

**FINAL**

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



Tri-Party Agreement



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

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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		To Be Missed
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		At Risk
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	1/31/2013		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	05/02/2012	Completed
*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

\*ORP/Ecology Approved Change Package M-45-12-04 changes will be reflected in next month's report.

## **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. Ecology is preparing a letter on this milestone.

**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 work plan modifications and sampling optimization strategy on 09/22/11. September meeting minutes, which document efforts, were signed 11/09/11 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 1/05/12 with a requested response by 2/10/12. Ecology provided response letter 12-NWP-071 on 05/08/12, approving proposed changes in both the Work Plan/SAP documents. The updated documents have been released, and a formal response to Ecology's letter is being prepared.

**M-045-56H, Complete Implementation of Agreed to Interim Measures (Meet Yearly to Discuss Interim Measures), Due: 07/31/12, Status: On Schedule.** The annual M-45-56 meeting has been scheduled for June 21, 2012.

**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
- Finalized updates to WMA C RFI/CMS work plan and SAP based on Ecology's approval of the TPA change notice

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

- 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.
- Finalize the TPA Change Package for M-045-92, based on Ecology's review of the draft TPA Change Package.
- Hold the annual meeting for M-45-56. Perform planning for Fiscal Year 2013 Interim Measures activities.

**Issues:**

FY2012 funding constraints will impact M-045-92 barriers work. TPA Change Package M-45-12-04 was signed by ORP and Ecology on 06/21/12; this revises the M-045-92 milestone to defer construction of proposed interim barriers in lieu of initiating vadose zone sampling and treatment testing. Changed/additional milestones will be reflected in next month's report (see Ecology approval letter 12-NWP-098).

Initial planning for FY2013 shows that continued constraints may affect out-year milestones, including M-45-61, 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.

## 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 met in May and are continuing to meeting in June 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. ORP provided updated Draft WIR process paper with RCRs to Ecology on March 15<sup>th</sup>. Ecology and ORP agree to meet to discuss comment resolution and extend the final resolution to the end of May. Ecology's comments were incorporated and the revised document has been provided to Ecology for final review.

**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 met in May and are continuing to meeting in June 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. Initial budget guidance for FY2013 will not support continuing the WMA C-PA in 2013. Impacts will be evaluated.

## **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







## 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.

<b>Fiscal Year</b>	<b>Campaign No.</b>	<b>Feed Source</b>	<b>Slurry Tank</b>	<b>Comments</b>
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	NA	NA	NA	No campaign conducted in FY12 due to ongoing 242-A and Tank Farm facility upgrades and revision to the 242-A Documented Safety Analysis (DSA).
FY13	13-01	AP- 107	AP-107	Estimated start May 2013. May require two (2) passes to achieve waste volume reduction.
FY13	13-02-	AW-106	AW-106	Estimated start July 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: Complete 03/12/12. (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 01/23/12.**

**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: Complete 05/02/2012. (ORP letter 12-TF-0009)**

**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-045-91F-T03, provide Ecology the Ionic Conductivity Feasibility Report. (ORP letter 12-TF-0009, dated 05/02/12)

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

- Planning for FY2013.

**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 May 1 – May 31, 2012:

### Accomplishments:

- Completed two liquid grab sampling events during the hard heel retrieval of tank 241-C-109. Liquid grab samples were collected on May 8 and 9, 2012, during sodium fluoride phosphate (natrophosphate) dissolution.
- RPP-RPT-52202, Rev. 0, *Final Report for Tank 241-AN-101 Mid-Retrieval Grab Samples in Support of Corrosion Mitigation During Tank 241-C-112 Retrieval* was released.
- RPP-RPT-52203, Rev. 0, *Final Analytical Report in Support of 241-C-108 Hard Heel Dissolution* was released.

