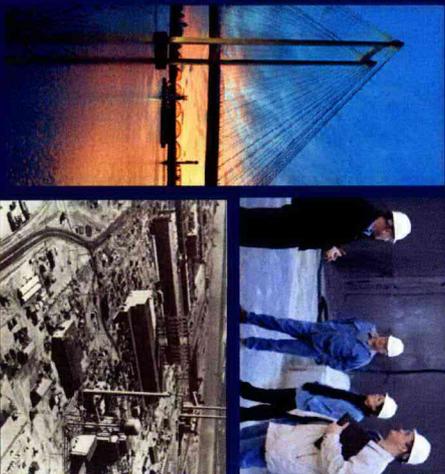
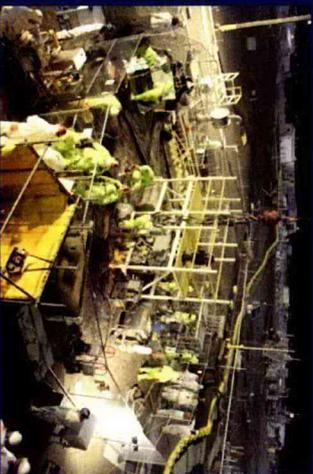
Activity Name	Forecast Start	Forecast Finish	BI Project Start	BI Project Finish	Days Ahead + or Behind
<b>104</b>	<b>11-Feb-2009 A</b>	<b>15-Aug-2012</b>	<b>29-Apr-2009</b>	<b>15-Apr-2012</b>	<b>5388</b>
C-104 Retrieval Start-up Testing Support	11-Feb-2009 A	31-Dec-2009	29-Apr-2009	30-Jun-2009	898
C-104 Retrieval Operations to 25%	30-Dec-2009	27-Jan-2010	01-Oct-2009	28-Oct-2009	898
C-104 Acceleration Tank Retrieval Ops (Supplemental)	28-Jan-2010	26-Feb-2010	29-Oct-2009	04-Mar-2009	898
C-104 Retrieval Operations (MS)	01-Mar-2010	07-Jun-2010	09-Jan-2010	09-Apr-2010	898
C-104 Sample for H/F Decs on	03-Jan-2011	02-Jun-2011	03-Jan-2011	02-Jun-2011	898
C-104 Hard Heel Rmvl Operations	07-Mar-2012	15-Apr-2012	07-Mar-2012	15-Apr-2012	898
<b>101</b>	<b>05-Jul-2014</b>	<b>11-Aug-2014</b>	<b>03-Jul-2014</b>	<b>11-Aug-2014</b>	<b>50</b>
C-101 Hard Heel Rmvl Operations	05-Jul-2014	11-Aug-2014	03-Jul-2014	11-Aug-2014	50
<b>102</b>	<b>01-Apr-2011</b>	<b>19-Aug-2014</b>	<b>01-Apr-2011</b>	<b>19-Aug-2014</b>	<b>504</b>
C-102 Retrieval Design	01-Apr-2011	30-Sep-2011	01-Apr-2011	30-Sep-2011	42
C-102 Engineering Support	01-Apr-2011	01-Nov-2012	01-Apr-2011	01-Nov-2012	42
C-102 Retrieval Procurement	03-Oct-2011	02-Apr-2012	03-Oct-2011	02-Apr-2012	42
C-102 Retrieval System Installation	03-Apr-2012	20-Sep-2012	03-Apr-2012	20-Sep-2012	42
C-102 Retrieval Startup and Readiness	26-Jul-2012	01-Nov-2012	26-Jul-2012	01-Nov-2012	42
C-102 Retrieval Operations (MS)	02-Nov-2012	20-Apr-2013	02-Nov-2012	20-Apr-2013	42
C-102 Sample for H/F Decs on	22-Apr-2013	30-Sep-2013	22-Apr-2013	30-Sep-2013	42
C-102 Hard Heel Rmvl Design & Engineering Support	01-Oct-2013	10-Jul-2014	01-Oct-2013	10-Jul-2014	42
C-102 Hard Heel Rmvl Procurement	26-Nov-2013	28-May-2014	26-Nov-2013	28-May-2014	42

**7** *The Data Date* indicates the date that status was last reported. In this case, the data date is set to December 28th.

**8** *Critical Path* can be calculated using multiple methods. Typically it is all activities that drive a TPA milestone to be behind schedule (float less than 0). However, for C Farm retrievals all completion dates are ahead of the required finish. Therefore, **C Farm retrieval critical path is calculated as the longest chain of events leading to C Farm completion** (C-102 retrieval). Important events on the near-critical or off-critical path are included for information (C-104 retrieval and other tank retrieval operations).

**C-Farm Retrieval  
Life-Cycle Baseline PMB  
2014 Compliance Case**





# Office of River Protection

## LAW-BOF-LAB Monthly Review January 2009 November 2009 Data

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Office of River Protection

# Low Activity Waste Facility

*Gary Olsen*  
*Federal Project Director, LAW*



*EM Environmental Management*

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67% Complete Overall / Engineering 91% Complete / Construction 56% Complete

**Engineering Activities:**

- Completed Title II Design and Engineering activities
- Resolved off-gas design issues
- Engineering released drawings for 1300 linear feet of increasing piping design to 95% complete.
- Vendors fabricated 4200 linear feet of piping bringing piping fabrication to 96% complete.

