

**FINAL**

Office of River Protection  
Tri-Party Agreement  
Monthly Summary Report  
April 2012



Office of River Protection  
Tri-Party Agreement Milestone Review  
April 2012

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23	System Plan; M-62-40	Dabrisha Smith / Jeff Lyon / Dan McDonald
24	WTP Overall TPA Summary and Milestone Status; M-62-01	Delmar Noyes / Dan McDonald

Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2012</b>				
M-062-40B	Submit System Plan	10/31/2011	10/21/2011	Completed
M-062-49	Sub. Report to ECY Demonstrating WTP Design Meets Vit. Criteria	10/31/2011	10/27/2011	Completed
M-045-91B	DOE Submit a Sampling and Analysis Plan to Ecology	12/30/2011	9/20/2011	Completed
M-045-92F	Meet Yearly on Performance of Barrier	12/31/2011	11/30/2011	Completed
M-045-91G-T02	Provide AOR Final Doc. for SSTs on 750,000 Gallon Tanks	1/31/2012	11/18/2011	Completed
M-062-01X	Submit Semi-Annual Project Compliance Report	1/31/2012	1/27/2012	Completed
M-045-91D	Submit Analytical Test Plan for Cores Removed from C-107 Plug	3/31/2012	6/27/2011	Completed
M-045-91G-T06	Provide Report of the Visual Inspection of 12 SSTs M-045-91G-T05	3/31/2012	03/12/2012	Completed
M-045-92M	Barrier 2 Design/Monitoring Submittal to Ecology	6/30/2012	5/19/2011	Completed
M-047-06	Comp. Neg's of No More Than 2 Interim Milestones	6/30/2012		At Risk
M-062-01Y	Submit Semi-Annual Project Compliance Report	7/31/2012		On Schedule
M-045-56H	Meet Yearly to Discuss Interim Measures	7/31/2012		On Schedule
<b>Fiscal Year 2013</b>				
M-045-92L	Barrier 1 Construction Complete	10/31/2012		To Be Missed
M-045-92G	Meet Yearly on Performance of Barrier	12/31/2012		On Schedule
M-090-11	Comp. Neg's No More Than 2 Canister Storage Fac. Const. Int. M/S	12/31/2012		On Schedule
M-062-01Z	Submit Semi-Annual Project Compliance Report	1/31/2013		On Schedule
M-045-91F-T01	Provide Report of the Liquid Leak Rate Assessments	1/31/2012		On Schedule
M-045-91D-T01	Provide Report on the Concrete Dome Samples from Tank C-107 Plug	5/31/2013		On Schedule
M-045-91F-T03	Provide Report on Testing for Ionic Conductivity of SSTs	5/31/2013		On Schedule
M-045-92O	Barrier 3 Design/Monitoring Submittal to Ecology	6/30/2013		At Risk
M-045-91F-T02	Provide Report of Liner Failures for SSTs	7/31/2013		On Schedule
M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	7/31/2013		On Schedule
M-045-91E	Provide SST Farms Dome Deflection Surveys Every Two Years	9/30/2013		On Schedule
M-045-91G-T03	Provide AOR Final Doc. for SSTs on 1,000,000 Gallon Tanks	9/30/2013		On Schedule

## **WBS 5.2 Retrieve and Close Single Shell Tanks**

**M-045-58, Submit to Ecology for Review and Approval as an Agreement primary document, a phase 2 CMS Master Work Plan, Due: 12/31/08 Status: Complete.** The outstanding issues involved integration of RCRA and CERCLA requirements, and the definition of a schedule for future RFI/CMS Work Plan development and implementation. With the development of the RCRA/CERCLA Integration White Paper (under M-045-80), it is now understood that the path to soil corrective measures implementation involves a modification to the RCRA Permit for SST Closure, and a ROD to address the CERCLA requirements. In addition, modifications to milestone M-045-84 and M-045-85 have now been made to explicitly define the requirements for schedule development for future RFI/CMS Work Plans, RFI/CMSs and Corrective Measures Implementation Plans. Thus all outstanding issues for the M-045-58 deliverable have been addressed, and this milestone may be considered closed.

**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, Due: 12/31/08, Status: Complete.** Continue field sampling with decommissioning of angle push under C203 underway. ORP and Ecology met for review of sampling results and draft workplan modifications and sampling optimization strategy on September 22, 2011. September meeting minutes, which document efforts, were signed 11/09/2011 by parties and were subsequently entered into the administrative record. A draft Work Plan/SAP Modification and TPA Change Notice was formally submitted to Ecology on 1/05/2012 with a requested response by 2/10/2012.

**M-045-56H, Complete Implementation of Agreed to Interim Measures (Meet Yearly to Discuss Interim Measures), Due: 07/31/12, Status: On Schedule.**

**M-045-59, Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST WMAS (pending the CMS report, milestone M-45-58, and implementation of other interim corrective measures), Due: TBD, Status: On Schedule**

**M-045-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RFI/CMS Report for WMA C, Due: 12/31/14, Status: On Schedule**

**M-045-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Study Report for WMA C, Due: 06/30/2015, Status: On Schedule**

**M-045-92, DOE and Ecology will establish selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due: 9/30/2016, Status: On Schedule.**

**M-45-92B, DOE shall submit to Ecology for approval, a final design and monitoring plan for TY farm interim barrier, Due: 03/31/2010, Status: Complete.** A revision will be made to the monitoring plan and submitted to Ecology with a TPA Change Notice, based on current evaluation of data as documented in meeting minutes signed by the parties as part of M-045-92F.

A draft Interim Barrier monitoring technical evaluation and draft change notice was provided to Ecology for comment as per Approved Meeting Minutes.

**M-045-92F, DOE and Ecology will meet yearly to review the monitoring data, agree to changes in monitoring (if needed) and assess the performance of the demonstration barrier, Due: 12/31/2011, Status: Complete.** Meeting was held 11/30/11. Meeting notes have been prepared, signed on 12/19/11, and have been entered into the TPA Administrative Record.

**M-045-92L, Construct Barrier 1 Due: 10/31/12, Status: To Be Missed.** Change Package is being developed. See issues below.

**M-045-92O, Submit a Final Design and Monitoring Plan for Interim Barrier 3 Due: 06/30/13, Status: At risk.** Being addressed in conjunction with M-045-92L change package.

**Significant Past Accomplishments:**

- Automated data collection system for T-Farm interim barrier monitoring continues gathering data.
- Automated data collection system for TY Interim Barrier monitoring continues gathering data.
- Continued laboratory analysis of direct push soil samples previously obtained in C farm and other farms

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

- Finalize updates to WMA C RFI/CMS workplan and SAP based on Ecology's review of the TPA change notice.
- Publish results of evaluation of barrier monitoring data, and recommend changes to future monitoring plan for TY barrier.
- Continue laboratory analysis of direct push soil samples previously obtained in C farm and other farms.

**Issues:**

FY2012 funding constraints will impact M-045-92 barriers work. A draft TPA change package has been developed as is under review and discussion.

## SST Retrieval and Closure Program

**M-045-101, Submit to Ecology as a primary document a report on all catch tanks and associated pipelines in the SST System Part A, Due: 12/27/10, Status: Complete.** Document transmitted from ORP to Ecology via letter 10-TPD-176 on 12/28/10. Comments were transmitted from Ecology to ORP on May 27, 2011, via letter 11-NWP-048. ORP requested one extension to the comment resolution period to December 5, 2011. Resolutions have been identified for all comments and the RCRs and redline provided to Ecology on 11/14/2011 with an extension date for Ecology response of March 15, 2012. Ecology and ORP are meeting in April to discuss comment resolution.

