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FINAL

Office of River Protection

Tri-Party Agreement

Report

April[1] 2018

Tri-Party Agreement

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[1] The narrative descriptions of progress in this report cover the period from March 1-31, 2018. Earned Value Management System data and descriptions cover the period of February 1-28, 2018.

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Acronyms and Abbreviations

CV	cost variance
DFLAW	direct feed Low Activity Waste
Ecology	Washington State Department of Ecology
FY	fiscal year
IQRPE	independent qualified registered professional engineer
LAWPS	Low-Activity Waste Pretreatment System
LERF	Liquid Effluent Retention Facility
ORP	U.S. Department of Energy, Office of River Protection
SST	single-shell tank
SV	schedule variance
TPA	Tri-Party Agreement
TSCR	tank-side cesium removal
WMA	waste management area
WRPS	Washington River Protection Solutions LLC
WTP	Waste Treatment and Immobilization Plant

Administrative Items/Milestone Status

Milestone	Title	Due Date	TPA Project Manager	Status
Prior Years				
M-062-45-T01	Complete Negotiations 6-Months After Last Issuance of System Plan	04/30/2015	Pfaff, Stephen H	In Abeyance
M-062-45-ZZ	Negotiate a One-Time Supplemental Treatment Selection	04/30/2015	Pfaff, Stephen H	In Abeyance
M-062-45-ZZ-A	Convert M-062-31-T01 through M-062-34-T01 to Interim Milestones	04/30/2015	Pfaff, Stephen H	In Abeyance
M-047-07	CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to Ecology	03/31/2016	Diediker, Janet A	In Abeyance
M-090-13	CD-1 for Interim Hanford Storage Project and CR for CD-2 to Ecology	03/31/2016	Diediker, Janet A	In Abeyance
M-062-31-T01	Complete Final Design & Submit RCRA Part B Permit Mod Request for Enhanced WTP & Supplemental Treatment	04/30/2016	Pfaff, Stephen H	In Abeyance
M-045-62	Submit the Draft Tier 3 Closure Plan with Corrective Measures in Phase 2 CMIP for WMA-C	TBD [1]	Bovier, Jan B	On Schedule
M-045-83	Complete the Closure of WMA-C by Completing Closure Activities Specified in the Tier 2 Closure Plan	TBD [1]	Bovier, Jan B	On Schedule
Fiscal Year 2018				
M-062-40F	Submit System Plan to Ecology	10/31/2017	Burnett, Kaylin W	Completed
M-062-32-T01	Start Construction of Supplemental Vitrification Facility and/or WTP Enhancements	04/30/2018	Pfaff, Stephen H	In Abeyance
M-045-92O	Barrier 3 (TX Tank Farm) Design/Monitoring Plan Submitted to Ecology	06/30/2018	Bovier, Jan B	To Be Missed

Milestone	Title	Due Date	TPA Project Manager	Status
M-045-56N	Ecology and DOE Agree, at a Minimum, to Meet Yearly (by July)	07/31/2018	Bovier, Jan B	On Schedule
M-045-91I	Provide IQRPE Certification of SSTs Structural Integrity	09/30/2018	Stewart, Dustin M	On Schedule
M-045-92T	Barrier 3 (TX Tank Farm) Design/Monitoring Plan Approved by Ecology	09/30/2018	Bovier, Jan B	At Risk
Fiscal Year 2019				
M-045-92N	Complete Construction of Barriers 1 and 2 in 241-SX Farm	10/31/2018	Bovier, Jan B	On Schedule
M-045-92Q	Barrier 4 (U Tank Farm) Design/Monitoring Plan Submitted to Ecology	06/30/2019	Bovier, Jan B	At Risk
M-045-56O	Ecology and DOE Agree, at a Minimum, to Meet Yearly (by July)	07/31/2019	Bovier, Jan B	On Schedule
M-045-91E3	Provide SST Farms Dome Deflection Surveys Every 2 Years to Ecology	09/30/2019	Stewart, Dustin M	On Schedule
M-045-92U	Barrier 4 (U Tank Farm) Design/Monitoring Plan Approved by Ecology	09/30/2019	Bovier, Jan B	At Risk

[1] To be established in accordance with the date identified in the M-045-82 Tier 2 closure plan.