**Procurement Activities:**

- Received both glass former mixers (and install).
- Received the melter power supply equipment.

**Construction Activities:**

- Completed installation of the roof and wall stainless steel liner plated in melter #1 and #2 pour caves.
- Completed rough setting the both glass former mixers on the roof of the facility.
- Continued installation of piping, hangers, and other commodities.
- Construction installed 9000 feet of piping bringing piping installation up to 69% complete.



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Cumulative SV (\$5,996K), SPI .99 and CV (\$35,753K), CPI .94

- Recoverable and non-Critical Path Affecting SV
  - Plant Equipment (\$5.8M)
- Unrecoverable CV in Various Control Accounts
  - Engineering (\$11.3M), Plant Material (\$5.97M), Construction Craft (\$12.2M), Construction Subs (\$18.4M)

Cumulative since Jan09 SV (\$9,326K), SPI .82 and CV \$203, CPI 1.00

- SV due to late procurements (e.g. Carbon Bed), Sub-Contracts.
- Since Re-plan, emphasis on Cost Efficiency/ Activities laid down to address construction efficiencies/cost challenges (ie: Partition Walls)
  - Need to address in terms of Overall Schedule health (11 Months of Float to Construction Substantially Complete)

Period SV (\$1.382K), SPI .70 and CV (\$463K), CPI .88

- Plant Equipment (SV due to items earned earlier), (CV due to Melter REA's)