**M-045-80, Complete those portions of C-200 Closure Demonstration Plan, Due: 1/31/2011 Status: Complete.** Four primary documents transmitted from ORP to Ecology via letter 10-TPD-166 on 12/28/10. Comments on three of the four documents were transmitted from Ecology to ORP on May 27, 2011, via letters 11-NWP-045, 11-NWP-047, and 11-NWP-051. ORP requested an extension, to December 5, 2011. Ecology requested additional time to review *Radioactive Waste Determination Process Plan for Waste Management Area C Tank Waste Residual* via 11-NWP-049. ORP transmitted responses on the C-301 Catch Tank Retrieval Feasibility Study (RPP-RPT-45723) to Ecology on November 8, 2011, via 11-TDP-085. ORP transmitted responses on the 241-C Tank Removal Study (RPP-RPT-47167) on November 9, 2011, via 11-TPD-084. ORP received Ecology comments on the *Radioactive Waste Determination Process Plan for Waste Management Area C Tank Waste Residuals* on December 7, 2011 and is evaluating comments. ORP transmitted responses for *The Waste Management Area C RCRA/CERCLA Integration White Paper* (RPP-PLAN-46459) on January 17, 2012 via 11-TF-151. A TPA extension is in place until March 15, 2012 for WIR Process response. ORP provided updated Draft WIR process paper with RCRs to Ecology on March 15<sup>th</sup>. Ecology and ORP agree to meet on May 7<sup>th</sup>, 2012 to discuss comment resolution and extend the final resolution to the May 17<sup>th</sup>, 2012 TPA Quarterly Meeting.

**M-045-81, Implement & complete all remaining activities in C-200 Closure Demonstration Plan, with any revisions agreed to by Ecology and DOE, and provide a report of the results of those activities, Due: 9/30/2014, Status: Complete.** The original C-200 Closure Demonstration Plan was revised and released as *Waste Management Area C Closure Demonstration Project Plan* (RPP-PLAN-46484, Revision 3). Ecology and DOE agreed to the changes in this revision of the plan in December 2011 Project Managers Meeting. The remaining deliverable specified in the closure demonstration plan was formally transmitted from ORP to ECY via letter 10-TPD-166 on 12/28/10. Comments were transmitted from Ecology to ORP on June 1, 2011, via letter 11-NWP-052. ORP requested an extension, to December 5, 2011. Ecology and ORP met on 11/1, 11/14, and 11/17/2011 to resolve comments. ORP requested an extension to March 15, 2012 to incorporate comment resolutions. ORP provided updated Draft Pipeline Feasibility Report and RCRs to Ecology on March 15<sup>th</sup>. Ecology and ORP are meeting in April to discuss comment resolution.

**M-045-82, Submit complete permit mod requests for Tiers 1, 2, & 3 of the SST, Due: 9/30/2015 Status: On Schedule**

**M-045-84, Complete negotiations of TPA interim MS for closure of second WMA, Due:**  
1/31/2017, Status: On Schedule

**M-045-83, Complete the closure of WMA C, Due:** 6/30/2019, Status: On Schedule

**M-045-85, Complete negotiations of TPA interim MS for closure of remaining WMAs, Due:**  
1/31/2022, Status: On Schedule

**M-045-70, Complete waste retrieval from all remaining SSTs, Due:** 12/31/2040, Status: On  
Schedule

**M-045-00, Complete Closure of all Single Shell Tank Farms, Due:** 1/31/2043, Status: On  
Schedule

**M-045-86, Submit retrieval data report to Ecology for 19 tanks retrieved, Due:** TBD (12  
months after retrieval certification), Status: On Schedule

**Significant Past Accomplishments:**

- See discussions above and related discussions in Consent Decree report.

**Significant Planned Activities in the Next Six Months:**

- See discussions above and related discussions in Consent Decree report.
- Work to discuss and resolve issues and comments associated with deliverables for M-45-101, 80, and 81.

**Issues:**

USDOE is deferring the final numeric modeling supporting the WMA C performance assessment to 2013 due to budget constraints in 2012. Impacts of this delay are being incorporated into the critical path schedules.

## **Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria**

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

**Significant Past Accomplishments:**

None

**Significant Planned Activities 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.

**Issues:**

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.

## **Tank Retrievals with Individual Milestones**

### **Tank 241-A-103**

**M-045-15, Completion of Tank A-103 SST Waste Retrieval**, Due: 9/30/22 Status: On schedule. Change package M-45-11-04 replaced tank S-102 with tank A-103 and changed to milestone completion date for M-045-15 to 09/30/2022.

**M-045-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**, Due: 9/30/22, Status: On schedule. Updated with tank A-103 and due date of 9/30/22 per M-45-11-04 Change Package.

**M-045-15D, Embedded Milestone, if appropriate, DOE will request an exception to waste retrieval criteria pursuant to Agreement Appendix H**, Due: 9/30/22, Status: On Schedule. Updated with A-103 tank and due date of 9/30/22 per M-45-11-04 Change Package.

#### **Significant Past Accomplishments:**

- Change Package M-45-11-04 was signed by ORP and Ecology on 04/19/11.

#### **Significant Planned Activities in the Next Six Months:**

None

#### **Issues:**

None

### **Tank 241-S-112**

**M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**, Due: TBD (in accordance with M-045-84 or M-045-85), Status: On Schedule

**M-045-13E, Complete Negotiations for Interim Milestones for Closure of S-112**, Due: TBD Status: On Schedule as part of M-045-84 or M-045-85.

#### **Significant Past Accomplishments:**

- Ecology letter of January 7, 2008, concurred with ORP that retrieval of Tank S-112 is complete.

#### **Significant Planned Activities in the Next Six Months:**

None

#### **Issues:**

None

SLCS-CUR / OPER-CUR		C-Farm Critical Path by WBS					Data Date 26-Mar-12																								
Activity ID	Activity Name	Orig Dur	Rem Dur	Current Start	Current Finish	Total Float	Chg Since Last Month	FY2010				FY2011				FY2012				FY2013				FY2014				FY2015			
								FQ1	FQ2	FQ3	FQ4																				
<b>5.02.02.06.01 C-101 Retrieval</b>		941	581	18-Oct-10 A	14-Jul-14	35	0																								
HHA-3C001B	C-101 Retrieval Design	144	0	18-Oct-10 A	31-Oct-11 A		0																								
HHA-3C001CA	C-101 Retrieval Procurement - Receive Equipment	60	118	08-Aug-11 A	10-Sep-12	49	-23																								
HHA-3C001E	C-101 Retrieval System Installation	48	0	16-May-11 A	02-Nov-11 A		0																								
HHA-3C001EA	C-101 Retrieval System Installation - FY12	169	132	02-Dec-11 A	28-Sep-12	35	-8																								
HHA-3C001F	C-101 Retrieval Startup and Readiness - FY12	47	47	25-Jul-12	28-Sep-12	35	0																								
HHA-3C001F1	C-101 Retrieval Startup and Readiness - FY13	23	23	01-Oct-12	31-Oct-12	35	0																								
HHA-3C001G	C-101 Retrieval Operations (MS)	84	84	01-Nov-12	06-Mar-13	35	0																								
HHA-3C001M1	C-101 Sample for Hard Heel Removal Decision	107	107	07-Mar-13	06-Aug-13	35	0																								
HHA-3C001T	C-101 Hard Heel Rmvl Design & Engineering Support	196	196	07-Aug-13	15-May-14	35	0																								
HHA-3C001R	C-101 Hard Heel Rmvl Procurement	126	126	03-Oct-13	03-Apr-14	35	0																								
HHA-3C001S	C-101 Hard Heel Rmvl Installation	70	70	05-Feb-14	15-May-14	35	0																								
HHA-3C001M	C-101 Hard Heel Rmvl Operations	40	40	16-May-14	14-Jul-14	35	0																								
<b>5.02.02.06.02 C-102 Retrieval</b>		945	619	07-Dec-10 A	06-Sep-14	17	0																								
HHA-1C002B	C-102 Retrieval Design	106	0	07-Dec-10 A	06-Feb-12 A		0																								
HHA-1C002C	C-102 Retrieval Procurement	80	118	15-Aug-11 A	10-Sep-12	34	-23																								
HHA-1C002E	C-102 Retrieval System Installation	185	126	10-Oct-11 A	20-Sep-12	27	0																								
HHA-1C002F	C-102 Retrieval Startup and Readiness FY12	46	46	25-Jul-12	28-Sep-12	14	0																								
HHA-1C002F1	C-102 Retrieval Startup and Readiness FY13	24	24	01-Oct-12	01-Nov-12	14	0																								
HHA-1C002G	C-102 Retrieval Operations (MS)	170	170	02-Nov-12	20-Apr-13	24	0																								
HHA-1C002R	C-102 Sample for HHR Decision	113	113	22-Apr-13	30-Sep-13	17	0																								
HHA-1C002H	C-102 Hard Heel Rmvl Design & Engineering Support	196	196	01-Oct-13	10-Jul-14	17	0																								
HHA-1C002J	C-102 Hard Heel Rmvl Procurement	126	126	26-Nov-13	28-May-14	17	0																								
HHA-1C002K	C-102 Hard Heel Rmvl Installation	70	70	02-Apr-14	10-Jul-14	17	0																								
HHA-1C002M	C-102 Hard Heel Rmvl Operations	40	40	11-Jul-14	06-Sep-14	17	0																								
<b>5.02.02.06.04 C-104 Retrieval</b>		165	90	14-Nov-11 A	31-Jul-12	55	-17																								
HHA-1C004C	C-104 Hard Heel Rmvl - Caustic Dissolution	165	90	14-Nov-11 A	31-Jul-12	55	-17																								
<b>5.02.02.06.05 C-105 Retrieval</b>		82	636	01-Nov-10 A	30-Sep-14	0	0																								
HHA-3C005B	C-105 Retrieval Design - Phase 1	82	0	01-Nov-10 A	09-Mar-12 A		6																								