### Planned Action within the next Six Months:

- Tank Sampling
  - Tank SY-102 grab samples for chemistry control – currently scheduled for June 2012
  - Tank C-107 stack gas samples to evaluate emissions of potential Toxic Air Pollutants at the middle of retrieval – currently scheduled for June 2012
  - Tank C-104 grab samples to support heel retrieval – currently scheduled to start in June 2012
  - Additional tank C-109 grab samples to support heel retrieval – currently scheduled to re-start in June 2012
  - Tank AN-106 grab samples for chemistry control after completion of C-107 sluicing - currently scheduled for July 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
  - Five tanks have been identified for updates in FY12 Quarter 3. The BBI updates will be issued in July 2012.
- Data Quality Objectives (DQO)
  - Revision of the DST Chemistry Control DQO (RPP-8532), 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:

None.

## TANK OPERATIONS CONTRACT (TOC) OVERVIEW

### Project Performance

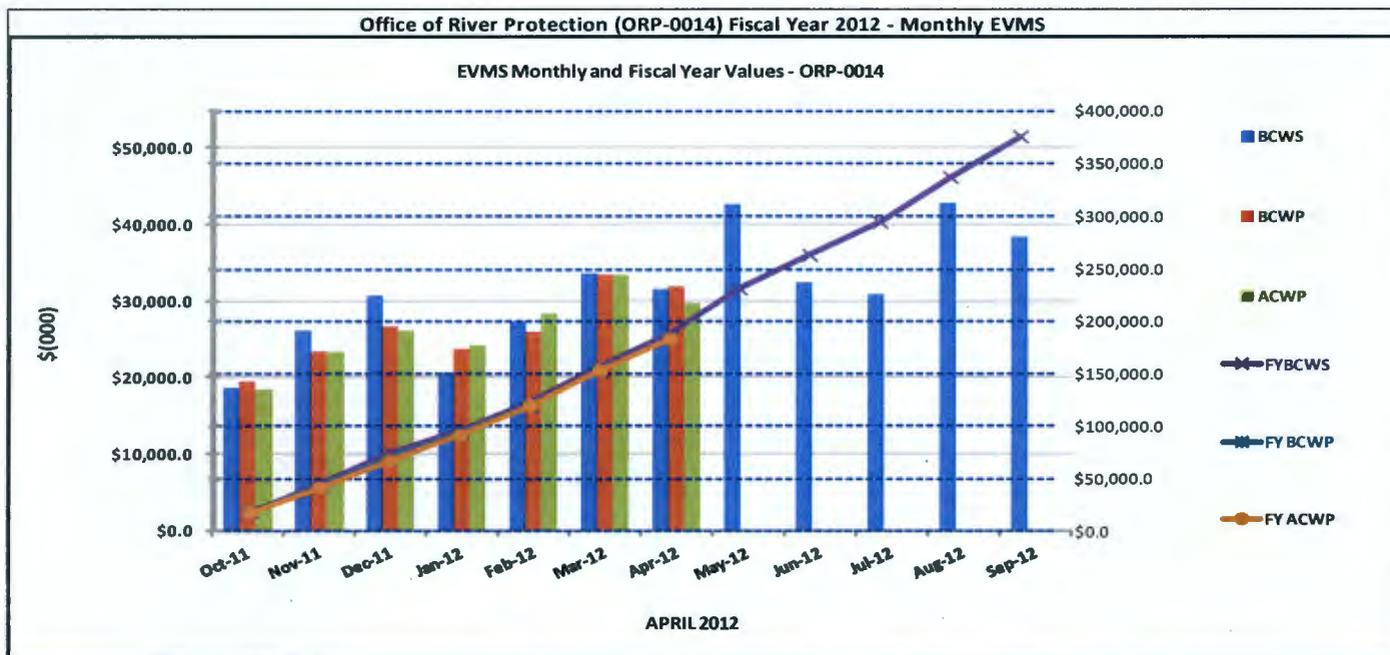
The earned value performance reporting reflects the format, Work Breakdown Structure (WBS) reporting levels, and variance thresholds as agreed to with the Tank Farms Operations Contractor (TOC) for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing Tri-Party Agreement Milestones.

As of April 30, 2012, Washington River Protection Solutions LLC (WRPS) worked 3,721,163 hours (385 days) without a Lost Time Workday Injury and 2,329,391 hours (257 days) without a Recordable case.