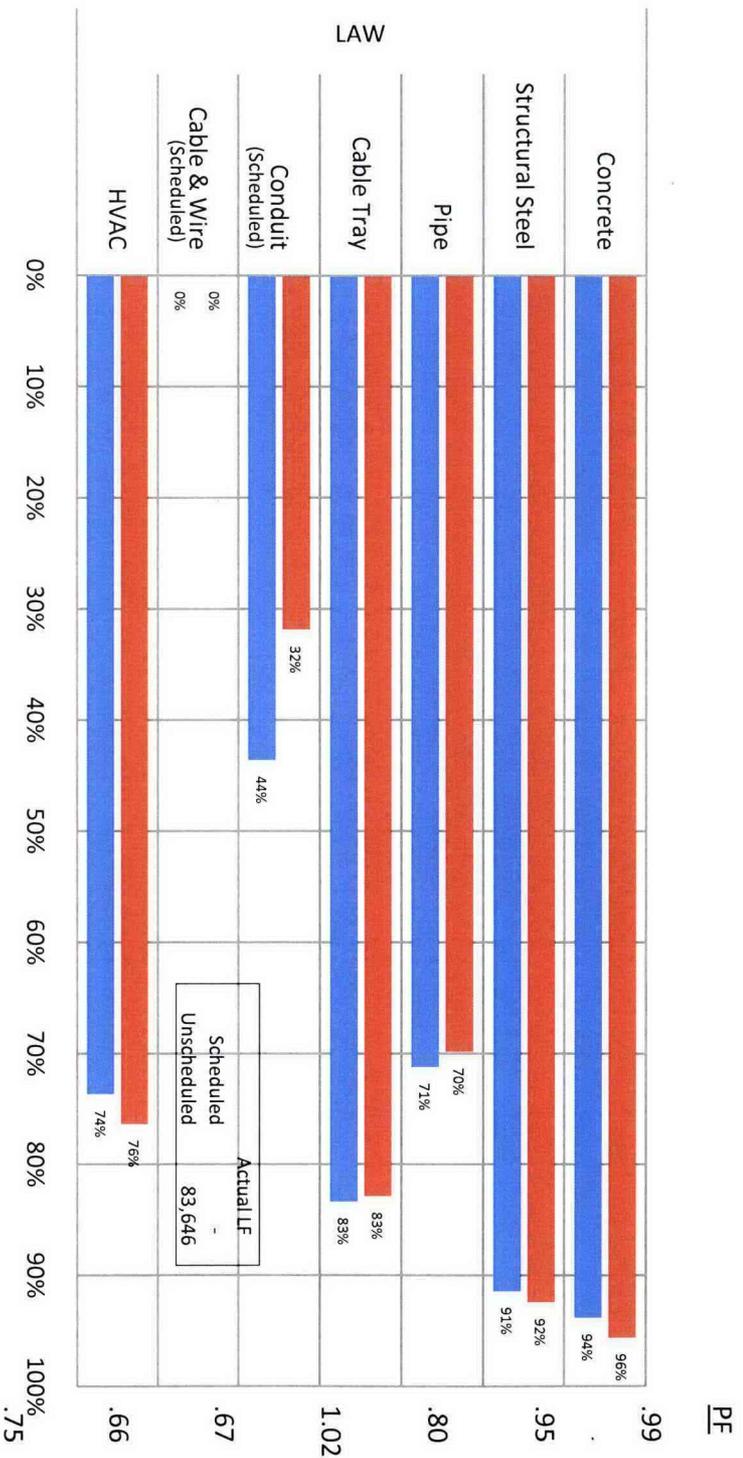


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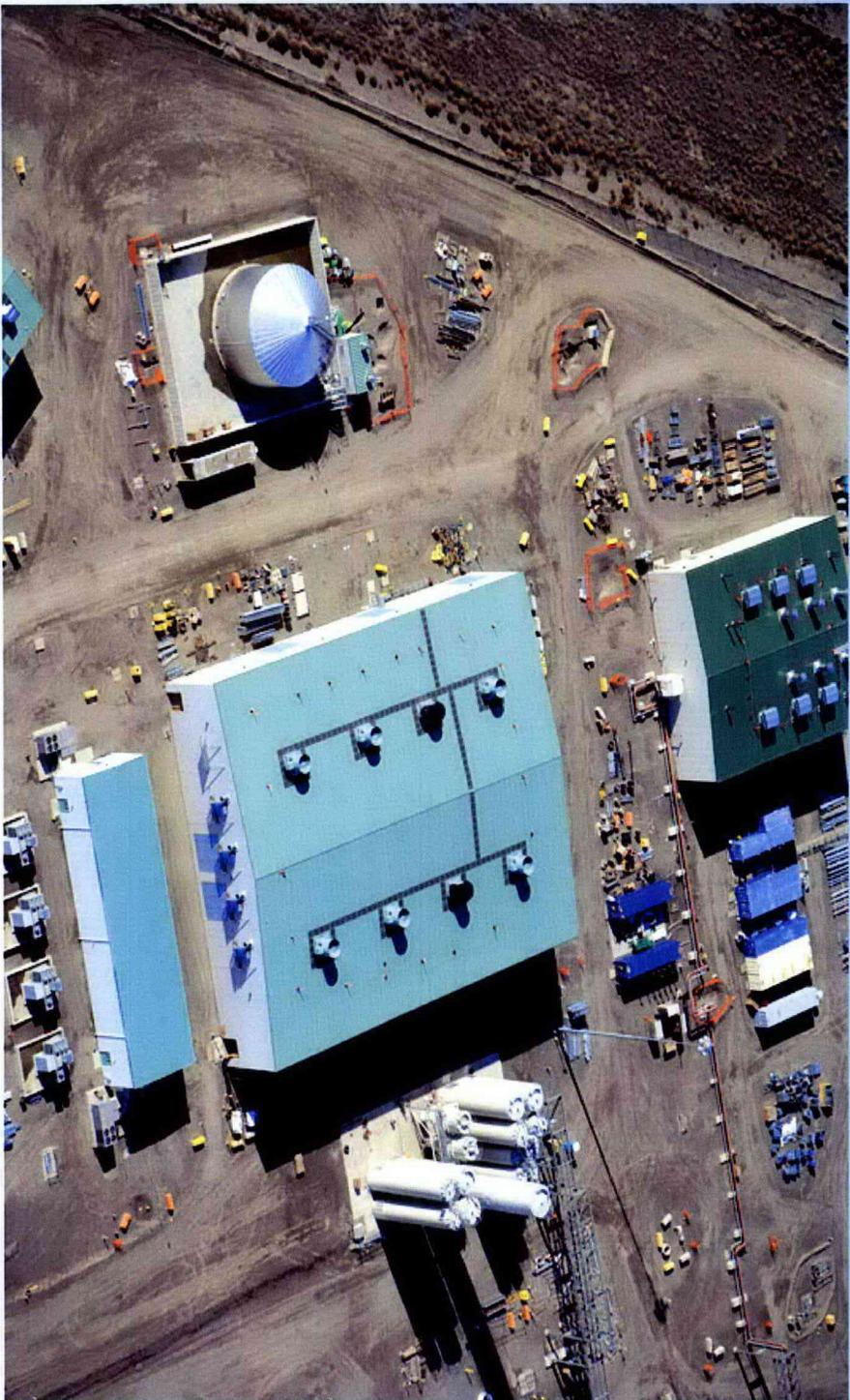
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# Balance of Facilities (BOF)