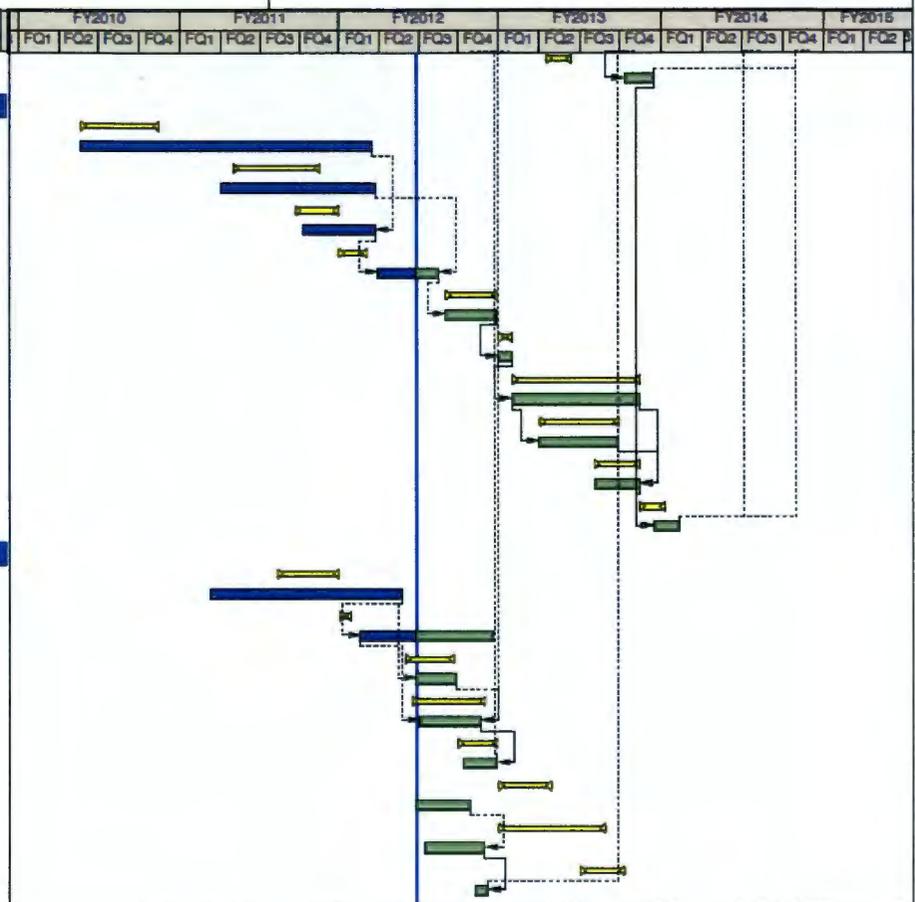
C-Farm Retrieval Critical Path  
Current Schedule  
March 2012

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TASK filters: ! - C-Farm CP  
Exclude, C-Farm - Critical Path.



SLCS-CUR / OPER-CUR		C-Farm Critical Path by WBS						Data Date 26-Mar-12																					
Activity ID	Activity Name	Orig Dur	Rem Dur	Current Start	Current Finish	Total Float	Chg Since Last Month	FY2010				FY2011				FY2012				FY2013				FY2014				FY2015	
								FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2	FQ3	FQ4	FQ1	FQ2
HHA-1C011M	C-111 Hard Heel Rmvl Operations	45	45	11-Jul-13	12-Sep-13	140	-127																						
<b>5.02.02.06.12 C-112 Retrieval</b>		<b>941</b>	<b>412</b>	<b>18-Feb-10 A</b>	<b>07-Nov-13</b>	<b>164</b>	<b>-22</b>																						
HHA-1C012B	C-112 Retrieval Design	125	0	18-Feb-10 A	16-Dec-11 A	0	0																						
HHA-1C012E	C-112 Retrieval System Installation	144	0	03-Jan-11 A	22-Dec-11 A	0	0																						
HHA-1C012F	C-112 Retrieval Startup and Readiness	57	0	11-Jul-11 A	21-Dec-11 A	0	0																						
HHA-1C012G	C-112 Retrieval Operations (MS)	58	52	28-Dec-11 A	16-May-12	287	-34																						
HHA-1C012R	C-112 Sample for HHR Decision FY12	64	64	01-Jun-12*	28-Sep-12	186	0																						
HHA-1C012R1	C-112 Sample for HHR Decision FY13	23	23	01-Oct-12	31-Oct-12	186	0																						
HHA-1C012H	C-112 Hard Heel Rmvl Design & Engineering Support	185	185	01-Nov-12	12-Aug-13	186	0																						
HHA-1C012J	C-112 Hard Heel Rmvl Procurement	125	125	03-Jan-13	28-Jun-13	186	0																						
HHA-1C012K	C-112 Hard Heel Rmvl Installation	70	70	03-May-13	12-Aug-13	186	0																						
HHA-1C012M	C-112 Hard Heel Rmvl Operations	40	40	13-Sep-13	07-Nov-13	164	-22																						
<b>5.02.02.06.20 C-Farm Infrastructure DST Receiver Tank 4</b>		<b>456</b>	<b>130</b>	<b>07-Dec-10 A</b>	<b>25-Sep-12</b>	<b>260</b>	<b>3</b>																						
HNA-2NFC0B	C-Farm Infrastructure DST Receiver Tank 4 Design	100	0	07-Dec-10 A	22-Feb-12 A	0	0																						
HNA-2NFC0BA	C-Farm Infrastructure DST Receiver Tank 4 Design	20	124	17-Nov-11 A	18-Sep-12	45	-122																						
HNA-2NFC0C	C-Farm Infrastructure AN-101 Upgrades Procurement	66	66	25-Mar-12	25-Jun-12	44	-7																						
HNA-2NFC0D	C-Farm Infrastructure AN-101 Upgrades - Construction	100	100	02-Apr-12*	21-Aug-12	40	1																						
HNA-2NFC0E	C-Farm Infrastructure AN-101 Upgrades Startup/Readiness	54	54	12-Jul-12	25-Sep-12	40	2																						
HNA-2NFC0C5	C-Farm Infrastructure AN-106 HIHTL Procurement	67	67	25-Mar-12	25-Jul-12	299	-39																						
HNA-2NFC0D3	C-Farm Infrastructure AN-106 HIHTL Replacement	99	99	11-Apr-12*	29-Aug-12	275	17																						
HNA-2NFC0E1	C-Farm Infrastructure AN-106 HIHTL Replacement Startup/Readiness	19	19	09-Aug-12	05-Sep-12	275	18																						



