

FINAL

Office of River Protection
Tri-Party Agreement
Monthly Summary Report
December 2014



Office of River Protection
Tri-Party Agreement Milestone Review
December 2014 (Monthly Summary Report/Project Earned Value Management System
reflects October 2014 information)

| Page | Topic | Leads |
|------|--|---|
| 1 | Administrative Items/Milestone Status | Bryan Trimberger/Dan McDonald/Jeff Lyon |
| 2 | System Plan; M-062-40 | DaBrisha Smith/Jeff Lyon/Dan McDonald |
| 3 | Acquisition of New Facilities; M-090-00 and M-047-00 | Janet Diediker/Jeff Lyon/Dan McDonald |
| 4 | Supplemental Treatment and Part B Permit Applications; M-062-00, M-062-21, M-062-30, and M-062-45 | Steve Pfaff/Jeff Lyon/Dan McDonald |
| 5 | 242-A Evaporator Status | Richard Valle/Paul Hernandez/Jeff Lyon |
| 6 | Double-Shell Tank System Update | Jeremy Johnson/Jeff Lyon |
| 6 | Single-Shell Tank Integrity Assurance; M-045-91 | Jeremy Johnson/ Jim Alzheimer |
| 7 | In Tank Characterization and Summary | Billie Mauss/Michael Barnes |
| 9 | Tank Operations Contract Overview | ORP TPA PMs/Jeff Lyon |
| 17 | Single-Shell Tank Corrective Action; M-045-22, M-045-50 series, M-045-60 series, and M-045-92 | Chris Kemp/Jeff Lyon |
| 18 | Single-Shell Retrieval and Closure Program Tri-Party Agreement (TPA) Milestones Status; M-045-00 series | Chris Kemp/Jeff Lyon |
| 20 | Tank Waste Retrieval Work Plan Status | Chris Kemp/Jeff Lyon |
| 21 | Tank in TPA Appendix H, Status Tank Retrievals with Individual Milestones | Chris Kemp/Jeff Lyon |
| CD | Waste Treatment and Immobilization Plant (WTP) Overall TPA Summary and Milestone Status; see the U.S. Department of Energy, Office of River Protection Consent Decree 08-5085-FVS Monthly Summary Report for WTP Facility-specific information | Delmar Noyes/Dan McDonald |

CD = Consent Decree 08-5085-FVS

| Milestone | Title | Due Date | Completion Date | Status |
|-------------------------|--|------------|-----------------------|--------------|
| Fiscal Year 2014 | | | | |
| M-062-40C | Select a Minimum of Three Scenario's for the System Plan | 12/15/2013 | 12/12/2013 | Completed |
| M-062-01AB | Submit Semi-Annual TPA Project Compliance Report | 01/31/2014 | 01/31/2014 | Completed |
| M-045-86C | Submit Retrieval Data Report to Ecology for C-104 | 03/21/2014 | 02/18/2014 | Completed |
| M-045-22-T02 | Submit Results of Vadose Zone Characterization of 241-U to Ecology | 04/30/2014 | 02/20/2014 | Completed |
| M-045-86F | Submit Retrieval Data Report to Ecology for C-108 | 05/01/2014 | 11/27/2013 | Completed |
| M-045-86G | Submit Retrieval Data Report to Ecology for C-109 | 06/04/2014 | 03/13/2014 | Completed |
| M-045-22-T03 | Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology | 07/31/2014 | 05/15/2014 | Completed |
| M-045-56J | Ecology and DOE Agree, at a Minimum, to Meet Yearly (by July) | 07/31/2014 | 07/22/2014 | Completed |
| M-062-01AC | Submit Semi-Annual TPA Project Compliance Report | 07/31/2014 | 07/31/2014 | Completed |
| M-045-22-T01 | Submit Results of Vadose Zone Characterization of 241-TX to Ecology | 09/30/2014 | 09/17/2014 | Completed |
| M-045-22 | Review M-045-22-T03 Report and Determine Path Forward | 09/30/2014 | 9/25/2014 | Completed |
| Fiscal Year 2015 | | | | |
| M-062-40D | Submit System Plan | 10/31/2014 | 10/31/2014 | Completed |
| M-062-40ZZ | Submit One Time Tank Waste Supp Treatment Technologies Report | 10/31/2014 | Deleted on 08/12/2014 | Deleted |
| M-045-91G-T03 | Provide AOR Final Doc. for SSTs on 1,000,000 Gallon Tanks | 10/31/2014 | 07/07/2014 | Completed |
| M-045-91F-T04 | Provide Report on 100-Series SSTs as having Leaked in RPP-32681 | 12/26/2014 | 11/14/14 | Completed |
| M-045-61 | Phase 2 RCRA Facility Investigation | 12/31/2014 | | On Schedule |
| M-045-86H | Submit Retrieval Data Report to Ecology for C-110 | 01/29/2015 | 08/06/2014 | Completed |
| M-045-91G-T04 | Provide AOR Final Doc. for SSTs on 55,000 Gallon Tanks | 01/30/2015 | | On Schedule |
| M-045-91B-T01 | Provide Ecology report on the Concrete Core from Tank A-106 or alt | 01/31/2015 | | On Schedule |
| M-045-91F-T02 | Provide Report of Liner Failures for SSTs | 03/31/2015 | | On Schedule |
| M-062-45-T01 | Comp. Neg's 6-Mo After Last Issuance of System Plan | 04/30/2015 | | On Schedule |
| M-062-45-ZZ | Negotiate a One Time Supplemental Treatment Selection | 04/30/2015 | | On Schedule |
| M-062-45-ZZ-A | Convert M-062-31-T01 Thru M-062-34-T01 to Interim Milestones | 04/30/2015 | | On Schedule |
| M-045-91F | Provide Summary Conclusions Report on Leak Integrity | 06/30/2015 | | On Schedule |
| M-045-62 | Phase 2 Corrective Measures Implementation Work Plan For WMA-C | 06/30/2015 | | To Be Missed |
| M-045-92O | Barrier 3 Design/Monitoring Approval From Ecology | 06/30/2015 | | On Schedule |
| M-045-91G | Provide Summary Conclusions Report of AOR for SSTs | 07/28/2015 | | On Schedule |
| M-045-56K | Ecology and DOE Agree, at a Minimum, to Meet Yearly (By July) | 07/31/2015 | | On Schedule |
| M-045-91H | Submit Change Pkg (if necessary) to est. Additional Milestones | 07/31/2015 | | On Schedule |
| M-045-82 | Submit Comp. Permit Modification Request for Tiers 1,2,3 | 09/30/2015 | | To Be Missed |

AOR = Analyses of Record.

CD-1/-2 = critical decision-1/-2

CR = change request.

DOE = U.S. Department of Energy.

Ecology = Washington State Department of Ecology.

RCRA = Resource Conservation and Recovery Act.

SST = single-shell tank.

TPA = Tri-Party Agreement.

WMA-C = Waste Management Area C.