**Gary Olsen**  
**Federal Project Director, BOF**

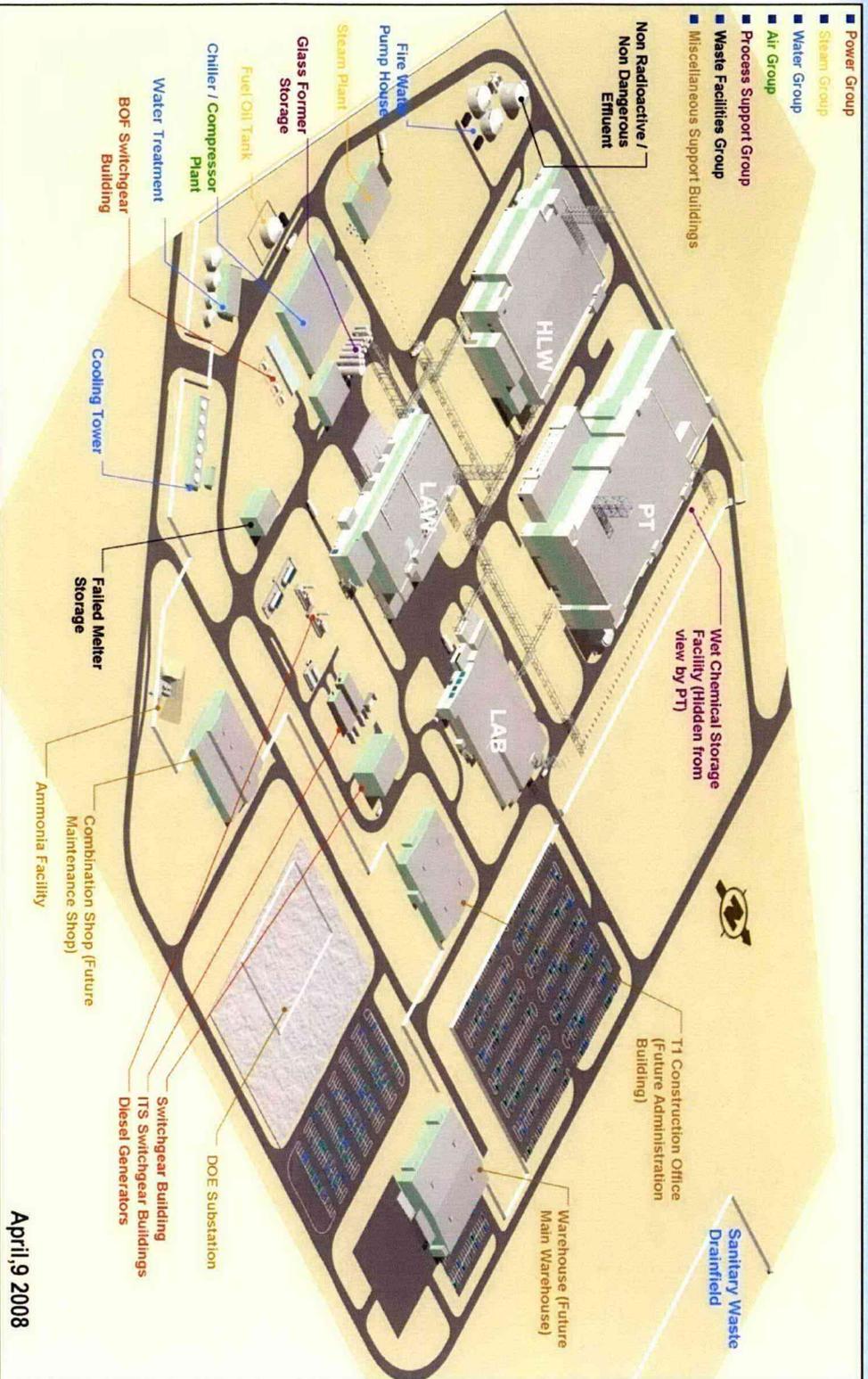


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Balance of Facilities

52% Complete Overall / Engineering 78% Complete / Construction 55% Complete

**Design Activities:**

- Started confirming design of various BOF systems
- Developed most cost effective EDG Acquisition strategy
- Completed Emergency Diesel Generator (EDG) Specification
- 90 plus Percent of Glass Former Facility Equipment Received
  - 13 Silo's, conveyance equipment, parts and pieces remain (WTP was this vendor's first and last Government Job per Vendor President)



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Cumulative SV (\$980K), SPI 1.00 and CV (\$326K), CPI 1.00