Actual Work	Critical Remain Work	Baseline Act	<b>C-Farm Retrieval Critical Path Current Schedule March 2012</b>	Page 3 of 3	TASK filters: ! - C-Farm CP Exclude, C-Farm - Critical Path.
Remain Work	Milestone	Baseline Milestone			

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

### 242-A Campaign strategy:

No campaigns were conducted in FY2011 due to ongoing 242-A and Tank Farm Life Extension and ARRA funded facility upgrades. The 242-A Campaign Strategy for FY2010 through FY2015 depicted below has been updated based on ORP-11242, River Protection Project Plan, Revision 6, and ongoing schedule integration efforts.

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY10	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and completing in early October 2010. Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY10	10-02	AW-106	AW-106	
FY11	NA	NA	NA	No campaign conducted in FY11 due to ongoing 242-A and Tank Farm facility life extension and ARRA funded upgrades.
FY12	12-01	AP-107	AP-107	Estimated start August 2012. May require two (2) passes to achieve waste volume reduction.
FY13	13-01	AP-104	AP-107	Estimated start March 2013.
FY13	13-02-	AW-106	AP-107	Estimated start September 2013.
FY14	14-01	AN-106 AZ-102 AW-106	AP-107	Estimated start March 2014. Two (2) passes required.
FY15	15-01	AY-101 AZ-102	AP-107	Estimated start March 2015. Three (3) passes required.
FY15	15-02	AY-101	AP-107	Estimated start August 2015. Four (4) passes required.

## SST Integrity Assurance

**M-045-91G-T02, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 750,000 gallon tanks (BY, S, TX and TY Farms), Due: 1/31/2012, Status: Complete 11/18/11. (ORP letter 11-TPD-091)**

**M-045-91D, Submit to Ecology an analytical test plan for the cores removed from the C-107 plug, Due: 3/31/2012, Status: Complete 06/27/11. (ORP letter 11-TPD-043)**

**M-045-91G-T06, Provide to Ecology a report documenting and evaluating the visual inspection of 12 SSTs per the criteria in M-045-91G-T05, Due: 3/31/2012, Status: Completed 03/12/2012, see ORP Letter 12-TF-0007.**

**M-045-91F-T01, Provide to Ecology as a HFFACO secondary document a report evaluating the applicability to Hanford SSTs of the liquid leak rate assessments of sludge and salt-cake from the Savannah River Site, Due: 1/31/2013, Status: On schedule. TPA change package M-45-12-01, moving M-45-91F-T01 and G-T03 out one year was signed by ORP and Ecology on 1/23/2012.**

**M-045-91D-T01, Provide Ecology a report containing the results and interpretation of testing, and analysis performed on the concrete dome samples obtained from the Tank C-107 plug, Due: 5/31/2013, Status: On schedule.**

**M-045-91F-T03, Provide to Ecology, as a HFFACO secondary document a report assessing the feasibility of testing for ionic conductivity between the inside and outside of SSTs, Due: 5/31/2013, Status: On schedule.**

**M-045-91F-T04, provide to Ecology, as a HFFACO secondary document, a report on the 100-series single-shell tanks which have been or will be identified as having leaked in RPP-32681, Rev 0, Due: 7/31/2013, Status: On schedule.**

**M-045-91F-T02, Provide to Ecology as a HFFACO secondary document a report evaluating the common factors of liner failures for SSTs that have leaked and will provide recommendations as appropriate, such as enhanced Leak Detection, Monitoring, and Mitigation, Due: 7/31/2013, Status: On schedule.**

**M-045-91G-T03, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 1,000,000 gallon tanks (A, AX and SX Farms), Due: 9/30/2013, Status: On schedule. TPA change package M-45-12-01, moving M-45-91F-T01 and G-T03 out one year was signed by ORP and Ecology on 1/23/2012.**

**M-045-91E, Provide to Ecology a compilation of the Single-Shell Tank farms dome deflection surveys every two years, beginning 9/30/2013, Due: 9/30/2013, Status: On schedule.**

**M-045-91G-T04, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 55,000 gallon tanks (B, C, T and U Farms), Due: 10/31/2013, Status: On schedule.**

**M-045-91F, Provide to Ecology a report (Summary Conclusions Report on Leak Integrity) summarizing and evaluating the information submitted under M-045-91F-T01 through - T04, Due: 12/31/2013, Status: On schedule.**

**M-045-91G, Provide a Summary Conclusions Report of Structural Analysis of Record (AOR) for SSTs, Due: 4/30/2014, Status: On schedule.**

**M-045-91B-T01, Provide Ecology a report containing the results and interpretation of testing, and analysis, performed on the concrete core obtained from Tank A- 106 or alternate tank, Due: 9/30/2014, Status: On schedule.**

**M-045-91H, Submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones based on information obtained from the actions in the preceding M-045-91 series milestones to date, Due: 7/31/2015, Status: On schedule.**

**M-045-91I, Provide to Ecology an IQRPE certification of SSTs structural integrity for the remainder of the mission, or for such time as the IQRPE believes he/she can reasonably certify, Due: 9/30/2018, Status: On schedule.**

**Significant Past Accomplishments:**

- Completed target M-045-91G-T06, providing the report to Ecology documenting and evaluating the visual inspection of the 12 SSTs per criteria in M-045-91G-T05. (ORP letter 12-TF-0007)

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

- Complete target M-045-91F-T03, provide Ecology the Ionic Conductivity Feasibility Report.

**Issues:**

- FY2012 funding constraints will impact FY2012 M-045-91 scheduled work. TPA Change Packages will be developed as needed.

## In Tank Characterization and Summary

For the period from March 1 – March 31, 2012:

### Accomplishments:

- Completed liquid grab sampling to support C-108 hard heel dissolution.
- Collected liquid grab samples from tank AN-102 to evaluate tank corrosion chemistry.
- Collected C-112 stack gas samples to evaluate emissions of potential Toxic Air Pollutants during retrieval.
- Completed RPP-51861, *C-104 Heel Removal Data Quality Objectives*, and RPP-PLAN-51912, *Sampling and Analysis Plan for Tank 241-C-104 Heel Dissolution*. Sample data will be used to support C-104 heel retrieval activities.
- Completed RPP-51566, *C-109 Hard Heel Dissolution Data Quality Objective*, and RPP-PLAN-51719, *Tank Sampling and Analysis Plan for 241-C-109 Hard Heel Dissolution*. Sample data will be used to support C-109 heel retrieval activities.
- Completed Revision 1 of RPP-48188, *C-108 Hard Heel Dissolution Data Quality Objectives*. The revision was necessary to reflect additional data needs and lessons learned during the C-108 heel retrieval.