CD-1/-2 = critical decision-1/-2.
CMIP = corrective measures implementation work plan.
CR = change request.
DOE = U.S. Department of Energy.
Ecology = Washington State Department of Ecology.
IQRPE = independent qualified registered professional engineer.
Mod = modification.
RCRA = *Resource Conservation and Recovery Act.*
SST = single-shell tank.
TBD = to be determined.
TPA = Tri-Party Agreement.
WTP = Waste Treatment and Immobilization Plant.
WMA-C = C Tank Farm waste management area.

System Plan

One System Division Director: Jon Peschong
Federal Program Manager: Kaylin Burnett
Ecology Project Manager: Dan McDonald, Jeff Lyon

Significant Past Accomplishments

- None.

Significant Planned Actions in the Next Six Months

- Continue negotiations of the M-062-45 Milestone and related milestones with intent to utilize information from the ORP-11242, *River Protection Project System Plan*, Rev. 8.

Issues

- None.

Acquisition of New Facilities

Tank Farms Assistant Manager: Glyn Trenchard
Deputy Federal Project Director: Janet Diediker
Ecology Project Manager: Dan McDonald, Jeff Lyon

M-047-07 CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to Ecology (ECY)

Due: March 31, 2016.

Status: In Abeyance. Decision document 2016-005, *Hanford Federal Facility Agreement and Consent Order Interagency Management Integration Team (IAMIT) Decision / Determination / Action Agreement*, signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-090-13 CD-1 for Interim Hanford Storage Project and CR for CD-2 to ECY

Due: March 31, 2016.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-090-00 Acquire/Modify Facilities for Storage of First Two Years of Immobilized High-Level Waste (IHLW) from the Waste Treatment and Immobilization Plant (WTP) Operations

Due: December 31, 2036.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-047-00 Completion of Work for Management of Secondary Waste from the WTP

Due: TBD.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

Significant Past Accomplishments

- None.

Significant Planned Actions in the Next Six Months

- None.

Issues

- Negotiations on the items identified in the M-062-45 Milestone began on September 8, 2016, in accordance with a decision by the Interagency Management Integration Team.

Supplemental Treatment and Part B Permit Applications

Tank Farms Assistant Manager: Glyn Trenchard
Federal Project Director: Steve Pfaff
Ecology Project Manager: Dan McDonald

M-062-45-T01 Complete Negotiations 6-Months after Last Issuance of System Plan

Due: April 30, 2015.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-062-45-ZZ Negotiate a One-Time Supplemental Treatment Selection

Due: April 30, 2015.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-062-45-ZZ-A Convert M-062-31-T01 through M-062-34-T01 to Interim Milestones

Due: April 30, 2015.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-062-31-T01 Complete Final Design and Submit Resource Conservation and Recovery Act (RCRA) Part B Permit Modification Request for Enhanced WTP & Supplemental Treatment

Due: April 30, 2016.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-062-32-T01 Start Construction of Supplemental Vitrification Facility and/or WTP Enhancements

Due: April 30, 2018.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-062-33-T01 Complete Construction of Supplemental Treatment Vitrification Facility and/or WTP Enhancements

Due: April 30, 2021.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-062-45-XX Complete Negotiations to Resolve Future Disputes M-062-45, Paragraphs 4 and 5

Due: December 31, 2021.

Status: On schedule.

M-062-34-T01 Complete Hot Commissioning of Supplemental Treatment Vitrification Facility and/or WTP Enhancements

Due: December 30, 2022.

Status: In Abeyance. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

M-062-21 Annually Submit Data Which Demonstrates Operation of the WTP at a Rate Sufficient to Meet M-062-00

Due: February 28, 2023.

Status: At risk.

M-062-00 Complete Pretreatment Processing and Vitrification of High-Level Waste (HLW) and Low-Activity Waste (LAW) Tank Wastes

Due: December 31, 2047.

Status: At risk.

Significant Past Accomplishments

- None.

Significant Planned Actions in the Next Six Months

- None.

Issues

- Negotiations on the items identified in the M-062-45 Milestone began on September 8, 2016, in accordance with a decision by the Interagency Management Integration Team.