- Reasonable Performance that must be maintained

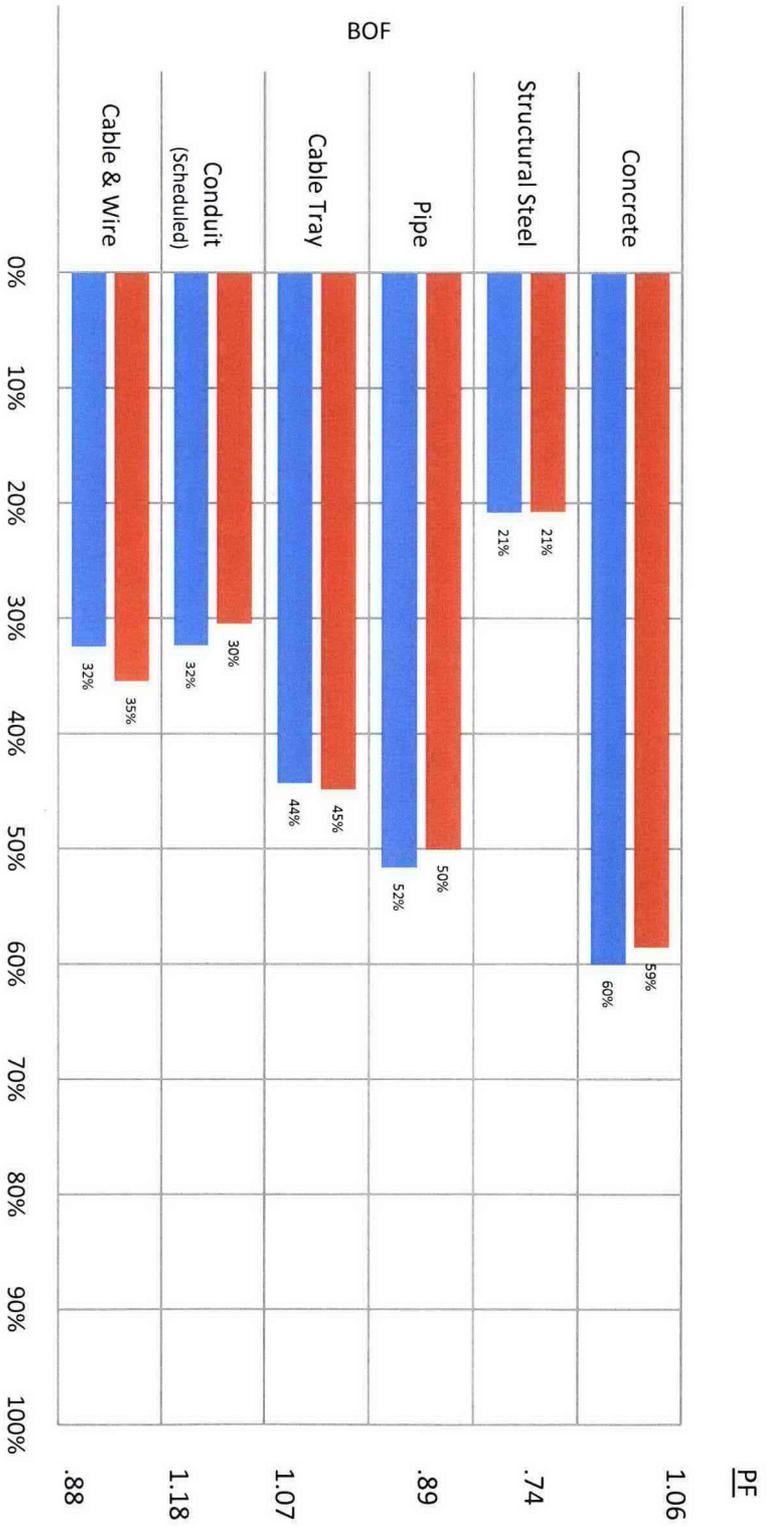
Cumulative since Jan09 SV (\$1,901K), SPI .89 and CV \$417, CPI 1.03

- Recent Schedule VAR partially due to Glass Former Facility, Resources being dedicated to contemporary issues

Period SV (\$185K), SPI .89 and CV (\$69K), CPI .96

- SV driven by Engineering (GF Slab) and Construction Craft, CV driven by Craft





■ Install Actual ■ Install Plan



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# Analytical Laboratory

**Gary Olsen**  
**Federal Project Director, LAB**



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Analytical Laboratory

47% Complete Overall / Engineering 79% Complete / Construction 56% Complete

**Design Activities:**

- Completed Title II Design and Engineering activities

**Procurement Activities:**

- Received the waste transfer system equipment.
- Received eight C5 safe change High Efficiency Particulate Air filter housings.
- Received the mechanical handling hot cell equipment.

**Construction Activities:**

- Completed approximately 55 percent of heating ventilation and air conditioning duct and support installation.
- Completed formwork, rebar, embed, concrete placement for the hot cell north end wall.



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Cumulative SV (\$1,350K), SPI .99 and CV (\$12,231K), CPI .92

- Unrecoverable CV – (\$5.2M) Plant Material, Engineering (\$3.1M), Construction and Construction SC