### April EVMS Data

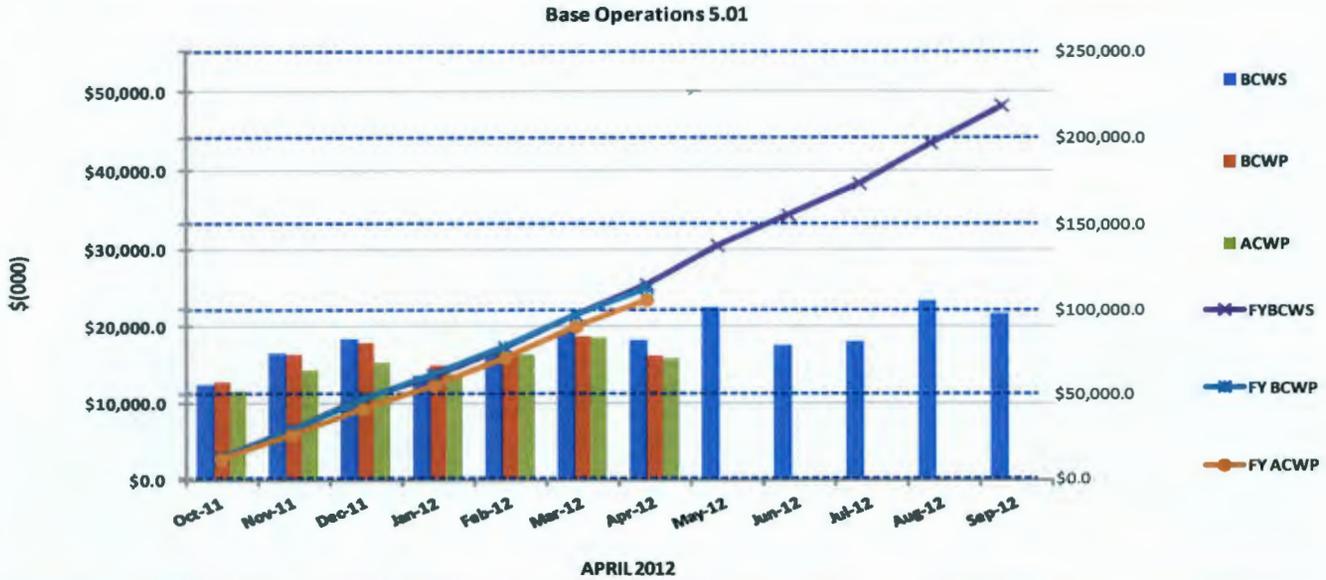
WRPS Project Performance - (\$k)										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	31,512.7	31,843.8	29,637.5	331.1	2,206.3	1.01	1.07			
FYTD	188,538.9	184,489.9	183,372.7	(4,049.0)	1,117.2	0.98	1.01	370,217.9	369,115.8	1,102.1
CTD	1,413,706.4	1,403,539.7	1,346,503.0	(10,166.7)	57,036.7	0.99	1.04	2,147,968.6	2,094,083.3	53,885.3

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.



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	\$33,615.5	\$33,405.7	\$33,466.4	0.99	1.00	\$157,025.8	\$152,645.8	\$153,735.6	0.97	0.99
Apr-12	\$31,512.7	\$31,843.8	\$29,637.5	1.01	1.07	\$188,538.5	\$184,489.6	\$183,373.1	0.98	1.01
May-12	\$42,608.3	\$0.0	\$0.0	0.00	0.00	\$231,146.8			0.00	0.00
Jun-12	\$32,349.0	\$0.0	\$0.0	0.00	0.00	\$263,495.8			0.00	0.00
Jul-12	\$30,966.0	\$0.0	\$0.0	0.00	0.00	\$294,461.8			0.00	0.00
Aug-12	\$42,822.3	\$0.0	\$0.0	0.00	0.00	\$337,284.1			0.00	0.00
Sep-12	\$38,393.4	\$0.0	\$0.0	0.00	0.00	\$375,677.5			0.00	0.00
CTD	\$1,413,706.4	\$1,403,539.7	\$1,346,503.0	0.99	1.04					