### Planned Action within the next Six Months:

- Tank Sampling
  - Tank 204-AR-TK-1 compatibility grab samples – currently scheduled for April 2012
  - Tank SY-102 grab samples for chemistry control – currently scheduled for May 2012
  - Tank C-107 stack gas samples to evaluate emissions of potential Toxic Air Pollutants at the middle of retrieval – currently scheduled for April/May 2012
  - Tank C-104 grab samples to support heel retrieval – currently scheduled to start in May 2012
  - Tank C-109 grab samples to support heel retrieval – currently scheduled to start in May 2012
  - Tank AN-106 grab samples for chemistry control after completion of C-107 sluicing - currently scheduled for June 2012
  - Tank C-108 off- riser samples for tank component closure – currently scheduled for June 2012
  - Tank AZ-102 grab samples for chemistry control – currently scheduled for July 2012
  - Tank AN-101 grab samples for chemistry control after completion of C-112 sluicing, caustic addition, and C-104 hard heel dissolution - currently scheduled for August 2012.
  - Tank C-112 off- riser samples to evaluate waste characteristics for heel dissolution may occur during June –September 2012 depending on the progress of retrieval. This sampling event may be replaced by in-tank analysis with a Raman probe.
- BBI Updates
  - Twelve tanks have been identified for updates in FY12 Quarter2. The BBI updates will be issued in April 2012.

- Data Quality Objectives (DQO)
  - Revision of the PCB Management DQO (RPP-7614) and the Compatibility DQO (HNF-SD-WM-DQO-001) in May 2012
  - Revision of the Strategic Planning DQO (RPP-44057) in May 2012

**Issues:**

The C-108 tank has had a full sampling suite of analyses performed after bulk retrieval, which is what would be done for a tank after final retrieval for the Retrieval Data Report sampling and analyses. After completion of chemical dissolution which is the second retrieval technology performed at C-108, an amended tank specific sampling and analysis plan will need to be performed for the C-108 closure, to take into account previous null sample results. ORP and ECY have agreed to have a regulator approved specific sampling analysis plan developed after the second retrieval technology at C-108 following the second retrieval technology.

## TANK OPERATIONS CONTRACT (TOC) OVERVIEW

### Project Performance

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 earned value analysis is not intended to be a measurement of performance against existing Tri-Party Agreement Milestones.

As of February 29, 2012 the TOC team worked 3,175,652 hours (324 days) without a Lost Time Workday Injury or DART case and achieved 1,783,880 hours (196 days) since the last Recordable case.

### February EVMS Data

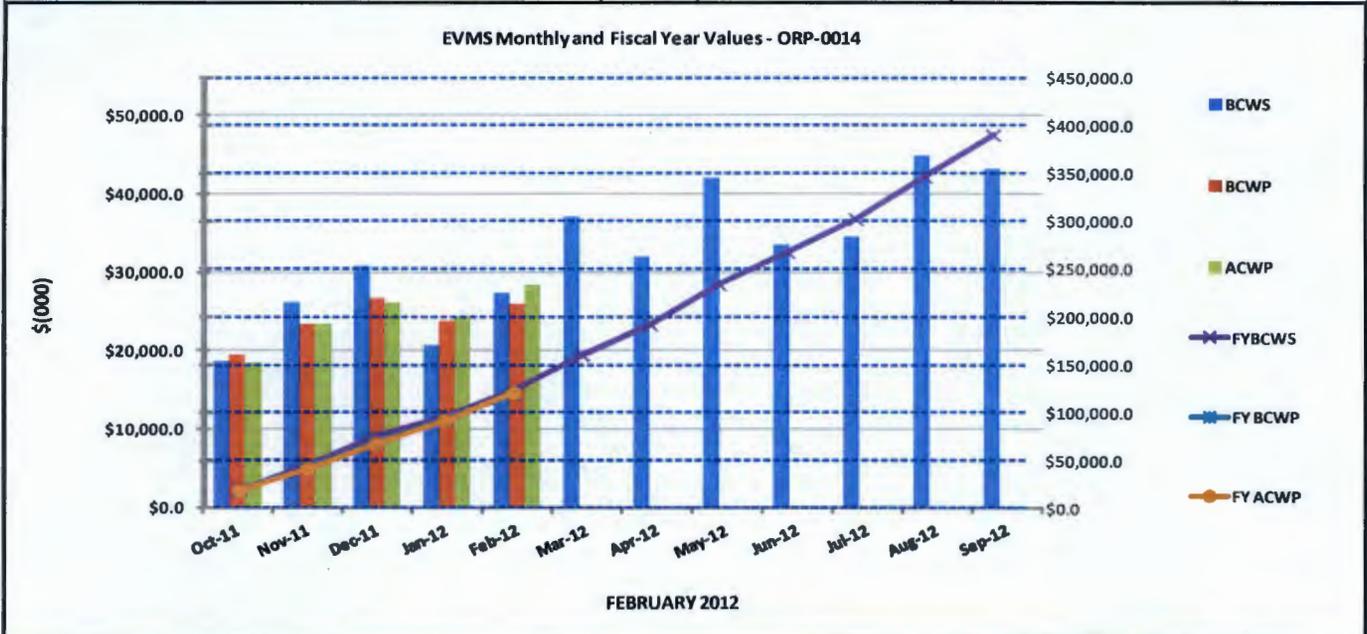
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	27,334.7	26,007.7	28,261.8	(1,327.0)	(2,254.1)	0.95	0.92			
FYTD	123,410.7	119,240.3	120,268.8	(4,170.4)	(1,028.5)	0.97	0.99	388,898.2	365,434.3	23,463.9
CTD	1,348,578.2	1,338,290.1	1,283,399.1	(10,288.1)	54,891.0	0.99	1.04	2,159,167.3	2,090,082.2	69,085.1

Red shaded cells indicates a SPI/CPI less than .90;

Green shaded cells indicate a SPI/CPI between .90 and .99; and

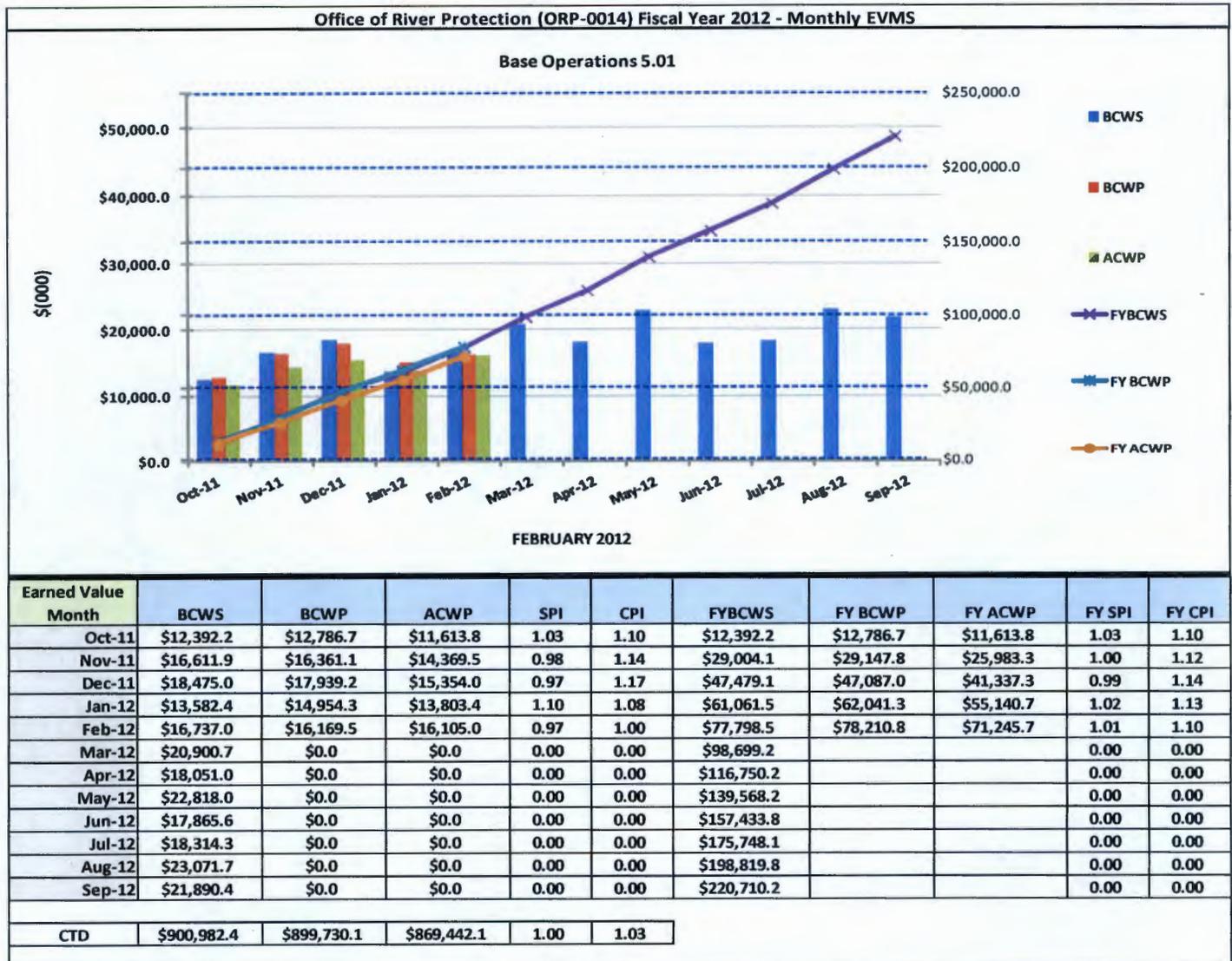
Blue shaded indicates a SPI/CPI greater than or equal to 1.