Cumulative since Jan09 SV \$305K, SPI 1.01 and CV \$1,382, CPI 1.06

- Good progress in CY 2009

Period SV \$313K, SPI 1.20 and CV \$31K, CPI 1.02

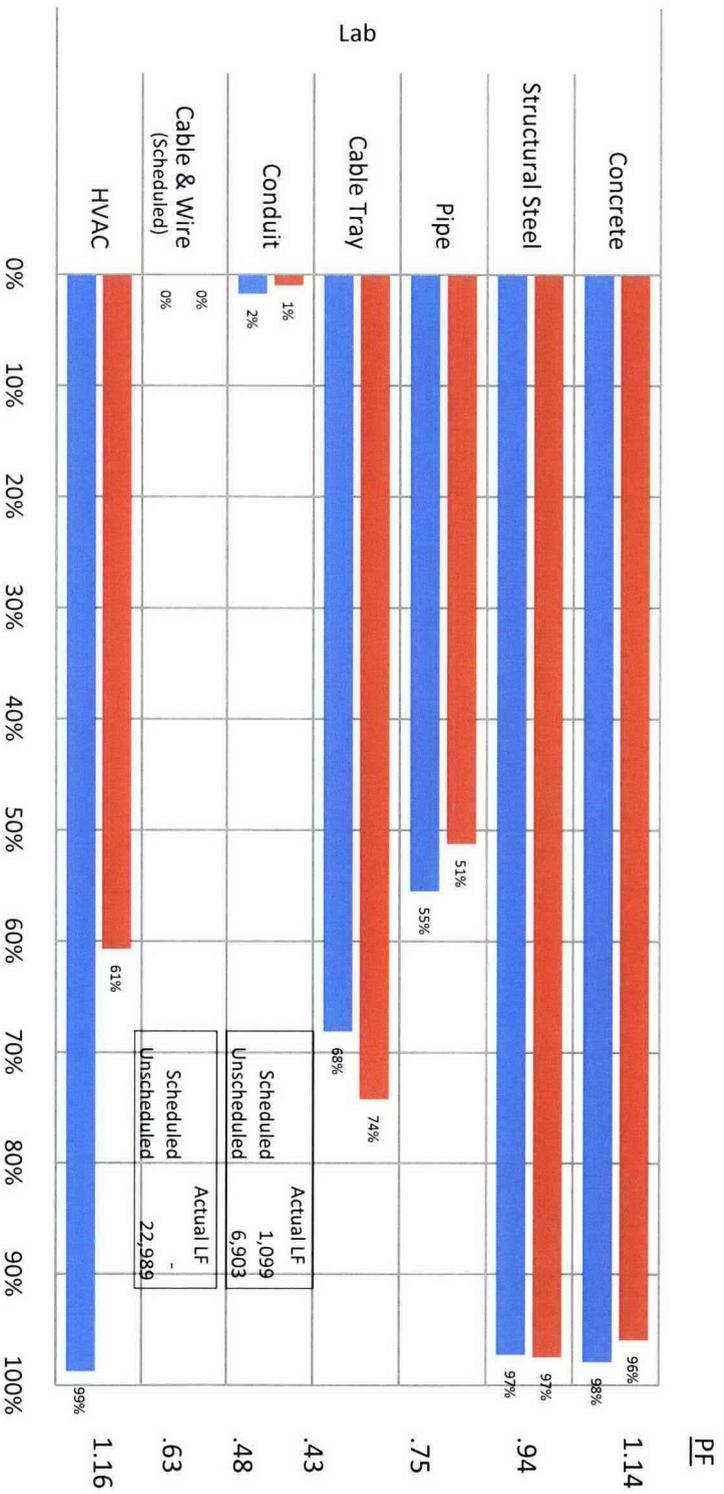


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**EM Environmental Management**

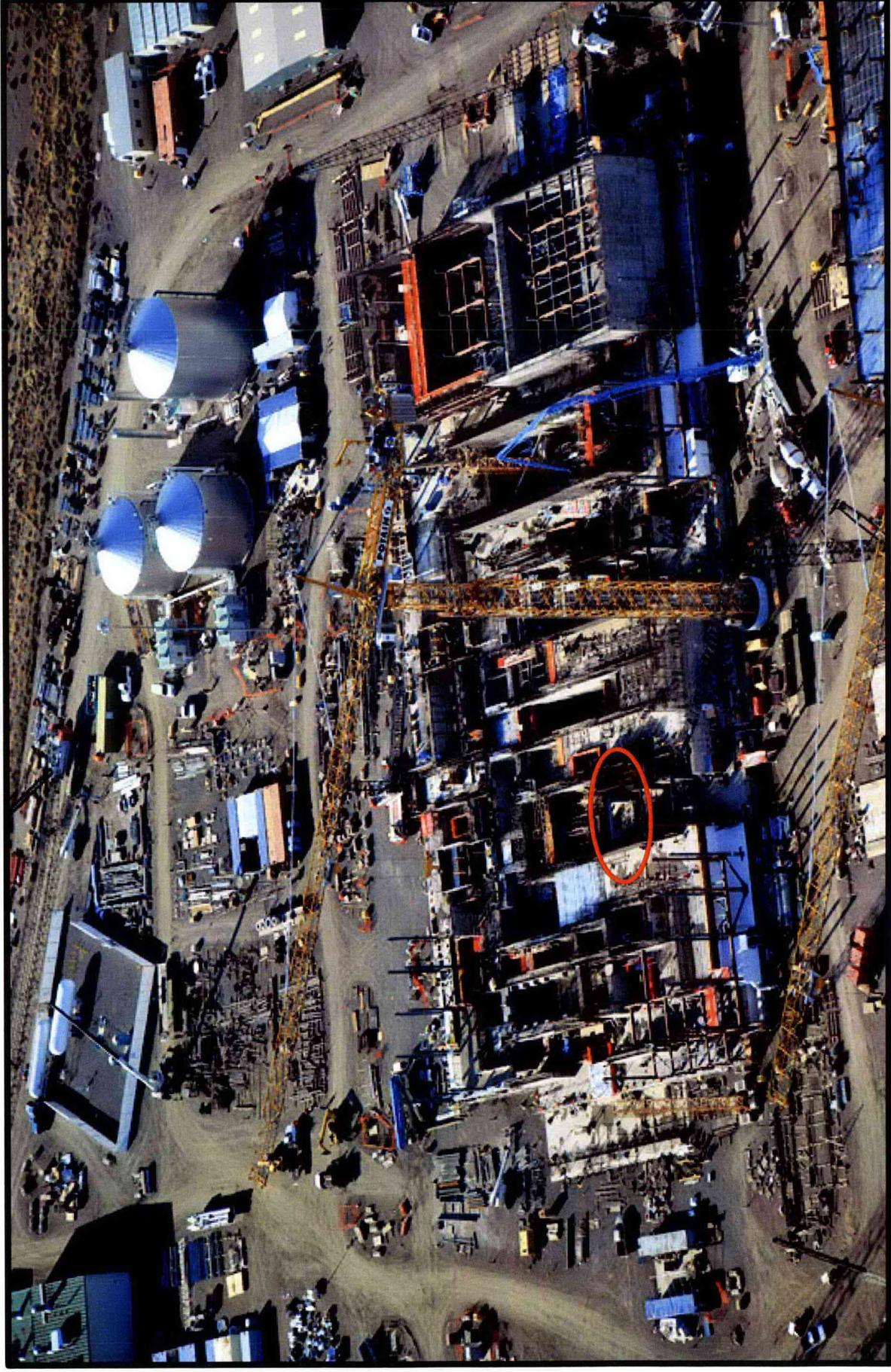
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www.em.doe.gov