System Plan

M-062-40C, Select a minimum of three scenarios that will be analyzed in the system plan,
Due: December 15, 2013, Status: Completed on December 12, 2013.

M-062-40D, Submit a system plan describing the disposition of all tank waste managed by ORP,
Due: October 31, 2014, Status: Completed on 10/31/2014.

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

Significant Past Accomplishments:

1. On October 24, 2013, Washington State Department of Ecology (Ecology) and U.S. Department of Energy (DOE), Office of River Protection (ORP) signed the Tri-Party Agreement (TPA) Change Control Form M-62-13-02, moving out the due date for this embedded milestone from October 31, 2013 to December 15, 2013, for selection of three, or more, scenarios to be modeled in the System Plan.
2. Ecology has defined five scenarios to be analyzed in System Plan 7. Washington River Protection Solutions LLC (WRPS) has included a description of each scenario in the Selected Scenarios for the River Protection Project System Plan, Rev. 7 document released to ORP on December 4, 2013. See joint ORP and Ecology letter 13-TPD-0070, dated December 12, 2013, for completion and description of M-062-40C scenarios.
3. Detailed assumption review was completed, and has been approved by Ecology.
4. On February 11, 2014, DOE-ORP transmitted a letter (14-TPD-0003) to Washington River Protection Solutions LLC in response to letter (WRPS-1400313) to approve the use of Ecology's Appendix B, "Key Assumptions and Success Criteria," for the ORP 11242, River Protection Project System Plan, Rev. 7.
5. On February 13, 2014 Washington State Department of Ecology presented the five selected scenarios to the Hanford Advisory Board Tank Waste Committee.
6. Ecology, DOE-ORP and WRPS reviewed and provided comments for sections 1 and 2 of the System Plan 7 during the week of February 17, 2014.
7. Ecology, DOE-ORP and WRPS reviewed and provided comments for section 3 of the System Plan 7 during the week of March 21, 2014.
8. Ecology, DOE-ORP and WRPS reviewed and provided comments for Appendix C of the System Plan 7 during the week of April 1, 2014.
9. During the week of April 28, 2014, WRPS and DOE-ORP facilitated meetings for Ecology to define detail spending assumptions for Case 5.
10. On July 29, 2014, WRPS Case authors presented the results of the five cases to Ecology and DOE-ORP.
11. System Plan 7 was reviewed, all comments resolved and incorporated into the document.
12. On October 31, 2014, ORP transmitted System Plan 7 to Ecology.

Significant Planned Actions in the Next 6 Months:

Issues:

None.

Acquisition of New Facilities

M-090-13, Submit Critical Decision-1 for Interim Hanford Storage Project and TPA Change Request for CD-2 to Ecology, Due: March 31, 2016, Status: On Schedule. Created by TPA Change Control Form M-90-12-02, signed by ORP and Ecology on November 19, 2012, to “Submit to Ecology, a Conceptual Design Report Package (Critical Decision-1) for the Interim Hanford Storage Project (storage of the first two years of Hanford Site Immobilized High-Level Waste from WTP operations) and a TPA Change Request (in accordance with TPA Action Plan Section 12.0) to submit to Ecology, a Preliminary Design Report package (Critical Decision-2).”

M-090-00, Acquire/Modify Facilities for Storage of Immobilized High-Level Waste (IHLW), Due: December 31, 2019, Status: On schedule.

M-047-07, Submit CD-1 for Secondary Liquid Waste Treatment and Change Request (CR) for CD-2 to Ecology, Due: March 31, 2016, Status: On Schedule. Created by TPA Change Control Form M-47-12-02, signed by ORP and Ecology on November 19, 2012, to “Submit to Ecology, a Conceptual Design Report package (Critical Decision-1) for the Secondary Liquid Waste Treatment Project and a TPA Change Request (in accordance with TPA Action Plan Section 12.0) to submit to Ecology, a Preliminary Design Report package (Critical Decision-2).”

M-047-00, Complete Work Necessary to Provide Facilities for Management of Secondary Waste from the Waste Treatment and Immobilization Plant (WTP), Due: December 31, 2022, Status: On schedule.

Significant Past Accomplishments:

ORP and Ecology signed TPA Change Packages M-47-14-01 and M-90-14-01 on July 14, 2014 moving the due date for M-047-07 and M-090-13 to March 31, 2016.

Significant Planned Actions in the Next 6 Months:

None.

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 second Low-Activity Waste (LAW), Due: October 31, 2014, Status: Deleted.*

M-062-45ZZ (designation for M-062-45 item #3), Negotiate a one-time supplemental treatment selection, Due: April 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: April 30, 2015, Status: On schedule.

M-062-31-T01, Complete final design and submit Resource Conservation and Recovery Act Part B permit modification request, Due: April 30, 2016, Status: On schedule.

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

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

M-062-45XX, No later than December 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: December 31, 2021, Status: On schedule.

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

M-062-21, Annually submit data that demonstrates operation of the WTP, Due: February 28, 2023, Status: On schedule.

M-062-00, Complete Pretreatment Processing and Vitrification of High-Level Waste and LAW Tank Wastes, Due: December 31, 2047, Status: On schedule.

Significant Past Accomplishments:

*Per ORP letter 14-TF-0052, signed by ORP on May 6, 2014 and provided to Ecology on May 7, 2014, ORP documented the ORP/Ecology discussions for the One-Time Hanford Tank Waste Supplemental Treatment Technologies Report and that ORP does not intend to submit this report. ORP received Ecology's response letter, 14-NWP-110, on May 29, 2014. ORP Letter 14-TF-0088, dated and delivered to Ecology on July 31, 2014, submitted a signed TPA Change Package to delete the requirement of the One-Time Hanford Tank Waste Supplemental Treatment Technologies Report from TPA Milestone M-062-40. Ecology signed TPA Change Package M-62-14-01 deleting M-062-40ZZ on August 12, 2014.

Significant Planned Actions in the Next 6 Months: None.

Issues: None.

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

242-A Evaporator Status:

The 242-A campaign strategy for fiscal year (FY) 2010 through FY 2015 depicted in the following table has been updated based on ORP-11242, *River Protection Project Plan* and ongoing schedule integration efforts.

| Fiscal Year | Campaign No. | Feed Source | Slurry Tank | Comments |
|-------------|--------------|-----------------|-------------|--|
| FY 2010 | 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. |
| FY 2010 | 10-02 | AW-106 | AW-106 | |
| FY 2011 | NA | NA | NA | No campaign conducted in FY 2011 due to ongoing 242-A and tank farm facility life extension and <i>American Recovery and Reinvestment Act</i> funded upgrades. |
| FY 2012 | NA | NA | NA | No campaign conducted in FY 2012 due to ongoing 242-A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis. |
| FY 2013 | NA | NA | NA | No campaigns to be conducted in FY 2013 due to ongoing 242-A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis. |
| FY 2014 | 13-01 | AP-107 | AP-107 | Campaign started September 9, 2014 Campaign completed on October 9, 2014. |
| FY 2015 | 14-01 | AP0103 & AP-104 | AP-107 | Estimated April 2015 Start. |
| FY 2015 | EC-02 | AZ-102 | AP-103 | Estimated April 2015 Start. |
| FY 2015 | EC-03 | AZ-102 | AP-103 | Estimated July 2015 Start. |
| FY 2015 | EC-04 | AW-106 | AP-103 | Estimated August 2015 Start. |

FY = fiscal year.