### Office of River Protection (ORP-0014) Fiscal Year 2012 - Monthly EVMS



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-11	\$18,559.4	\$19,444.2	\$18,408.0	1.05	1.06	\$18,559.4	\$19,444.2	\$18,408.0	1.05	1.06
Nov-11	\$26,121.7	\$23,436.0	\$23,336.0	0.90	1.00	\$44,681.1	\$42,880.2	\$41,744.0	0.96	1.03
Dec-11	\$30,678.0	\$26,611.0	\$26,115.0	0.87	1.02	\$75,359.1	\$69,491.2	\$67,859.0	0.92	1.02
Jan-12	\$20,716.5	\$23,741.2	\$24,148.4	1.15	0.98	\$96,075.6	\$93,232.4	\$92,007.4	0.97	1.01
Feb-12	\$27,334.7	\$26,007.7	\$28,261.8	0.95	0.92	\$123,410.3	\$119,240.1	\$120,269.2	0.97	0.99
Mar-12	\$36,990.0	\$0.0	\$0.0	0.00	0.00	\$160,400.3			0.00	0.00
Apr-12	\$31,905.0	\$0.0	\$0.0	0.00	0.00	\$192,305.3			0.00	0.00
May-12	\$41,913.0	\$0.0	\$0.0	0.00	0.00	\$234,218.3			0.00	0.00
Jun-12	\$33,397.0	\$0.0	\$0.0	0.00	0.00	\$267,615.3			0.00	0.00
Jul-12	\$34,431.0	\$0.0	\$0.0	0.00	0.00	\$302,046.3			0.00	0.00
Aug-12	\$44,925.0	\$0.0	\$0.0	0.00	0.00	\$346,971.3			0.00	0.00
Sep-12	\$43,092.0	\$0.0	\$0.0	0.00	0.00	\$390,063.3			0.00	0.00

CTD	\$1,348,578.2	\$1,338,290.1	\$1,283,399.1	0.99	1.04
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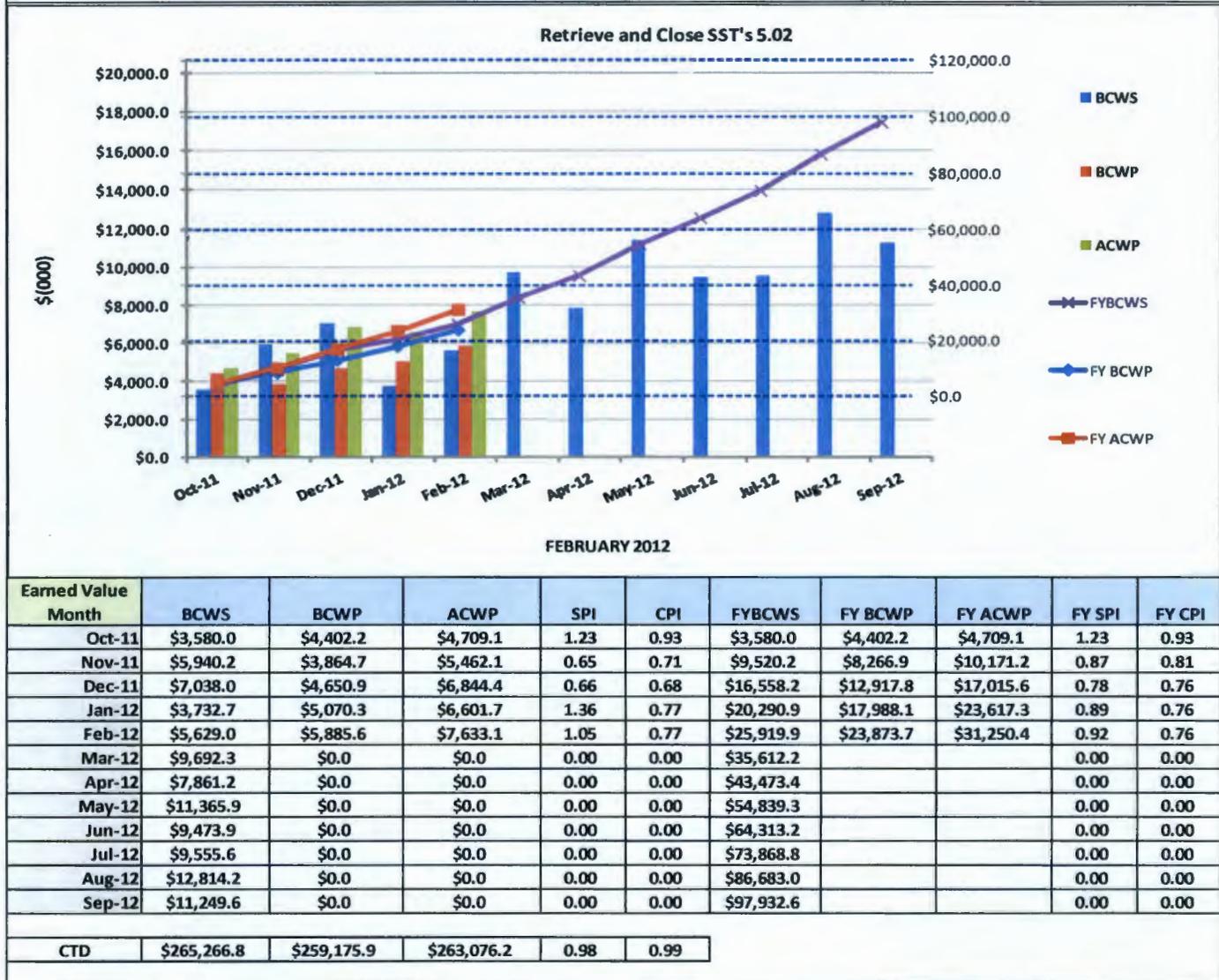
**Base Operations**

**Schedule Variance (-\$567K):**

The unfavorable schedule variance is primarily due to:

- Delay in the AW-105 Chemistry Control fabrication and field work activities that were originally planned in the current fiscal month. The delay is due to the Boundary Element Analysis performed at the beginning of the fiscal year to confirm a new design for the corrosion probe. The new design was proposed by the Tank Chemistry technical team and expert panel oversight committee to reduce fabrication time and costs. A baseline change request (BCR) has been submitted to reflect this new approach on the AW-105 corrosion probe and defer the fabrication and installation activities to fiscal year 2013 to allow the design to complete in fiscal year 2012.
- Delay in awarding the construction contract to perform the AY/AZ Infrastructure upgrades. The current baseline schedule had field work beginning in January; however, as a result of funding challenges and the implementation of the Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Matrix, the contract award has been delayed by four months into April 2012.