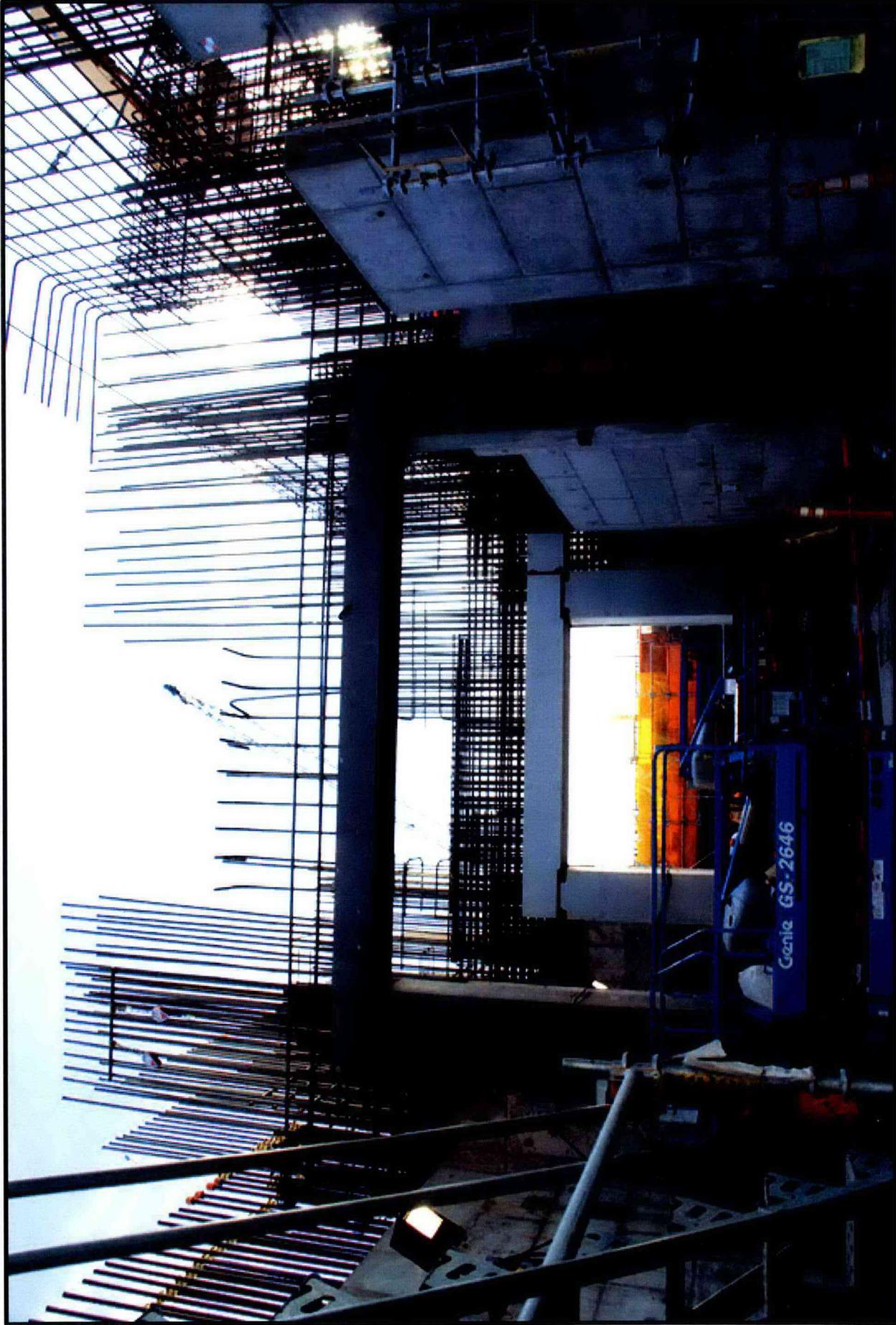




Delivery of C5 Shield Door for HLW Melter Cave #1



**HLW Aerial Looking North to South**  
*(C5 Shield Door 10 Location Highlighted)*



Steel Door Frame Liners for HLW Melter Cave #1

### MEETING MINUTES

#### **Annual Meeting Between the U.S. Department of Energy, Office of River Protection (ORP) and the State of Washington, Department of Ecology (Ecology) to Discuss Interim Measures for Fiscal Year 2009**