NA = not applicable.

Significant Planned Actions in the Next 6 Months:

Propose inspection of condenser for scaling/fouling. Feasibility study presented to DOE-ORP by MSA for the possibility of replacing current condenser raw water feed system with a recirculating cooling tower. Review and recommendations are ongoing.

Issues:

Due to continuing self-imposed compensatory measures, slip in scheduling will be incurred for all subsequent DST transfers. This, in turn, will delay the planned evaporator campaigns planned in the 2015 calendar year. As such, evaporator campaign EC-01 (i.e. 14-01) is now believed to occur around the March 2015 timeframe.

Double-Shell Tank System Update

Ultrasonic Testing

- Routine UT of tank AP-102 was completed.
- Currently demonstrating the use of Electro Magnet Acoustic Transducer (EMAT) in AP-102, teamed with PNNL and AREVA

Visual Inspection

- Continuing bi-weekly inspections of AY-102 waste accumulation sites.
- Continuing bi-monthly comprehensive inspection of AY-102 annulus.
- Issued the report, RPP-RPT-34311, Rev. 2, *Double-Shell Tank Integrity Inspection Report for 241-AY Tank Farm*, which summarizes annulus inspections performed in AY Farm through September 16, 2014.
- Annulus visual inspections were performed in tanks AP-102, AP-103, AP-104, AP-105, and AP-106. The enhanced inspections for these tanks are scheduled to be completed in December 2014.

Transfers

- No transfers were performed during the month of October

Single-Shell Tank Integrity Assurance

M-045-91F-T04, Provide to Ecology, as a Hanford Federal Facility Agreement and Consent Order secondary document, a report on the 100-series SSTs, which have been or will be identified as having leaked in RPP-32681, Rev. 0, Due: December 26, 2014, Status: Complete. RPP-RPT-54909, Hanford Single-Shell Tanks Leak Causes, Locations, and Rates: Summary Report was transmitted to Ecology on 11/14/2014 under letter 14-TF-1024.

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: January 30, 2015, Status: On schedule. RPP-RPT-49993, Single-Shell Tank Integrity Project Analysis of Record Hanford Type I Single-Shell Tank Thermal and Operating Loads and Seismic Analysis was transmitted to ORP on 11/13/2014 under letter WRPS-1404777

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 an alternate tank, Due: January 31, 2015, Status: On schedule. . RPP-RPT-58254, Concrete Core Testing Report for the Single-Shell Tank 241-A-106 Sidewall Coring Project was transmitted to ORP on 11/11/2014 under letter WRPS-1404732

M-045-91F-T02, Provide to Ecology as a Hanford Federal Facility Agreement and Consent Order 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: March 31, 2015, 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 M-045-91F-T04, Due: June 30, 2015 Status: On schedule.

M-045-91G, Provide a Summary Conclusions Report of Structural Analysis of Record for SSTs, Due: July 28, 2015, 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 of milestones to date, Due: July 31, 2015, Status: On schedule.

M-045-91I, Provide to Ecology an Independent, Qualified, Registered Professional Engineer (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: September 30, 2018, Status: On schedule.

Significant Past Accomplishments:

- The SST Type I Analysis of Record was issued on 11/04/2014

Significant Planned Actions in the Next 6 Months:

- Issue the SST Common Factors Report (M-045-91F-T02)

Issues:

Planning and discussion for M-045-91H to submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones for Phase II of the Single-Shell Tank Integrity Project needs to begin.

In Tank Characterization and Summary

For the period from November 1 through November 30, 2014:

Accomplishments:

- Completed RPP-RPT-57458, *Derivation of Best-Basis Inventory for Tank 241-C-102 as of October 1, 2014, Rev 1*
- Completed RPP-RPT-55307, *Tank 241-C-104 Residual Waste Inventory Estimates for Component Closure Risk Assessment, Rev 1.*
- Completed RPP-RPT-55803, *Tank 241-C-109 Residual Waste Inventory Estimates for Component Closure Risk Assessment, Rev 1.*

- Completed RPP-RPT-54757, *Tank 241-C-108 Residual Waste Inventory Estimates for Component Closure Risk Assessment*, Rev 1.
- Completed RPP-PLAN-60049, *Tank 241-AW-102 Grab Sampling and Analysis Plan in Support of Evaporator Campaign EC-01*, Rev 0.
- RPP-RPT-58328, *Final Report for Tank 241-AZ-102 Liquid Grab Samples in Support of Evaporator Campaign for Fiscal Year 2014*, Rev 1, was released November 12, 2014.
- RPP-RPT-58355, *Final Report for Tank 241-AN-101 Grab Samples at Midpoint of Tank 241-C-102 in Support of Chemistry Control and Compatibility*, Rev 0, was released November 24, 2014.
- Completed 241-AZ-102A Leak-Detection Pit liquid grab sampling on November 11, 2014. Four samples were received at the lab.
- Completed sampling of waste on Tank 241-C-111 failed sluicer on November 25, 2014. One sample was received at the lab.

Planned Action within the Next 6 Months:

Tank sampling:

- Tank 241-SY-102 core sampling (Riser #04) is planned for December 2014.
- 241-C-105 fingertrap sampling is planned for December 2014.
- 241-AY-102A LDP grab sample #13 is planned for December 2014.
- Tank 241-AW-102 (Evaporator campaign EC-01) sampling is planned for December 2014.
- Tank 241-C-112 clamshell or fingertrap sampling is planned for January 2015.
- Tank 241-C-101 ORSS closure sampling is planned for February 2015.
- Tank 241-AN-103 chemistry control rotary mode core sample is planned for April 2015.
- Tank 241-AZ-102 (EC-03) grab sampling is planned for May 2015.
- Tank 241-AN-106 sample at C-105 100% retrieval is planned for May 2015.

Best-Basis Inventory (BBI) updates:

A BBI update for tank 241-C-102 was completed in November.

BBI updates for the following tanks are planned to be completed in December.

- | | | |
|--------------|--------------|-------------|
| • 241-AN-101 | • 241-AP-106 | • 241-B-204 |
| • 241-AN-102 | • 241-AP-107 | • 241-C-107 |
| • 241-AN-106 | • 241-AW-102 | • 241-T-201 |
| | • 241-AW-106 | |

Data Quality Objectives (DQO):

A screening DQO is in-process to obtain data on odorous tank stack emissions in support of dispersion modeling and is planned to be released in December.

Issues:

None.