Direct-Feed Low-Activity Waste Projects

Tank Farms Assistant Manager: Glyn Trenchard
LAWPS Federal Manager: Steve Pfaff
TSCR Federal Manager: Sahid Smith
Ecology Project Manager: Dan McDonald, Jeff Lyon

This section only covers the Tank Farms Project scope of the direct-feed law-activity waste (DFLAW) mission. Please refer to the *Consent Decree Monthly Report* for the WTP scope pertaining to DFLAW.

Low-Activity Waste Pretreatment System:

Significant Past Accomplishments

- Washington River Protection Solutions LLC (WRPS) submitted a contract change proposal for the optimized Low-Activity Waste Pretreatment System (LAWPS), using a nonelutable ion exchange media in a cesium removal facility.

Significant Planned Actions in the Next Six Months

- WRPS to continue design development of the optimized LAWPS with an informal 45 percent design review to be conducted by the end of fiscal year (FY) 2018. (Formal 60 percent and 90 percent design reviews are to be conducted in FY 2019.)

Issues

- None.

Tank-Side Cesium Removal:

Significant Past Accomplishments

- WRPS received and began evaluating vendor proposals for the design, fabrication, and factory acceptance testing of the tank-side cesium removal (TSCR) system on March 12, 2018. The independent Source Evaluation Board convened March 26 and 27 to review the vendor proposals and provide comments. Vendors are to provide a best and final offer proposal by April 11 that addresses comments from the Source Evaluation Board.

Significant Planned Actions in the Next Six Months

- WRPS to award a contract for the design, fabrication, and factory acceptance testing of the TSCR system. The contract is on track to be awarded at the end of June.
- WRPS to complete the engineering procurement specification for the TSCR system and issue the specification during contract award.
- WRPS to conduct 30 percent design review in September 2018. The 60 percent and 90 percent design reviews are to be conducted in FY 2019.

Issues

- None.

242-A Evaporator Status

Tank Farms Assistant Manager: Glyn Trenchard
Federal Program Manager: Paul Hernandez
Ecology Project Manager: Jeff Lyon

The 242-A Evaporator campaign strategy for FY 2018 is in the following table:

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
2018	EC-08	Blend of AP-106 AP-107	AP-103	222-S Laboratory analysis is underway. Process Engineering has initiated Process Control Plan development. Activities are on target to allow an April 2018 campaign.
2018	EC-09	Blend of AP-106 AP-108	AP-104	Waste staging in Tank AW-106 is complete and samples have been obtained. Analysis is underway at 222-S Laboratory. The waste will need to be transferred from Tank AW-106 to Tank AW-102 (242-A Evaporator feed tank) after EC-08 completes. Activities are on target to allow a June 2018 campaign.

Significant Past Accomplishments

- Continued sample analysis at 222-S Laboratory in support of EC-08
- Initiated sample analysis at 222-S Laboratory in support of EC-09
- Continued replacement of control room air conditioning units
- Completed vessel vent continuous air monitor replacement.

Significant Planned Actions in the Next Six Months

- Establish the future campaign and outage scheduling
- Replace fire alarm control panel at 242-A Evaporator.

Issues

- None.

Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility

Tank Farms Assistant Manager: Glyn Trenchard
Federal Program Manager: Richard Valle
Ecology Project Manager: Stephanie Schleif

The Liquid Effluent Retention Facility (LERF) liquid levels, inventory, and received waste are shown in the table below. Volumes in this table are estimated. Tanker shipment volumes are estimated by multiplying the number of shipments by the capacity of the tanker being used.

	242AL-42 (Basin 42)	242AL-43 (Basin 43)	242AL-44 (Basin 44)
Total Volume (as of March. 31, 2018)	~ 0.55 Mgal	~ 6.55 Mgal	~ 7.47 Mgal

Waste Received			
AZ-301 Tanker Shipments	-	-	-
MWT-31 and 34 Leachate	~ 28,000 gal	-	
Other (e.g., Totes, SWLL)	~ 1,500 gal	-	
242-A Evaporator Campaigns	-	-	-

gal = gallon.
Mgal = million gallons.
MWT = mixed waste trench.
SWLL = solid waste landfill lysimeter.

Significant Past Accomplishments

- Total FY 2018 volume processed (as of March 31, 2018): approximately 601,000 gallons
- Completed inter-basin transfer of LERF Basin 42 to LERF Basin 43
- Completed repairs to the Effluent Treatment Facility vapor compressor system.