## Office of River Protection (ORP-0014) Fiscal Year 2012 - Monthly EVMS

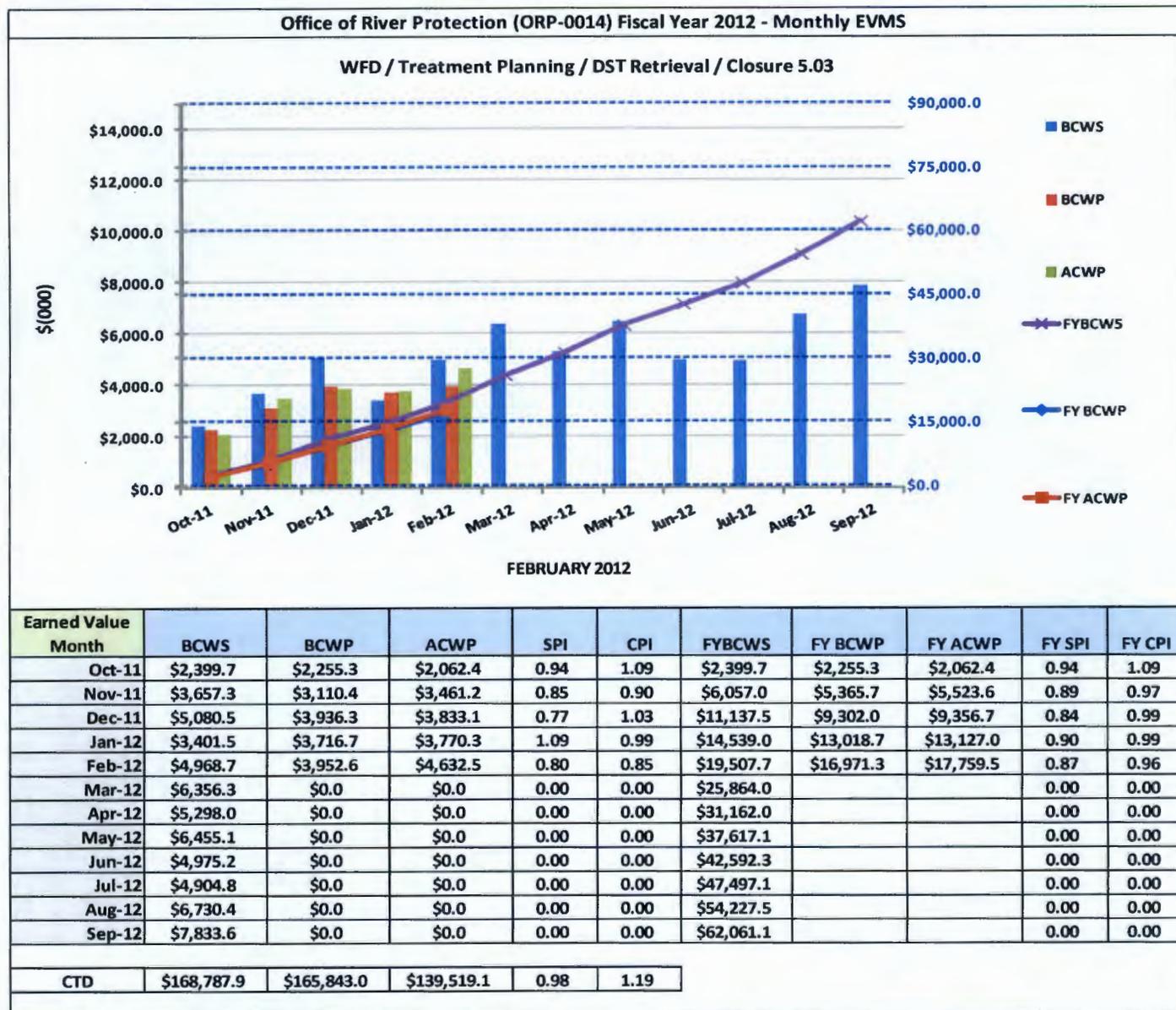
**Single-Shell Tanks****Cost Variance (-\$1747.5K):**

The unfavorable cost variance is primarily due to:

- C Farm Infrastructure costs are higher due to the AN-106 construction and pump replacement activities. Significant engineering, pump assembly, and testing costs resulted due to the change from an electric pump to a hydraulic pump. In addition, installation of the work tent took longer than originally planned.
- Higher costs due to the expansion in the scope of work associated with the accelerated C-104 Hard Heel Retrieval project resulting in unanticipated planning and engineering labor and subcontract design costs.
- C-107 Retrieval costs are higher due to the failed supernate pump at receiver tank AN-106. The pump failed during operation and retrieval was discontinued. Unplanned maintenance/repair/troubleshooting activities were performed during February, with no associated retrieval progress.
- Health physics technical and nuclear chemical operation labor costs were higher than planned due to a two week downtime when circulation of the caustic in C-108 was not possible. Increased material costs associated with the purchase of blankets and miscellaneous items needed to keep

the tank warm to prevent the caustic from gelling in the tank were also a contributor to the unfavorable cost variance.

- One-time costs to train construction forces personnel supporting Tank C-109 hard heel removal. No training of construction forces was projected as it was assumed that the work would be performed by plant forces but was later determined to be construction forces.