TANK OPERATIONS CONTRACT OVERVIEW

Project Performance

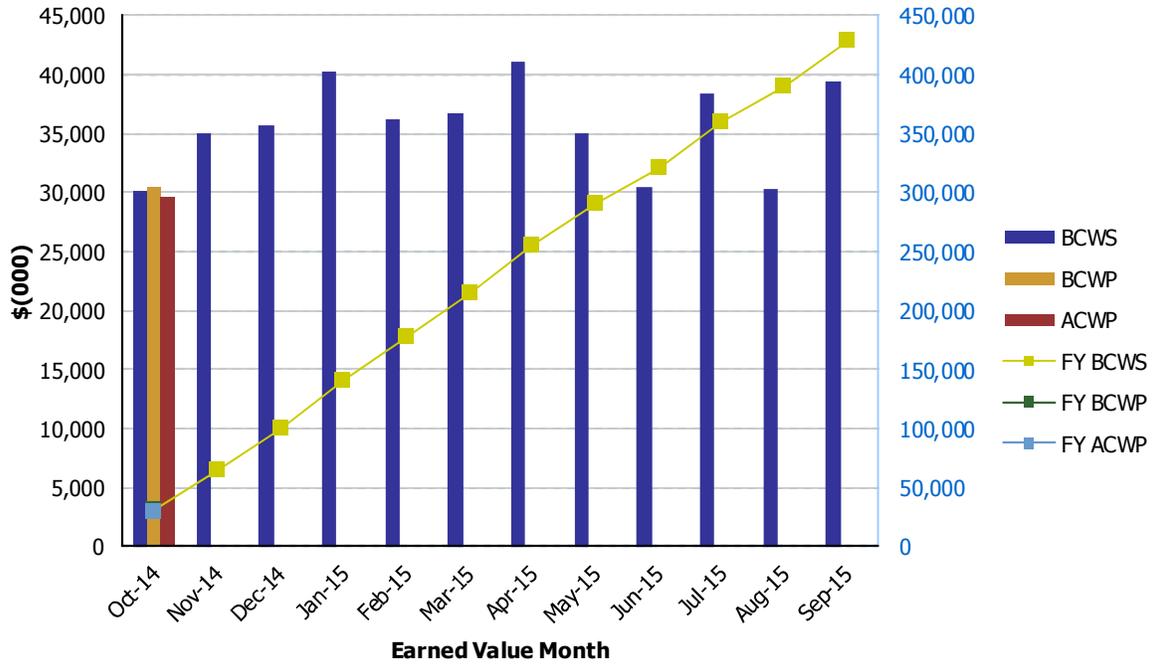
The earned value performance reporting reflects the format, work breakdown structure reporting levels, and variance thresholds as agreed to with the tank operations contractor for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing TPA milestones.

Through October 31, 2014, Washington River Protection Solutions LLC (WRPS) worked 119,841 hours (11 days) without a Lost Time Workday Injury and 119,841 hours (11 days) since the last Recordable case. There was one recordable cases in October 2014, and no Days Away, Restricted, or Transferred (DART) cases.

| October-14 | | | | | | | | | | |
|------------|-------------|-------------|-------------|------------|----------|------|------|-------------|-------------|-----------|
| | BCWS | BCWP | ACWP | SV | CV | SPI | CPI | BAC | EAC | VAC |
| CM | 30,052.0 | 30,480.0 | 29,607.0 | 428.0 | 873.0 | 1.01 | 1.03 | | | |
| FYTD | 30,052.0 | 30,480.0 | 29,607.0 | 428.0 | 873.0 | 1.01 | 1.03 | 428,225.5 | 436,690.1 | (8,464.6) |
| CTD | 2,373,957.6 | 2,348,959.8 | 2,330,552.8 | (24,997.8) | 18,407.0 | 0.99 | 1.01 | 3,312,642.0 | 3,278,959.0 | 33,683.0 |

Tank Farms ORP-0014

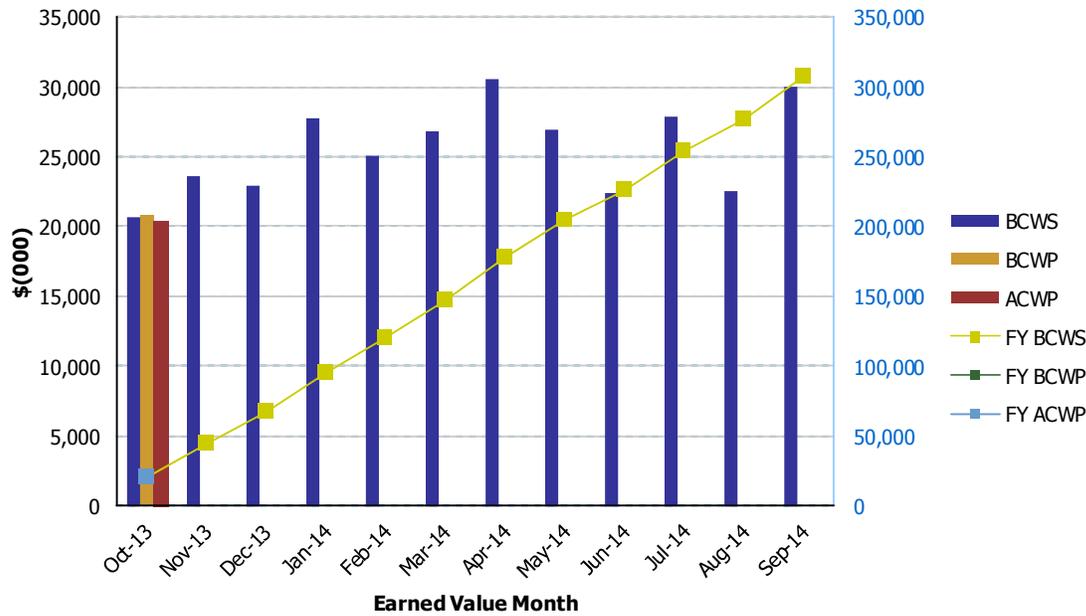
EVMS Monthly and Fiscal Year Values



| Earned Value Month | BCWS | BCWP | ACWP | SPI | CPI | FY BCWS | FY BCWP | FY ACWP | FY SPI | FY CPI |
|--------------------|-------------|-------------|-------------|------|------|-----------|----------|----------|--------|--------|
| Oct 2014 | \$30,052 | \$30,480 | \$29,607 | 1.01 | 1.03 | \$30,052 | \$30,480 | \$29,607 | 1.01 | 1.03 |
| Nov 2014 | \$34,963 | | | | | \$65,014 | | | | |
| Dec 2014 | \$35,622 | | | | | \$100,636 | | | | |
| Jan 2015 | \$40,210 | | | | | \$140,846 | | | | |
| Feb 2015 | \$36,185 | | | | | \$177,031 | | | | |
| Mar 2015 | \$36,673 | | | | | \$213,703 | | | | |
| Apr 2015 | \$41,112 | | | | | \$254,815 | | | | |
| May 2015 | \$34,949 | | | | | \$289,764 | | | | |
| Jun 2015 | \$30,511 | | | | | \$320,275 | | | | |
| Jul 2015 | \$38,306 | | | | | \$358,581 | | | | |
| Aug 2015 | \$30,335 | | | | | \$388,915 | | | | |
| Sep 2015 | \$39,310 | | | | | \$428,226 | | | | |
| CTD | \$2,373,957 | \$2,348,960 | \$2,330,553 | 0.99 | 1.01 | | | | | |