Significant Planned Actions in the Next Six Months

- Continue processing LERF Basin 43 waste at Effluent Treatment Facility.
- Enter plant cleanout/outage before initiating LERF Basin 44 waste processing.
- Continue work planning of camera visual inspections in support of the Effluent Treatment Facility integrity assessment.
- Final dewatering of LERF Basin 42 to support the cover replacement project, followed by design, procurement/fabrication, and work planning. Begin subcontractor training before mobilizing to LERF Basin 42.

Issues

- The inter-basin transfer from LERF Basin 42 to LERF Basin 43 was halted in late calendar year 2017 due to investigation of increased leachate level at LERF Basin 43. In March this transfer was completed (not including final dewatering for construction activities for the Basin 42 cover replacement). Additional response actions were implemented to continue pumping the leachate, monitor the leachate sump in-leakage rate, and maintain equipment as needed. In speaking with the vendor who installed the leachate collection system, it is anticipated the leachate rate at Basin 43 will not stabilize for several months following the pumping of the excess leachate. Leachate rates continue to be maintained below regulatory limits.

Tank System Update

Tank Farms Assistant Manager: Glyn Trenchard
Federal Program Manager: Dusty Stewart
Ecology Project Manager: Jeff Lyon, Cheryl Whalen

Reports are identified as completed (internal access only) or released (external access).

Double-Shell Tank Integrity:

Significant Past Accomplishments

- Corrosion testing contracts with DNV-GL Laboratory and Savannah River National Laboratory are in place and the U.S. Department of Energy, Office of River Protection (ORP) has received a test plan for FY 2018. Emphasis this year is on new specification development to accommodate DFLAW returns and secondary liner testing.
- Tank AY-101 enhanced annulus visual inspections were performed. Videos were reviewed by WRPS Engineering and no evidence of a primary tank leak was observed.

Significant Planned Actions in the Next Six Months

- Enhanced annulus visual inspections are planned for the following tanks in FY 2018:
  - 241-AP-102
  - 241-AP-103
  - 241-AP-104
  - 241-AP-105
  - 241-AP-106
  - 241-AP-108
  - 241-AW-101
  - 241-AW-102
  - 241-AW-104.
- Ultrasonic testing inspections are planned for the following tanks in FY 2018:
  - 241-AY-101 (ongoing)
  - 241-AZ-101
  - 241-AZ-102.
- In response to receipt of the Washington State Department of Ecology (Ecology) letter 18-NWP-015, "Transmittal of Fourth Mutual Letter of Agreement for 241-AY-102 for Signatures" dated January 29, 2018, the settlement agreement driven video inspections of the Tank AY-102 annulus have been discontinued. Periodic monitoring of the waste accumulation in the annulus will continue on a schedule to be determined by WRPS Engineering.
- Continuing annual comprehensive inspection of Tank AY-101 annulus.
- Secondary liners:

- Perform laboratory testing of secondary liners for corrosion from moisture in the soil and for use of corrosion inhibitors. Both are methods that could be used to protect the secondary liner.
- Continue modeling potential water ingress routes into the annulus systems.
- Perform a visual inspection of the Tank 241-AP-102 annulus floor; scheduled for FY 2018.
- Perform another ultrasonic test scan of the area in question and additional areas in all four quadrants of the Tank 241-AP-102 annulus; scheduled for FY 2019.[2]
- Investigate and develop nondestructive examination methods, in particular long-range, guided wave ultrasonic testing to support more comprehensive examination capability for double-shell tank bottoms. Field testing could begin as early as FY 2019.[2]

Issues

- None.

Single-Shell Tank Integrity:

Significant Past Accomplishments

- WRPS awarded the contract for the single-shell tank (SST) integrity assessment project as described in M-045-91I (assessment of structural integrity) to Meier Architecture Engineering. The integrity assessment activities are underway.
- Completed in-tank video inspections for the tanks B-104, B-105, TX-105, TX-106, TX-109, TX-118, S-107, SX-101, SX-103, SX-105, SX-113, and U-103. Videos are currently being reviewed by WRPS Engineering.
- The following in-tank video inspections have been performed in FY 2018:

– 241-B-104	(completed)	– 241-SX-113	(completed)
– 241-B-105	(completed)	– 241-TX-105	(completed)
– 241-S-107	(completed)	– 241-TX-106	(completed)
– 241-SX-101	(completed)	– 241-TX-109	(completed)
– 241-SX-103	(completed)	– 241-TX-118	(completed)
– 241-SX-105	(completed)	– 241-U-103	(completed).