Meeting Date: July 21, 2009

Location: Ecology Offices, Room 3C

Purpose: Fulfill Hanford Federal Facility and Consent Order commitment M-45-56, "Ecology and DOE agree, at a minimum, to meet yearly (by July 31 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. Additional Agreement Interim Measures shall be documented through establishment of Interim Milestones and associated target dates as agreed necessary by the parties"

Attendees: Jeff Lyon (Ecology), Joseph Caggiano (Ecology), Zelma Jackson (Ecology), Bob Lober (ORP), Susan Eberlein (WRPS), Dan Parker (WRPS), Jeff Luke (WRPS)

Discussion: It was noted that with this meeting the requirements of TPA milestone M-45-56 would be met for CY2009 (see Agreement 1, below).

Actions agreed to at last year's meeting were discussed.

#### Actions completed in FY2009 were identified as follows:

1. Maintenance plan for previously constructed interim measures. (Note: Letter, WRPS-0900388 R2, "Interim Measures Maintenance Plan" was provided to Ecology, during the meeting, by ORP, to meet this action.)
2. Assessment of design alternatives for future interim barriers. (Note: RPP-RPT-38323, "Tank Farm Interim Surface Barrier Materials and Runoff Alternatives Study", was provided to Ecology, by ORP, to meet this Action.)
3. Criteria document for interim barriers addressing:
  - o Criteria for prioritizing future barriers
  - o Criteria for evaluating barrier performance(Note: RPP-ENV-41309, "Criteria for Prioritizing Hanford Site Tank Interim Surface Barriers and for Evaluating Their Performance", was provided to Ecology, by ORP, to meet the above Action.)

Ecology concurred that the above identified actions have been completed.

Actions planned for completion in FY2009 were identified as follows:

1. Evaluate (with Ecology input) the merit of proceeding with SX characterization and planning for a future interim barrier.
2. Identify (with Ecology input) the next tank farm to undergo characterization for purposes of designing an interim surface barrier.
3. Provide a plan for decommissioning up to five existing boreholes per year in future years. (It was noted by ORP that, per this agreement, a plan would be provided in FY09 and the actual decommissioning would occur in outyears, identified by the plan.)

Ecology concurred that the above identified actions constitute the remaining actions to be completed, in FY09, from the 7/22/08 Meeting Agreement.

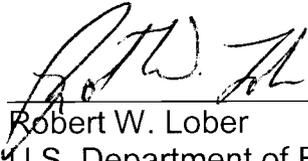
Actions proposed for FY2010 were identified as follows:

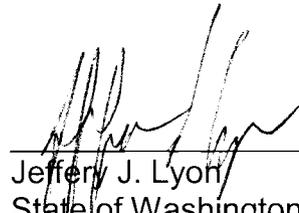
1. Construct an interim surface barrier in TY farm (pending Ecology approval of plan). (Note: It was discussed and understood by Ecology and ORP that the TY Barrier Design Package is to be provided to Ecology by March 2010.)
2. Complete characterization in support of an interim surface barrier in SX farm. (Note: It was understood by Ecology and ORP that initiation of this action is contingent upon the results of Action 1, above, under "Actions planned for completion in FY2009".)
3. Implement plan for borehole decommissioning.

It was agreed that the three activities, listed above, should constitute the Interim Measures for FY2010. It was also agreed that three meetings, each meeting to address one of the above proposed actions, would be scheduled.

- Agreement (1): It was agreed this meeting satisfied the requirement of TPA milestone M-45-56 for CY2009.
- Agreement (2): Construct an interim surface barrier in TY farm (pending Ecology approval of plan). (Note: It was discussed and understood by Ecology and ORP that the TY Barrier Design Package is to be provided to Ecology by March 2010.)
- Agreement (3): Complete characterization in support of an interim surface barrier in SX farm. (Note: It was understood by Ecology and ORP that initiation of this action is contingent upon the results of Action 1, above, under " Actions planned for completion in FY2009".)
- Agreement (4): Implement plan for borehole decommissioning.

Meeting Minutes Agreed to by:

  
\_\_\_\_\_  
Robert W. Lober  
U.S. Department of Energy  
Office of River Protection

  
\_\_\_\_\_  
Jeffery J. Lyon  
State of Washington  
Department of Ecology

ORP Project Managers Meeting  
2440  
Richland, Washington  
**Meeting Minutes Transmittal**

**Attachment C: Attendee List**