**Tank Farms ORP-0014
Base Operations 5.01**

EVMS Monthly and Fiscal Year Values



| Earned Value Month | BCWS | BCWP | ACWP | SPI | CPI | FY BCWS | FY BCWP | FY ACWP | FY SPI | FY CPI |
|--------------------|----------|----------|----------|------|------|-----------|----------|----------|--------|--------|
| Oct 2013 | \$20,627 | \$20,833 | \$20,428 | 1.01 | 1.02 | \$20,627 | \$20,833 | \$20,428 | 1.01 | 1.02 |
| Nov 2013 | \$23,665 | | | | | \$44,292 | | | | |
| Dec 2013 | \$22,993 | | | | | \$67,284 | | | | |
| Jan 2014 | \$27,725 | | | | | \$95,009 | | | | |
| Feb 2014 | \$25,047 | | | | | \$120,056 | | | | |
| Mar 2014 | \$26,812 | | | | | \$146,868 | | | | |
| Apr 2014 | \$30,490 | | | | | \$177,358 | | | | |
| May 2014 | \$26,895 | | | | | \$204,252 | | | | |
| Jun 2014 | \$22,401 | | | | | \$226,653 | | | | |
| Jul 2014 | \$27,909 | | | | | \$254,562 | | | | |
| Aug 2014 | \$22,480 | | | | | \$277,041 | | | | |
| Sep 2014 | \$30,008 | | | | | \$307,049 | | | | |

| | | | | | |
|-----|-------------|-------------|-------------|------|------|
| CTD | \$1,558,055 | \$1,546,676 | \$1,528,111 | 0.99 | 1.01 |
|-----|-------------|-------------|-------------|------|------|

Base Operations and Tank Farm Projects

The current month favorable schedule variance (SV) of \$206K is due to the following:

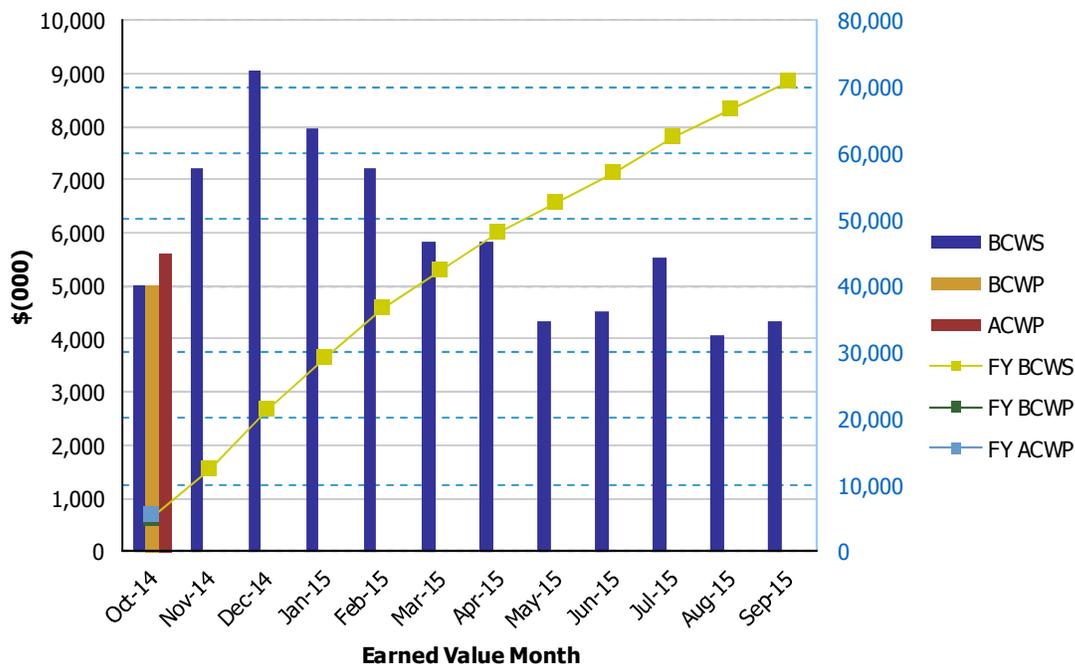
- 242-A Evaporation Campaign schedule recovery.

The current month favorable cost variance (CV) of \$405K is primarily due to the following:

- Reassignment of staff to higher priority work for Solid Waste Management and Bae Operations West Area.

**Tank Farms ORP-0014
Retrieve and Close SST's 5.02**

EVMS Monthly and Fiscal Year Values



| Earned Value Month | BCWS | BCWP | ACWP | SPI | CPI | FY BCWS | FY BCWP | FY ACWP | FY SPI | FY CPI |
|--------------------|-----------|-----------|-----------|------|------|----------|---------|---------|--------|--------|
| Oct 2014 | \$5,024 | \$5,011 | \$5,609 | 1.00 | 0.89 | \$5,024 | \$5,011 | \$5,609 | 1.00 | 0.89 |
| Nov 2014 | \$7,212 | | | | | \$12,236 | | | | |
| Dec 2014 | \$9,069 | | | | | \$21,304 | | | | |
| Jan 2015 | \$7,970 | | | | | \$29,275 | | | | |
| Feb 2015 | \$7,208 | | | | | \$36,482 | | | | |
| Mar 2015 | \$5,831 | | | | | \$42,313 | | | | |
| Apr 2015 | \$5,829 | | | | | \$48,142 | | | | |
| May 2015 | \$4,316 | | | | | \$52,458 | | | | |
| Jun 2015 | \$4,503 | | | | | \$56,961 | | | | |
| Jul 2015 | \$5,525 | | | | | \$62,486 | | | | |
| Aug 2015 | \$4,071 | | | | | \$66,558 | | | | |
| Sep 2015 | \$4,329 | | | | | \$70,887 | | | | |
| CTD | \$510,523 | \$500,428 | \$514,952 | 0.98 | 0.97 | | | | | |

Retrieval and Close Single-Shell Tanks

The current month unfavorable cost variance (CV) of (\$13k) is within the reporting threshold