Significant Planned Actions in the Next Six Months

- None.

[2] Will not occur in the next six months, included for information only.

Issues

- None.

Independent Qualified Registered Professional Engineer Activities:

Significant Past Accomplishments

- Document RPP-PLAN-61510, *Single-Shell Tank Structural Integrity Assessment Plan*, for the 2018 SST independent qualified registered professional engineer (IQRPE) report was released. WRPS awarded the contract for the SST integrity assessment project as described in M-045-91I (assessment of structural integrity) to Meier Architecture Engineering.
- WRPS awarded the contract for the 219-S integrity assessment project to Meier Architecture Engineering.
- Significant Planned Actions in the Next Six Months
- Support IQRPE with continued development of the SST integrity assessment report.
- Work continues on document RPP-PLAN-61349, *Effluent Treatment Facility Integrity Program Plan*. The plan will support the FY 2019 IQRPE Effluent Treatment Facility integrity assessment.
- Planning is underway for conducting visual, ultrasonic, and leak tests in the 219-S facility. Document RPP-PLAN-61634, *219-S Integrity Assessment Plan*, has been released and will serve as a guide for conducting these inspections.

Issues

- None.

Single-Shell Tank Integrity Assurance

Tank Farms Assistant Manager: Glyn Trenchard
Federal Program Manager: Dusty Stewart
Ecology Project Manager: Jeff Lyon

Reports are identified as completed (internal access only) or released (external access).

M-045-91I Provide Independent, Qualified, Registered Professional Engineer (IQRPE) Certification of Single-Shell Tanks (SSTs) Structural Integrity

Due: September 30, 2018.

Status: On schedule.

Significant Past Accomplishments

- Document RPP-PLAN-61510, for the 2018 SST IQRPE report was released. WRPS awarded the contract for the SST integrity assessment project as described in M-045-91I (assessment of structural integrity) to Meier Architecture Engineering.

Significant Planned Actions in the Next Six Months

- Support IQRPE with continued development of the SST integrity assessment.

Issues:

- None.

In-Tank Characterization and Summary

Tank Farms Assistant Manager: Glyn Trenchard
Federal Program Manager: Dusty Stewart
Ecology Project Manager: Jeff Lyon

Significant Past Accomplishments

For the period from March 1 through March 31, 2018, the following reports were completed (internal access only) or released (external access):

Completed:

- RPP-RPT-60490, *Final Analytical Report for Tank 241-SY-102 Grab Samples Collected September 2017*, Rev. 1
- RPP-RPT-60563, *Final Analytical Report for Tank 241-AW-102 Grab Samples in Support of Evaporator Campaign EC-08*, Rev. 0
- RPP-RPT-60630, *Final Report for Tank 241-C-105 Hard Heel Retrieval Fiscal Year 2017*, Rev. 0
- RPP-RPT-60687, *Final Analytical Report for Tank 241-AP-106 Grab Sampling and Analysis Plan – Fiscal Year 2018*, Rev. 0.

Released:

- HNF-EP-0182, *Waste Tank Summary Report for Month Ending February 28, 2018*, Rev. 362
- RPP-PLAN-58022, *Sampling and Analysis Plan for 242-A Evaporator Cooling Water and Steam Condensate*, Rev. 4
- RPP-PLAN-62073, *Tank 241-AW-105 Grab Sampling and Analysis Plan for Fiscal Year 2018*, Rev. 0
- RPP-RPT-43493, *Derivation of Best-Basis Inventory for Tank 241-AP-106 as of January 1, 2018*, Rev. 5
- RPP-RPT-43992, *Derivation of Best-Basis Inventory for Tank 241-AN-106 as of March 1, 2018*, Rev. 19
- RPP-RPT-46772, *Derivation of Best-Basis Inventory for Tank 241-AN-107 as of January 1, 2018*, Rev. 3
- RPP-RPT-46792, *Derivation of Best-Basis Inventory for Tank 241-AW-102 as of January 1, 2018*, Rev. 14
- RPP-RPT-51225, *Derivation of Best-Basis Inventory for Tank 241-TX-105 as of February 1, 2018*, Rev. 2
- RPP-RPT-54017, *Derivation of Best-Basis Inventory for Tank 241-AP-102 as of January 1, 2018*, Rev. 6