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



APRIL 2012

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-11	\$12,392.2	\$12,786.7	\$11,613.8	1.03	1.10	\$12,392.2	\$12,786.7	\$11,613.8	1.03	1.10
Nov-11	\$16,611.9	\$16,361.1	\$14,369.5	0.98	1.14	\$29,004.1	\$29,147.8	\$25,983.3	1.00	1.12
Dec-11	\$18,475.0	\$17,939.2	\$15,354.0	0.97	1.17	\$47,479.1	\$47,087.0	\$41,337.3	0.99	1.14
Jan-12	\$13,582.4	\$14,954.3	\$13,803.4	1.10	1.08	\$61,061.5	\$62,041.3	\$55,140.7	1.02	1.13
Feb-12	\$16,737.0	\$16,169.5	\$16,405.1	0.97	0.99	\$77,798.5	\$78,210.8	\$71,545.8	1.01	1.09
Mar-12	\$19,272.8	\$18,703.5	\$18,623.5	0.97	1.00	\$97,071.3	\$96,914.3	\$90,169.3	1.00	1.07
Apr-12	\$18,206.1	\$16,155.1	\$15,909.1	0.89	2.00	\$115,277.4	\$113,069.4	\$106,078.4	0.98	1.07
May-12	\$22,579.2	\$0.0	\$0.0	0.00	0.00	\$137,856.6			0.00	0.00
Jun-12	\$17,625.9	\$0.0	\$0.0	0.00	0.00	\$155,482.5			0.00	0.00
Jul-12	\$18,100.3	\$0.0	\$0.0	0.00	0.00	\$173,582.8			0.00	0.00
Aug-12	\$23,312.8	\$0.0	\$0.0	0.00	0.00	\$196,895.6			0.00	0.00
Sep-12	\$21,739.2	\$0.0	\$0.0	0.00	0.00	\$218,634.8			0.00	0.00
CTD	\$938,461.4	\$934,588.6	\$903,974.7	1.00	1.03					

**Base Operations**

Schedule Variance:

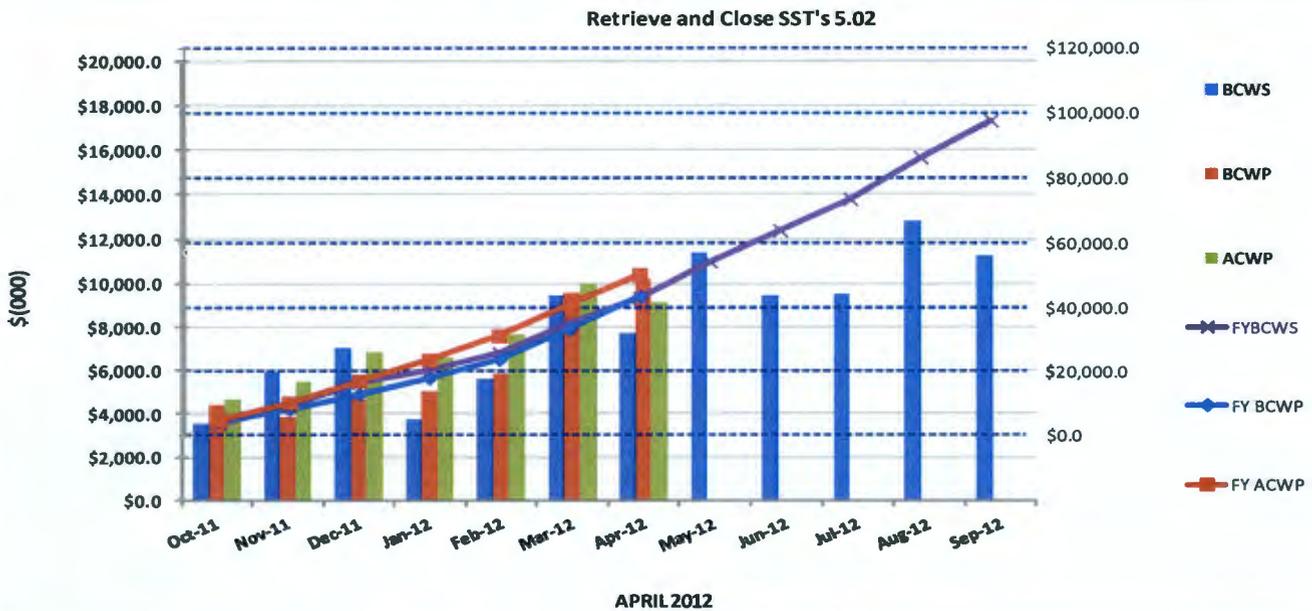
The unfavorable schedule variance is primarily due to:

- Corrective and preventive maintenance work was performed and earned ahead of schedule. Budget for these previously performed activities is reflected in the current month creating a negative variance. This work is on schedule.
- Delay and suspension of fabrication and installation activities for AW-105 corrosion probe which was originally planned to start in February 2012. Suspension is driven by development of a new corrosion probe design that will not complete until September. A baseline change request has been submitted to reflect this new approach was been submitted to defer the fabrication and installation activities to FY 2013.
- Delay to the field and shipping activities for the AY-101 coupon array scheduled to start in March 2012. Management decisions on work priorities and the use of critical resources deferred this work to the May through July 2012 timeframe

Cost Variance:

The variance is negligible

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



APRIL 2012

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-11	\$3,580.0	\$4,402.2	\$4,709.1	1.23	0.93	\$3,580.0	\$4,402.2	\$4,709.1	1.23	0.93
Nov-11	\$5,940.2	\$3,864.7	\$5,462.1	0.65	0.71	\$9,520.2	\$8,266.9	\$10,171.2	0.87	0.81
Dec-11	\$7,038.0	\$4,650.9	\$6,844.4	0.66	0.68	\$16,558.2	\$12,917.8	\$17,015.6	0.78	0.76
Jan-12	\$3,732.7	\$5,070.3	\$6,601.7	1.36	0.77	\$20,290.9	\$17,988.1	\$23,617.3	0.89	0.76
Feb-12	\$5,629.0	\$5,885.6	\$7,633.1	1.05	0.77	\$25,919.9	\$23,873.7	\$31,250.4	0.92	0.76
Mar-12	\$9,484.6	\$9,596.9	\$9,999.9	1.01	0.96	\$35,404.5	\$33,470.6	\$41,250.3	0.95	0.81
Apr-12	\$7,717.2	\$10,237.2	\$9,151.0	1.33	1.12	\$43,121.7	\$43,707.8	\$50,401.3	1.01	0.87
May-12	\$11,365.9	\$0.0	\$0.0	0.00	0.00	\$54,487.6			0.00	0.00
Jun-12	\$9,473.9	\$0.0	\$0.0	0.00	0.00	\$63,961.5			0.00	0.00
Jul-12	\$9,555.6	\$0.0	\$0.0	0.00	0.00	\$73,517.1			0.00	0.00
Aug-12	\$12,814.2	\$0.0	\$0.0	0.00	0.00	\$86,331.3			0.00	0.00
Sep-12	\$11,249.6	\$0.0	\$0.0	0.00	0.00	\$97,580.9			0.00	0.00
<b>CTD</b>	<b>\$282,468.6</b>	<b>\$279,010.0</b>	<b>\$282,227.1</b>	<b>0.99</b>	<b>0.99</b>					

Single-Shell Tanks

Schedule Variance:

The favorable schedule variance is primarily due to:

- Schedule recovery on C-112 retrieval operations. Bulk retrieval to the limits of technology was completed in May (original Date December 2011), and included use of the new Extended Reach Sluicing System.
- Initiated the Phase 3 acceptance testing of the MARS-V educator system one month early. Component fabrication and installation was completed much sooner than first expected which allowed the testing to start early.
- Accelerated C-105 retrieval system installation resulting from work process improvements realized in the pit removal mockup. The mockup was constructed by a separate construction contractor at an offsite location. This allowed the dedicated C-105 construction crew to work in parallel with the construction of the mockup on the removal of abandoned C-105 equipment around the central pit and fabrication of ventilation ducting during the construction of the pit mockup. Also, additional soil analysis increased the allowable amount of soil that could be removed at one time and the absence of a saltwell pump in the central riser allowed the equipment to be removed with one excavation instead of having to excavate and backfill each piece of removed equipment.