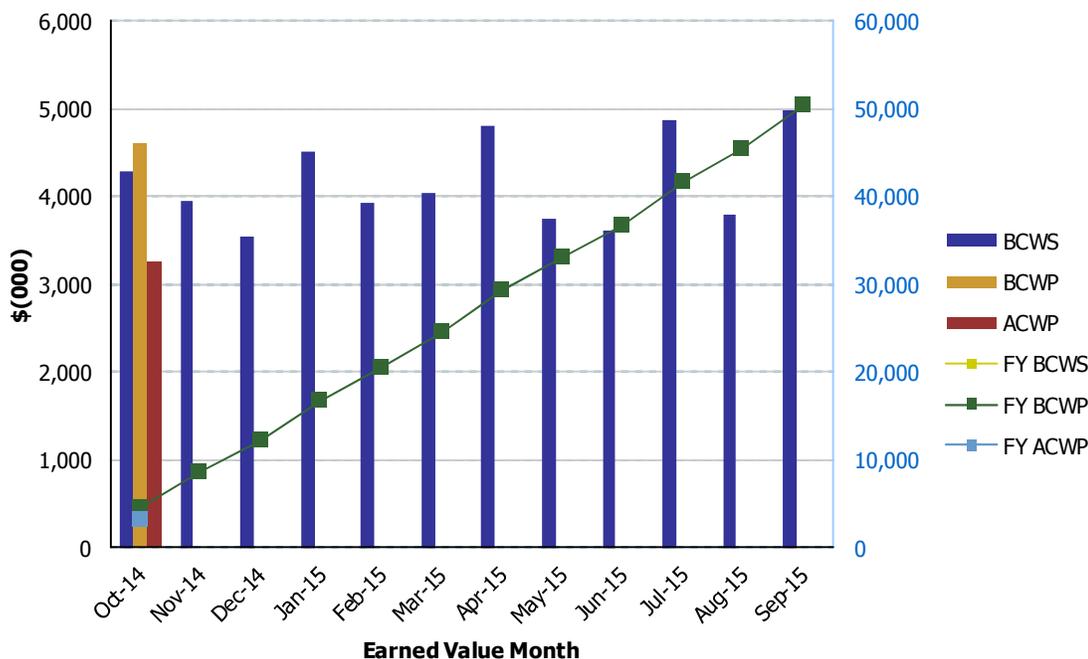
The current month unfavorable schedule variance (SV) of (\$598k) is due to:

Non-performance of SST C-105 Retrieval activities due to the plugged slurry distributor in receiver tank AN-106 and shut down of C-105 vacuum retrieval and stepping back and doing a path forward analysis using s systems engineering approach. Corrective Action:

Slurry distributor to be replaced. Complete the systems engineering evaluation for C-105 and start up retrieval using high pressure water and modified sluicing along with potential evaluation of another 3rd retrieval technology method.

Tank Farms ORP-0014
Waste Feed Delivery/Treatment/Double-Shell Tank Retrieval Closure 5.03

EVMS Monthly and Fiscal Year Values



| Earned Value Month | BCWS | BCWP | ACWP | SPI | CPI | FY BCWS | FY BCWP | FY ACWP | FY SPI | FY CPI |
|--------------------|-----------|-----------|-----------|------|------|---------|----------|---------|--------|--------|
| Oct 2014 | \$4,277 | \$4,605 | \$3,261 | 1.08 | 1.41 | \$4,277 | \$4,605 | \$3,261 | 1.08 | 1.41 |
| Nov 2014 | \$3,949 | | | | | | \$8,554 | | | |
| Dec 2014 | \$3,541 | | | | | | \$12,094 | | | |
| Jan 2015 | \$4,515 | | | | | | \$16,609 | | | |
| Feb 2015 | \$3,931 | | | | | | \$20,540 | | | |
| Mar 2015 | \$4,029 | | | | | | \$24,569 | | | |
| Apr 2015 | \$4,793 | | | | | | \$29,362 | | | |
| May 2015 | \$3,738 | | | | | | \$33,100 | | | |
| Jun 2015 | \$3,607 | | | | | | \$36,707 | | | |
| Jul 2015 | \$4,872 | | | | | | \$41,579 | | | |
| Aug 2015 | \$3,784 | | | | | | \$45,363 | | | |
| Sep 2015 | \$4,973 | | | | | | \$50,336 | | | |
| CTD | \$280,846 | \$277,168 | \$263,606 | 0.99 | 1.05 | | | | | |

Waste Feed Delivery/Treatment/Double-Shell Tank Retrieval Closure

The current month favorable schedule variance (SV) of \$328K is due to:

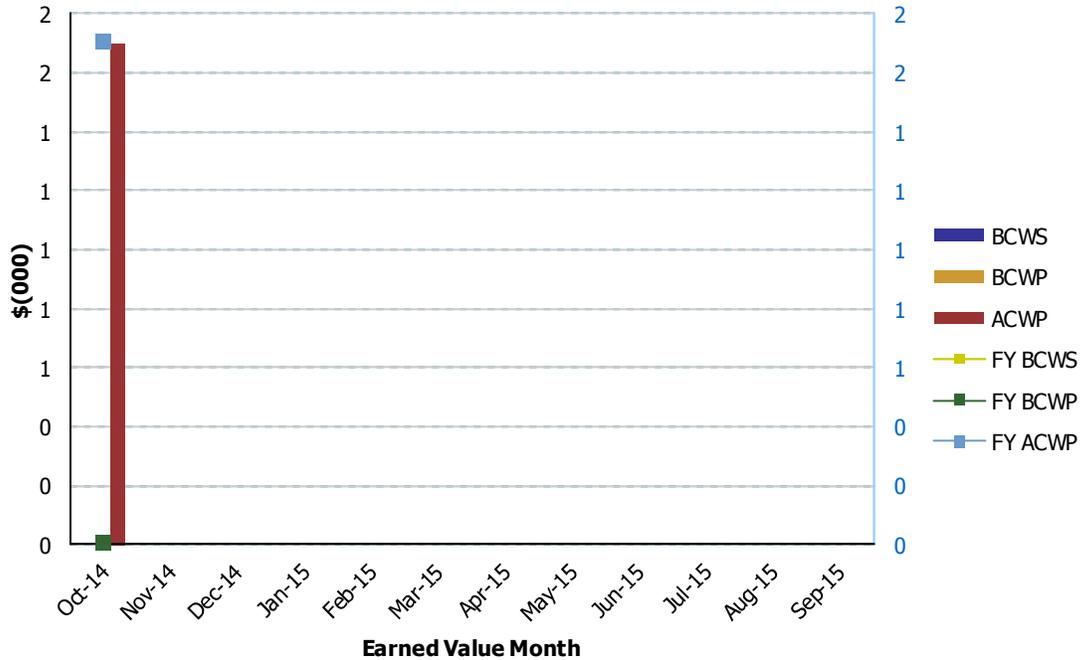
- Measurement of Glass Form properties scope progressing at a faster rate than originally planned due to PNNL’s past experience in glass form testing.