- RPP-RPT-58071, *Derivation of Best-Basis Inventory for Tank 241-C-105 as of March 1, 2018*, Rev. 5
- RPP-RPT-58456, *Derivation of Best-Basis Inventory for Tank 241-AP-103 as of February 1, 2018*, Rev. 5
- RPP-RPT-58620, *Derivation of Best-Basis Inventory for Tank 241-AX-101 as of January 1, 2018*, Rev. 1.

For the period from March 1 through March 31, 2018, the following sampling was conducted:

- Completed 241-AW-106 liquid grab sampling March 12, 2018. Thirteen samples were received at the laboratory.
- Completed 241-AY-101 liquid grab sampling March 27, 2018. Nine samples were received at the laboratory.
- Completed 241-AZ-102 liquid grab sampling March 30, 2018. Eight samples were received at the laboratory.

Significant Planned Actions in the Next Six Months

- *Tank Sampling:*
  - Tank 241-C-105 post-retrieval solids grab sampling is planned for April 2018.
  - Tank 241-AW-105 liquid grab sampling is planned for May 2018.
  - Tank 241-AY-101 post-recirculation liquid grab sampling is planned for May 2018.
  - Tank 241-AZ-102 post-recirculation liquid grab sampling is planned for May 2018.
  - Tank 241-AY-102 solids grab sampling is planned for August 2018.
  - Tank 241-A-105 solids grab sampling is planned for August 2018.

Issues

- None.

Best-Basis Inventory Updates

Best-basis inventory updates for the following tanks were completed in March 2018:

- 241-AN-106
- 241-AN-107
- 241-AP-102
- 241-AP-103
- 241-AP-106
- 241-AW-102
- 241-AX-101
- 241-C-105
- 241-TX-105.

Best-basis inventory updates for the following tanks are currently planned to be completed in April 2018:

- 241-AP-103
- 241-AP-108
- 241-AX-104
- 241-AY-101
- 241-SY-103.

Data Quality Objectives Updates

- None.

Single-Shell Tank Closure Program

Tank Farms Assistant Manager: Glyn Trenchard
Federal Program Manager: Jan Bovier
Ecology Project Manager: Jeff Lyon

M-045-59 Control Surface Water Infiltration Pathways as Needed

Due: To be determined. Will be implemented if 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).

Status: On Schedule.

M-045-62 Submit the Draft Tier 3 Closure with Corrective Measures in Phase 2 Corrective Measures Implementation Work Plan (CMIP) for WMA-C

Due: To be established in accordance with the date identified in the M-45-82 Tier 2 closure plan.

Status: On Schedule.

M-045-83 Complete the Closure of WMA-C by Completing Closure Activities Specified in the Tier 2 Closure Plan

Due: To be established in accordance with the date identified in the M-45-82 Tier 2 closure plan.

Status: On Schedule.

M-045-84 Initiate Negotiations to Establish HFFACO Interim Milestones for Closure of 2nd SST WMA

Due: April 3, 2017.

Status: Complete (March 14, 2017). Negotiations initiated on March 14, 2017.

Note: Decision on location of next WMA to be closed needs to be finalized.

M-045-92O Barrier 3 (TX Tank Farm Barrier) Design/Monitoring Plan Submitted to Ecology

Due: June 30, 2018.