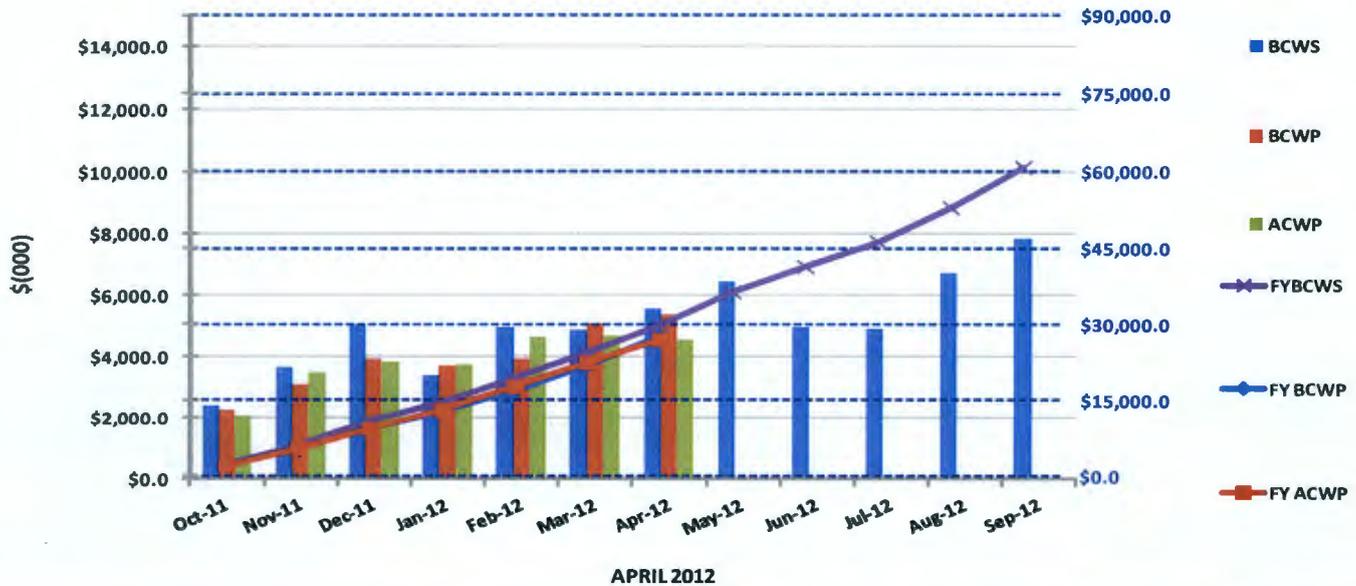
Cost Variance:

The favorable cost variance is primarily due to:

- C-105 retrieval system installation efficiencies resulted as some planned labor resources, including staff augmentation, engineers, and industrial hygienists were not required during the month. Use of a dedicated, experienced construction crew reduced the amount of and need for internal labor support and field oversight activities. In addition, additional soil analysis was performed resulting in an increase in the allowable volume of soil that may be removed at one time. This resulted in one excavation for equipment removal instead of excavating and backfilling each piece of removed equipment as was originally planned.
- C-101 retrieval system installation activities including the ventilation header test and demister installation were completed in April 2012. Favorable weather conditions allowed these activities to be completed with minimal delays.
- The deployment of on-riser, non-tank-intrusive Raman technology utilizing a combination of PNNL and WRPS labor resources resulted in efficiencies. The technology was selected to provide analytical data to support the C-111 hard heel strategy decision-making process. Fieldwork and preliminary analysis of waste tank contents required less resources and materials than traditional off-riser or other in-tank sampling methods which were originally planned. Additional in-tank confirmatory sampling to validate the Raman results and to provide material for additional analysis and dissolution testing is anticipated in late FY 2012 or early FY 2013 to support final selection of the hard heel retrieval methodology.