The current month favorable cost variance (CV) of \$1,344K is due to:

- Underrun in labor due to unfilled vacancies
- Labor efficiencies due to fewer resources being required to accomplish planned workscope

**Tank Farms ORP-0014
Supplement Treatment 5.04**

EVMS Monthly and Fiscal Year Values



| Earned Value Month | BCWS | BCWP | ACWP | SPI | CPI | FY BCWS | FY BCWP | FY ACWP | FY SPI | FY CPI |
|--------------------|------|------|------|------|------|---------|---------|---------|--------|--------|
| Oct 2014 | \$0 | \$0 | \$2 | 0.00 | 0.00 | \$0 | \$0 | \$2 | 0.00 | 0.00 |
| Nov 2014 | | | | | | | | | | |
| Dec 2014 | | | | | | | | | | |
| Jan 2015 | | | | | | | | | | |
| Feb 2015 | | | | | | | | | | |
| Mar 2015 | | | | | | | | | | |
| Apr 2015 | | | | | | | | | | |
| May 2015 | | | | | | | | | | |
| Jun 2015 | | | | | | | | | | |
| Jul 2015 | | | | | | | | | | |
| Aug 2015 | | | | | | | | | | |
| Sep 2015 | | | | | | | | | | |

| | | | | | |
|-----|----------|----------|----------|------|------|
| CTD | \$20,110 | \$20,110 | \$19,180 | 1.00 | 1.05 |
|-----|----------|----------|----------|------|------|

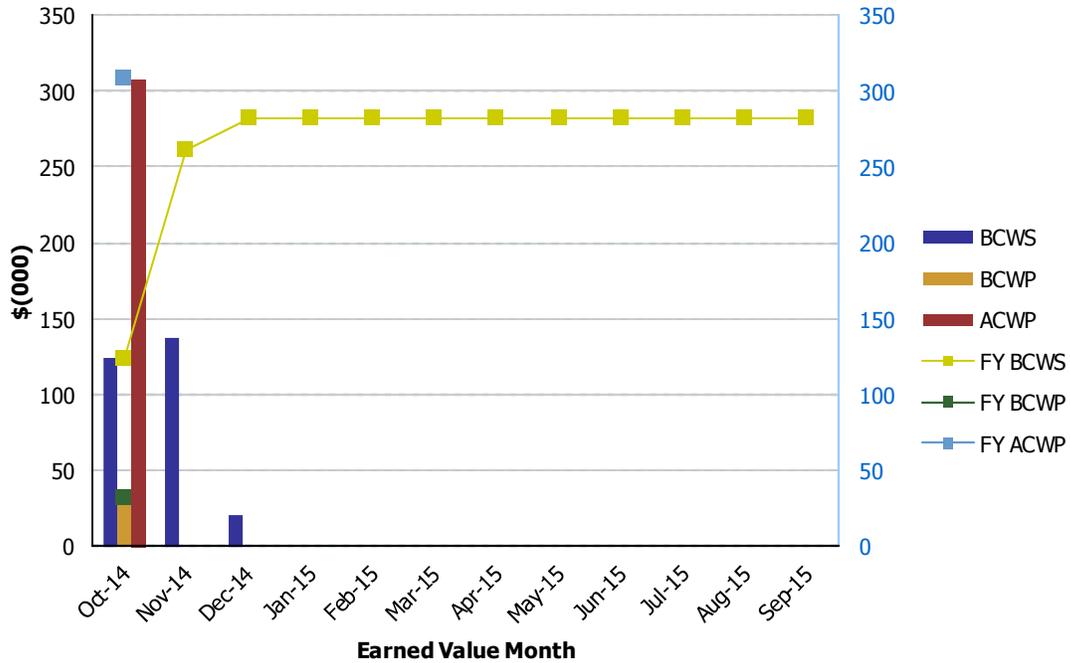
Supplemental Treatment

The current month favorable schedule variance (SV) of \$0K is within the reporting threshold.

The current month unfavorable cost variance (CV) of (\$2K) is within the reporting threshold.

**Tank Farms ORP-0014
Treat Waste 5.5**

EVMS Monthly and Fiscal Year Values



| Earned Value Month | BCWS | BCWP | ACWP | SPI | CPI | FY BCWS | FY BCWP | FY ACWP | FY SPI | FY CPI |
|--------------------|---------|---------|---------|------|------|---------|---------|---------|--------|--------|
| Oct 2014 | \$124 | \$32 | \$308 | 0.26 | 0.10 | \$124 | \$32 | \$308 | 0.26 | 0.10 |
| Nov 2014 | \$137 | | | | | \$261 | | | | |
| Dec 2014 | \$21 | | | | | \$282 | | | | |
| Jan 2015 | \$0 | | | | | \$282 | | | | |
| Feb 2015 | \$0 | | | | | \$282 | | | | |
| Mar 2015 | \$0 | | | | | \$282 | | | | |
| Apr 2015 | \$0 | | | | | \$282 | | | | |
| May 2015 | \$0 | | | | | \$282 | | | | |
| Jun 2015 | \$0 | | | | | \$282 | | | | |
| Jul 2015 | \$0 | | | | | \$282 | | | | |
| Aug 2015 | \$0 | | | | | \$282 | | | | |
| Sep 2015 | \$0 | | | | | \$282 | | | | |
| CTD | \$4,423 | \$4,578 | \$4,705 | 1.03 | 0.97 | | | | | |

Treat Waste

The current month unfavorable schedule variance (SV) of (\$92K) is within the reporting threshold.

The current month unfavorable cost variance (CV) of (\$276K) is due to:

- No corrective action required. October results reflect the effort required to replan FY2015 work due to the Continuing Resolution and the delay in obtaining capital funding for LAWPS Preliminary Design. This replanning work was not part of the original LAWPS schedule, nor is the effort devoted to Advanced Conceptual Design in lieu of funding to begin Preliminary Design.

Work Breakdown Structure 5.2 Retrieve and Close Single-Shell Tanks

M-045-22, Review M-045-22-T03 Report and Determine Path Forward, Due: September 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: Complete. Ecology and ORP agreed at the September 25, 2014 TPA Project Managers' meeting that this milestone was closed, though M-045-92 remains open.

M-045-22-T01, Submit Results of Vadose Zone Characterization of 241-TX to Ecology, Due: September 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: Complete. ORP submitted this deliverable to ECY on September 17, 2014, via letter 14-TF-0100.

M-045-22-T02, Submit Results of Vadose Zone Characterization of 241-U to Ecology, Due: April 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: Complete. ORP submitted this deliverable to ECY on February 20, 2014, via letter 14-TF-0015.

M-045-22-T03, Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology, Due: July 31, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: Complete. ORP submitted this deliverable to ECY on May 15, 2014, via letter 14-TF-0054.

M-045-56J, Complete Implementation of Agreed to Interim Measures, Due: July 31, 2014, Status: Complete. The M-045-56 annual meeting was held on July 22, 2014 and meeting minutes have been entered into the Administrative Record.

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 Waste Management Areas (WMA) (pending the Corrective Measures Study report, Milestone M-45-58, and implementation of other interim corrective measures), Due: To be determined, Status: On schedule.