**Waste Feed Delivery/Treatment/DST Retrieval Closure**

**Schedule Variance (-\$1016.1K):**

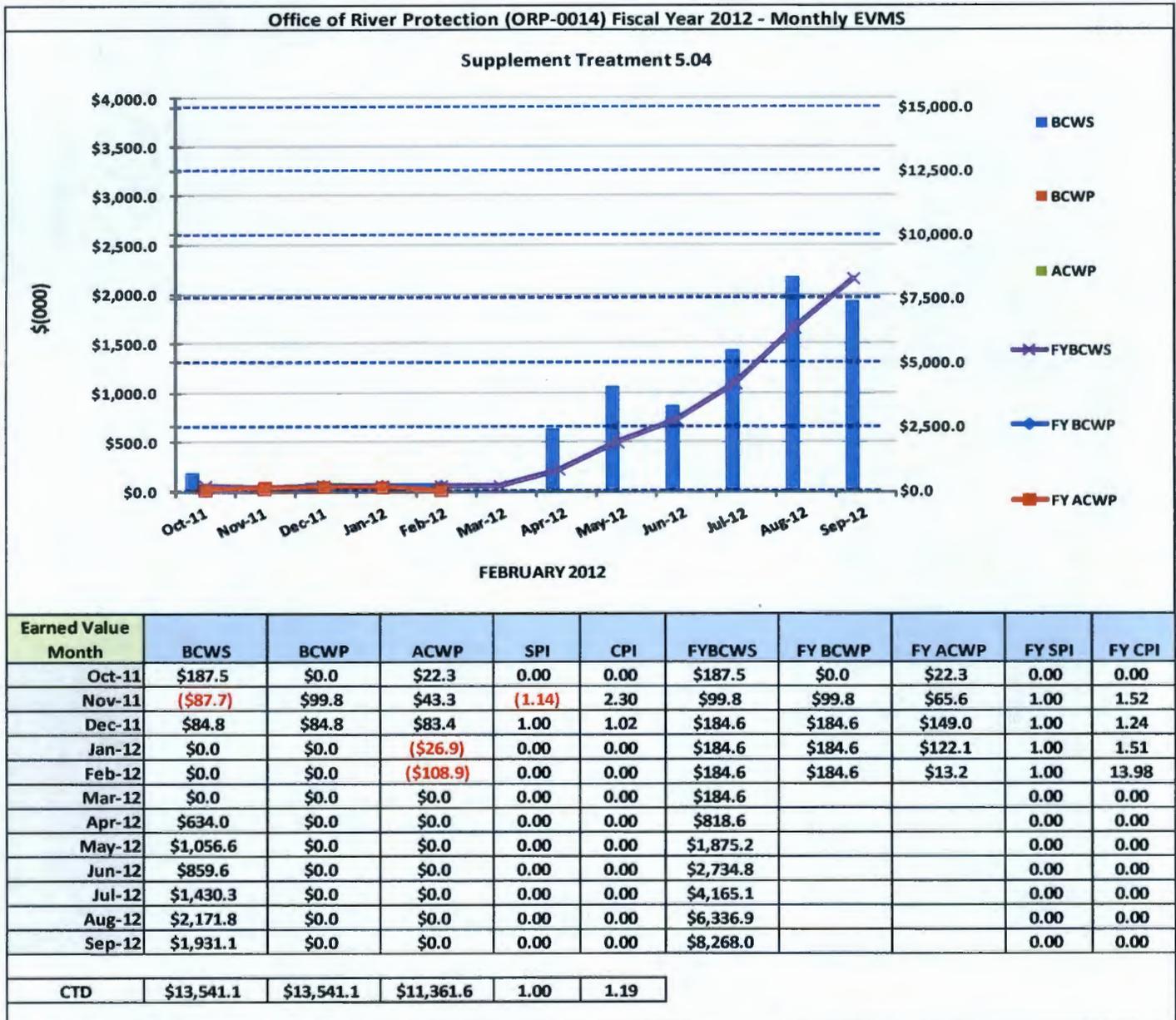
The unfavorable schedule variance is primarily due to:

- Delay in the award of the AY/AZ Farm Infrastructure construction contract due to funding challenges and implementation of the inspections, tests, analyses, and acceptance criteria matrix.
- Work has been stopped on the Mixer Pump Procurement and will be deferred to FY 2013.
- Design effort was placed on hold pending reevaluation of the design configuration for the AY/AZ Ventilation System Upgrade.

**Cost Variance (-\$679.9):**

The unfavorable schedule variance is primarily due to:

- Higher than planned detailed cost estimates for AY/AZ Ventilation Upgrades. The higher estimates are due to the subcontractor being redirected to explore options for reducing design costs. Cost efficiencies will be realized when options are evaluated and design is resumed. The evaluation is expected to be completed in March.
- The WTP Pretreatment Engineering Platform costs were higher due to the difference between vendor cost accruals through the end of the calendar months versus progress earned through the fiscal month.



**Supplemental Treatment**

Variations are negligible

## Acquisition of New Facilities

**M-090-11, Complete the Negotiation of No More Than Two Canister Storage Facility Construction Interim Milestones**, Due: 12/31/12, Status: On Schedule. Negotiations are not yet underway.

**M-090-00, Acquire/modify facilities for storage of IHLW**, Due: 12/31/2019, Status: On Schedule

**M-047-06, Complete negotiation of no more than two interim milestones governing work necessary to support completion of M-047-00**, Due: 06/30/12, Status: At Risk. Draft TPA Change Package M-47-12-01 was provided to Ecology at the 03/27/12 PMM. Follow-up meetings are underway to discuss this change package and a path forward.

**M-047-00, Complete Work Necessary to provide facilities for management of secondary waste from the WTP**, Due: 12/31/2022, Status: On Schedule

### Significant Past Accomplishments:

The Interim Hanford Storage Conceptual Design activities (e.g. Conceptual Design Report [CDR], Preliminary Process Hazards Analysis, Design Basis Accident Analysis, etc.) continue on schedule. The project completed the Environmental and Communications Plan.

The Secondary Liquid Waste Treatment Project issued a Preliminary Hazard Categorization document which demonstrates the Effluent Treatment Facility will remain less than hazard category 3 with the modifications and upgrades. The project conceptual design activities (e.g. Conceptual Design Report, Preliminary Fire Hazard Analysis, Risk Management Plan, Acquisition Plan, etc.) continue on schedule.

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

- Continue Conceptual Design for both the Interim Hanford Storage and Secondary Liquid Waste Treatment Projects.
- Issue the Risk Management Plans for the Interim Hanford Storage and Secondary Liquid Waste Treatment Projects.
- Issue the Safety Design Strategy and Process Hazard Analysis Report for the Interim Hanford Storage Project.
- Complete the Conceptual Safety Design Report for the Interim Hanford Storage project.
- Complete Conceptual Design for both the Interim Hanford Storage and Secondary Waste Treatment Projects.
- Issue the Preliminary Hazard Categorization document for the Secondary Liquid Waste Treatment Project.
- Complete Acquisition Plans for both the Interim Hanford Storage and Secondary Liquid Waste Treatment Projects

### Issues:

None

## Supplemental Treatment and Part B Permit Applications

**M-062-40ZZ, Submit a one-time Tank Waste Supplemental Treatment Technologies report if a supplemental treatment technology is proposed other than a 2nd LAW, Due: 10/31/2014, Status: On Schedule.**

**M-062-45ZZ, Negotiate a one-time supplemental treatment selection, Due: 4/30/2015, Status: On schedule. Negotiations are not yet underway.**

**M-062-45ZZ-A, Convert M-062-31-T01 through M-062-34-T01 to Interim Milestones, Due: 4/30/2015, Status: On Schedule.**

**M-062-31-T01, Complete final design and submit RCRA Part B permit mod request, Due: 4/30/2016, Status: On schedule**

**M-062-32-T01, Start construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2018, Status: On schedule**

**M-062-33-T01, Complete construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2021, Status: On schedule**

**M-062-45XX, No later than 12/31/2021, the DOE and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45, paragraphs 4 and 5, due: 12/31/2021, Status: On Schedule**

**M-062-34-T01, Complete hot commissioning of supplemental vitrification treatment facility and/or WTP enhancements, Due: 12/30/2022, Status: On schedule**

**M-062-21, Annually, submit data that demonstrates operation of the WTP, Due: 2/28/2023, Status: On Schedule**

**M-062-00, Complete Pretreatment Processing and Vitrification of HLW and LAW Tank Wastes, Due: 12/31/2047, Status: On Schedule**

### Significant Past Accomplishments:

None

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

None

### Issues:

None

## System Plan

**M-062-40B, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2011, Status: Completed 10/24/2011 via DOE-ORP/ECY joint signature letter 11-TPD-087.**

**M-062-40C, Select a minimum of three scenarios that will be analyzed in the system plan, Due: 10/31/2013, Status: On Schedule**

**M-062-40D, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2014, Status: On Schedule**

**M-062-45-T01, Every six years, within six-months after last revision of the System Plan, negotiate tank waste retrieval sequencing, Due: 4/30/2015, Status: On Schedule**

### **Significant Past Accomplishments:**

DOE/ORP submitted the River Protection Project System Plan, Revision 6, with a joint Ecology signature to EPA on October 24, 2011.

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

None

### **Issues:**

None

**WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) PROJECT**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
M-062-01X	Submit Semi-Annual TPA Project Compliance Report	01/31/2012	Completed - Report Sent 01/27/2012
M-062-01Y	Submit Semi-Annual TPA Project Compliance Report	07/31/2012	On Schedule

**\*SEE THE APRIL 2012 ORP CONSENT DECREE 08-5085-FVS  
MONTHLY SUMMARY REPORT FOR WTP FACILITY-SPECIFIC  
INFORMATION**