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

WFD / Treatment Planning / DST Retrieval / Closure 5.03



APRIL 2012

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-11	\$2,399.7	\$2,255.3	\$2,062.4	0.94	1.09	\$2,399.7	\$2,255.3	\$2,062.4	0.94	1.09
Nov-11	\$3,657.3	\$3,110.4	\$3,461.2	0.85	0.90	\$6,057.0	\$5,365.7	\$5,523.6	0.89	0.97
Dec-11	\$5,080.5	\$3,936.3	\$3,833.1	0.77	1.03	\$11,137.5	\$9,302.0	\$9,356.7	0.84	0.99
Jan-12	\$3,401.5	\$3,716.7	\$3,770.3	1.09	0.99	\$14,539.0	\$13,018.7	\$13,127.0	0.90	0.99
Feb-12	\$4,968.7	\$3,952.6	\$4,632.5	0.80	0.85	\$19,507.7	\$16,971.3	\$17,759.5	0.87	0.96
Mar-12	\$4,858.0	\$5,105.4	\$4,692.0	1.05	1.09	\$24,365.7	\$22,076.7	\$22,451.5	0.91	0.98
Apr-12	\$5,556.4	\$5,404.5	\$4,531.6	0.97	1.19	\$29,922.1	\$27,481.2	\$26,983.1	0.92	1.02
May-12	\$6,455.1	\$0.0	\$0.0	0.00	0.00	\$36,377.2			0.00	0.00
Jun-12	\$4,975.2	\$0.0	\$0.0	0.00	0.00	\$41,352.4			0.00	0.00
Jul-12	\$4,904.8	\$0.0	\$0.0	0.00	0.00	\$46,257.2			0.00	0.00
Aug-12	\$6,730.4	\$0.0	\$0.0	0.00	0.00	\$52,987.6			0.00	0.00
Sep-12	\$7,833.6	\$0.0	\$0.0	0.00	0.00	\$60,821.2			0.00	0.00
CTD	\$179,202.3	\$176,352.9	\$148,742.7	0.98	1.19					

*Waste Feed Delivery/Treatment/DST Retrieval Closure*

Schedule Variance:

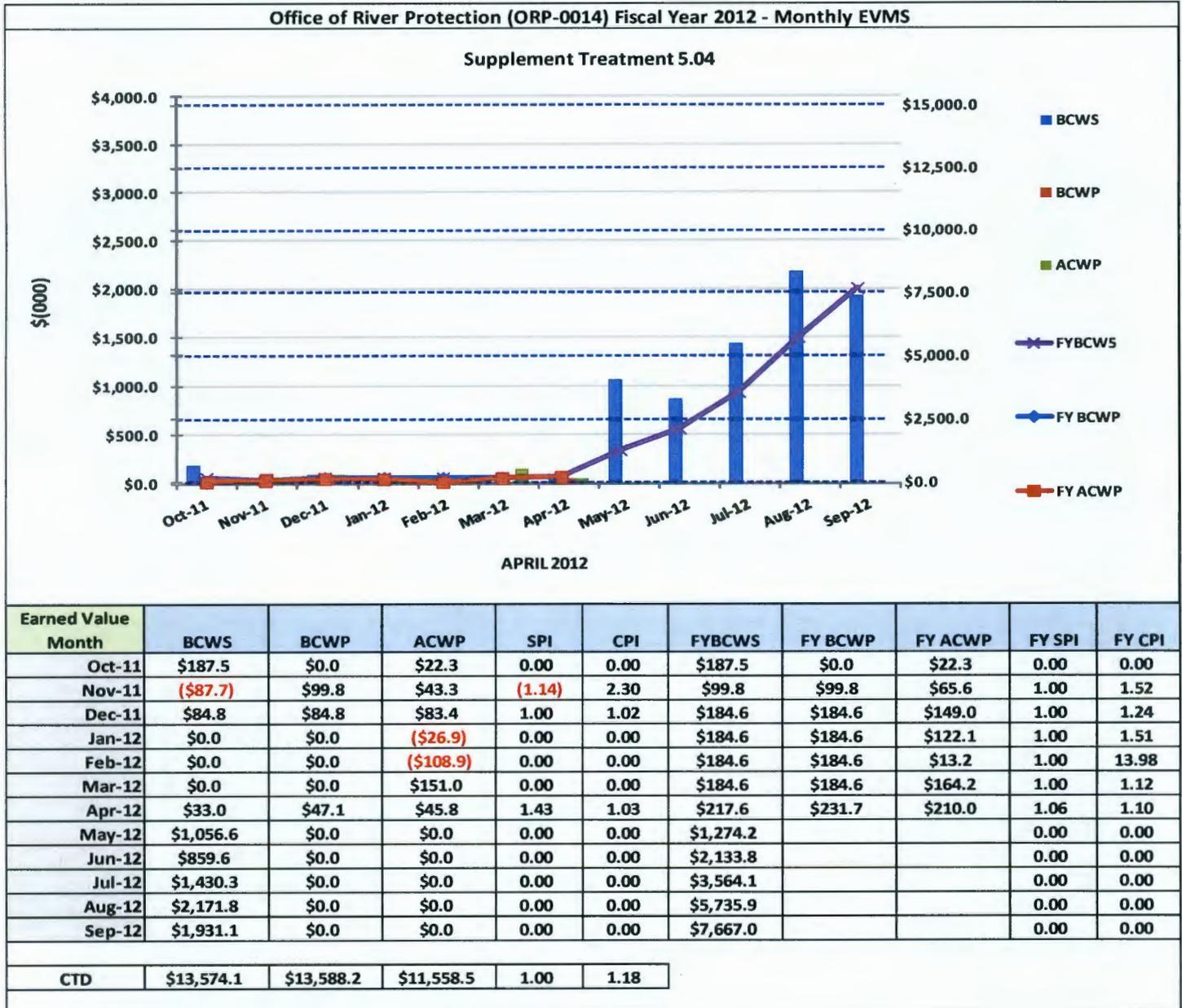
Variations are negligible

Cost Variance:

The favorable schedule variance is primarily due to:

- Implementation of BCR RPP-12-117, "AWA - PEP Contract Modification 157" and Contract Modification 157 provided additional funding for continued work to dismantle, relocate, and store the Pretreatment Engineering Platform. The BCR added baseline budget for the PNNL support to move gas and fiber optic lines in the PNNL PDL-W facility, WRPS project support to oversee activities and monthly storage costs at the CEES facility. The additional baseline budget allowed progress taken in April on completed work that could not be taken before the BCR was implemented. All relocation work is complete, with budget remaining only for storage and maintenance.

- Fieldwork was completed on the nozzle 13 complex corrective maintenance packages (AW/AP Farm) in March; however, performance was not taken because the CHAMPS database did not status it as "Field Work Complete," as it was pending completion of the post-review process. The performance was taken this month and the actual costs were reflected in March.



**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: At Risk. Ecology and ORP have begun preliminary discussions. ORP provided signed TPA Change Package M-90-12-01 to Ecology on 06/13/12. Please see issues below.

**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: To Be Missed. Ecology and ORP have begun preliminary discussions. ORP provided signed TPA Change Package M-47-12-01 to Ecology on 06/13/12. Please see issues below.

**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 issued the 90% CDR for internal review and is in the process of comment incorporation. Completed the Risk Management Plan and Acquisition Plan.

The Secondary Liquid Waste Treatment Project conducted a 90% review of the conceptual design drawings, specifications, calculations, design report narrative, and supporting documents. The project completed and issued the Preliminary Hazard Analysis Report (RPP-RPT-52816).

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

- Complete Conceptual Design for both the Interim Hanford Storage and Secondary Liquid Waste Treatment Projects.
- Complete the Risk Management Plan Secondary Liquid Waste Treatment Project.
- Complete 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 Acquisition Plans for Secondary Liquid Waste Treatment Project
- Submit the Interim Hanford Storage Project and Secondary Liquid Waste Treatment Project CD-1 Package to ORP.

### Issues:

ORP submitted signed TPA Change Packages M-47-12-01 and M-90-12-01 to Ecology on 06/13/12 to defer negotiation of these milestones to a To Be Determined (TBD) date to be established 12 months following completion of the River Protection Plan (RPP) Waste Treatment Plant (WTP) re-baseline/re-planning efforts. ORP cannot reasonably expect to conduct the M-047-06 and M-090-11 milestone negotiations in 2012 in the absence of this information. Ecology provided letters 12-NWP-101 and 12-NWP-100 disapproving M-47-12-01 and M-90-12-01 TPA Change Packages to ORP on 06/25/12.

## 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 JUNE 2012 ORP CONSENT DECREE 08-5085-FVS MONTHLY SUMMARY REPORT FOR WTP FACILITY-SPECIFIC INFORMATION**