M-045-61, Submit to Ecology in accordance with the HFFACO Secondary document review process a Phase 2 RCRA Facility Investigation (RFI) Report Draft A for WMA Area C (WMA-C), Due: December 31, 2014, Status: On Schedule. This milestone was modified by HFFACO change package M-45-14-03, signed October 1, 2014.

M-045-61A, Submit to Ecology for review and approval as an Agreement primary document, document review process, a Phase 2 Corrective Measures Study, and revision 0 update to the RFI Report for WMA-C, Due: December 31, 2016, Status: On schedule. This milestone was created by HFFACO change package M-45-14-03, signed October 1, 2014.

M-045-62, Submit to Ecology for review and approval as an agreement primary document a Phase 2 Corrective Measures Study Implementation Plan for WMA-C, Due: June 30, 2015, Status: To be missed. Please see issues.

M-045-92, Complete Installation of Four (4) Additional Interim Barriers (see interim milestones below), Due: October 31, 2017, Status: On schedule.

M-045-92N, Construct Barriers 1 and 2 in 241-SX Farm, Due: October 31, 2015, Status: On schedule.

M-045-92O, Submit a Final Design and Monitoring Plan for Interim Barrier 3, Due: June 30, 2015, Status: On schedule.

Significant Past Accomplishments:

- Automated data collection systems for T Farm and TY Farm interim barrier monitoring continue gathering data
- Documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act Facility Investigation Report continues.

Significant Planned Actions in the Next 6 Months:

- Complete documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act Facility Investigation Report. Draft to complete M-045-61.

SST Retrieval and Closure Program

M-045-82, Submit complete permit mod requests for Tiers 1, 2, and 3 of the SST, Due: September 30, 2015, Status: To be missed. Please see issues.

M-045-84, Complete negotiations of TPA interim milestones for closure of second WMA, Due: January 31, 2017, Status: On schedule.

M-045-83, Complete the closure of WMA-C, Due: June 30, 2019, Status: On schedule.

M-045-85, Complete negotiations of TPA interim milestones for closure of remaining WMAs, Due: January 31, 2022, Status: On schedule.

M-045-70, Complete waste retrieval from all remaining SSTs, Due: December 31, 2040, Status: On schedule.

M-045-00, Complete closure of all SST farms, Due: January 31, 2043, Status: On schedule.

M-045-86, Submit retrieval data report to Ecology for 19 tanks retrieved, Due: To be determined (12 months after retrieval certification), Status: On schedule.

- M-045-86C: Retrieval Data Report for C-104 was due March 21, 2014. Completed on February 18, 2014 with letter 14-TF-0013
- M-045-86F: Retrieval Data Report for C-108 was due May 1, 2014. Completed on November 27, 2013 with letter 13-TF-0120
- M-045-86G: Retrieval Data Report for C-109 was due June 4, 2014. Completed on March 13, 2014 with letter 14-TF-0020
- M-045-86H: Retrieval Data Report for C-110 was due January 29, 2015. Completed on August 6, 2014 with letter 14-TF-0086.

Significant Past Accomplishments:

- Submitted the Retrieval Data Report for C-110
- Completed post-retrieval logging of the drywells near C-104, C-109, and C-110 to support the retrieval data reports
- See discussions above and related discussions in Consent Decree report.

Significant Planned Activities in the Next 6 Months:

- Continue developing the WMA-C performance assessment
- Develop a draft of the Tier 1 (framework) closure plan for WMA C as required by the TPA
- Initiate a performance assessment for WMA A/AX.
- See discussions above and related discussions in Consent Decree report.

Issues:

A new deliverable date for the Corrective Measures Implementation Plan, M-045-62, will need to be established based on the modification to milestone M-045-61 and M-045-61A. ORP and Ecology continue to meet to develop an integrated path forward that addresses all the deliverables associated with Milestone M-045-82.

Tank Waste Retrieval Work Plan Status

| Tank | TWRWP | Expected Revisions | First Retrieval Technology | Second Technology | Third Technology |
|-------|-------------------|--------------------|-----------------------------|---|--|
| C-101 | RPP-22520, Rev. 8 | Complete | Modified Sluicing with ERSS | High-Pressure Water deployed with the ERSS | - |
| C-102 | RPP-22393, Rev. 7 | In Process | Modified Sluicing with ERSS | High-Pressure Water deployed with the ERSS | - |
| C-104 | RPP-22393, Rev. 7 | Complete | Modified Sluicing | Chemical Retrieval Process complete per 13-TF-0018 | - |
| C-105 | RPP-22520, Rev. 8 | Complete | MARS-V | MARS-V-High Pressure Water Spray | - |
| C-107 | RPP-22393, Rev. 7 | Complete | MARS-S | MARS-S -High Pressure Water Spray | Water Dissolution |
| C-108 | RPP-22393, Rev. 7 | Complete | Modified Sluicing | Chemical Retrieval Process complete per 13-TF-0025 | - |
| C-109 | RPP-21895, Rev. 5 | Complete | Modified Sluicing | Chemical Retrieval Process complete per 13-TF-0037 | - |
| C-110 | RPP-33116, Rev. 3 | Complete | Modified Sluicing | Mechanical Waste Conditioning with an In-Tank Vehicle | High Pressure Water |
| C-111 | RPP-37739, Rev. 2 | Complete | Modified Sluicing | High pressure water using the ERSS | Chemical Dissolution Process with ERSS |
| C-112 | RPP-22393, Rev. 7 | Complete | Modified Sluicing | Chemical Retrieval Process | - |

ERSS = Extended Reach Sluicing System.

MARS = Mobile Arm Retrieval System.

S = sluicing.

TWRWP = Tank Waste Retrieval Work Plan.

V = vacuum.

Significant Accomplishments:

None.

Significant Planned Activities in the Next 6 Months:

None.

Issues:

None.

Tank in Appendix H, “Status - Single Shell Waste Retrieval Criteria”

Tank 241-C-106

Significant Past Accomplishments:

None.

Significant Planned Activities in the Next 6 Months:

Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A request for additional information 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 Performance Assessment (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: September 30, 2022, Status: On schedule. Change Package M-45-11-04 replaced Tank S-102 with Tank A-103 and changed the milestone completion date for M-045-15 to September 30, 2022.

M-045-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I, Due: September 30, 2022, Status: On schedule. Updated with Tank A-103 and due date of September 30, 2022, per Change Package M-45-11-04.

M-045-15D, Embedded Milestone, if appropriate, DOE will request an exception to waste retrieval criteria pursuant to Agreement Appendix H, Due: September 30, 2022, Status: On schedule. Updated with Tank A-103 and due date of September 30, 2022, per Change Package M-45-11-04.

Significant Past Accomplishments:

Change Package M-45-11-04 was signed by ORP and Ecology on April 19, 2011.

No significant planned activities in the next 6 months and no issues for Tank 241-A-103.

Tank 241-S-112

M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project, Due: To be determined (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: To be determined, 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.

No significant planned activities in the next 6 months and no issues for Tank 241-S-112.