Status: To be missed. This will be negotiated as part of draft Change Control Form M-45-17-03. A joint decision between ORP and Ecology regarding the size of the barrier needs to be made to allow the design to progress. An initial decision on the outline of the first of three panels which will constitute barrier 3 was made on March 20, 2018, allowing design work to begin on a portion of the barrier, but not on the full barrier. ORP sent draft Tri-Party Agreement (TPA) Change Control Form M-45-17-03 to Ecology via email on

December 14, 2017. This change control form proposes to modify Milestone M-045-92 to incorporate an expansion of barrier design and construction of barriers 1 and 2 in SX Tank Farm; proposes to establish dates for agreement of the surface area to be covered by barrier 3 in TX Tank Farm and barrier 4 in U Tank Farm; and proposes to modify the schedule dates for design and construction of barriers 3 and 4. This change control form would refine and detail the interim surface barrier work to be performed under M-045-92 in order to allow the work to progress in an orderly and timely fashion. Some of the interim dates will need to be adjusted and the entire package will need to be negotiated with Ecology. ORP received Ecology comments on the draft change control form on February 22, 2018, via email. Need to negotiate.

M-045-92T Barrier 3 (TX Tank Farm Barrier) Design/Monitoring Plan Approved by Ecology

Due: September 30, 2018.

Status: At Risk. A joint decision between ORP and Ecology regarding the size of the barrier needs to be made to allow the design to progress. ORP sent draft TPA Change Control Form M-45-17-03 to Ecology via email on December 14, 2017. This change control form proposes to modify Milestone M-045-92 to incorporate an expansion of barrier design and construction of barriers 1 and 2 in SX Tank Farm; proposes to establish dates for agreement of the surface area to be covered by barrier 3 in TX Tank Farm and barrier 4 in U Tank Farm; and proposes to modify the schedule dates for design and construction of barriers 3 and 4. This change control form would refine and detail the interim surface barrier work to be performed under M-045-92 in order to allow the work to progress in an orderly and timely fashion. Some of the interim dates will need to be adjusted and the entire package will need to be negotiated with Ecology. ORP received Ecology comments on the draft change control form on February 22, 2018, via email. Need to negotiate.

M-045-92N Complete Construction of Barriers 1 and 2 in 241-SX Farm

Due: October 31, 2018.

Status: On schedule.

M-045-92Q Barrier 4 (U Tank Farm Barrier) Design/Monitoring Plan Submitted to Ecology

Due: June 30, 2019.

Status: At Risk. A joint decision between ORP and Ecology regarding the size of the barrier needs to be made to allow the design to progress. ORP sent draft TPA Change Control Form M-45-17-03 to Ecology via email on December 14, 2017. This change control form proposes to modify Milestone M-045-92 to incorporate an expansion of barrier design and construction of barriers 1 and 2 in SX Tank Farm; proposes to establish dates for agreement of the surface area to be covered by barrier 3 in TX Tank Farm and barrier 4 in U Tank

Farm; and proposes to modify the schedule dates for design and construction of barriers 3 and 4. This change control form would refine and detail the interim surface barrier work to be performed under M-045-92 in order to allow the work to progress in an orderly and timely fashion. Some of the interim dates will need to be adjusted and the entire package will need to be negotiated with Ecology. ORP received Ecology comments on the draft change control form on February 22, 2018, via email. Need to negotiate.

M-045-92U **Barrier 4 (U Tank Farm Barrier) Design/Monitoring Plan Approved by Ecology**

Due: September 30, 2019.

Status: At Risk. A joint decision between ORP and Ecology regarding the size of the barrier needs to be made to allow the design to progress. ORP sent draft TPA Change Control Form M-45-17-03 to Ecology via email on December 14, 2017. This change control form proposes to modify Milestone M-045-92 to incorporate an expansion of barrier design and construction of barriers 1 and 2 in SX Tank Farm; proposes to establish dates for agreement of the surface area to be covered by barrier 3 in TX Tank Farm and barrier 4 in U Tank Farm; and proposes to modify the schedule dates for design and construction of barriers 3 and 4. This change control form would refine and detail the interim surface barrier work to be performed under M-045-92 in order to allow the work to progress in an orderly and timely fashion. Some of the interim dates will need to be adjusted and the entire package will need to be negotiated with Ecology. ORP received Ecology comments on the draft change control form on February 22, 2018, via email. Need to negotiate.

M-045-92P **Complete Construction of Barrier 3 (TX Tank Farm Barrier)**

Due: October 31, 2019.

Status: At Risk. A joint decision between ORP and Ecology regarding the size of the barrier needs to be made to allow the design to progress. ORP sent draft TPA Change Control Form M-45-17-03 to Ecology via email on December 14, 2017. This change control form proposes to modify Milestone M-045-92 to incorporate an expansion of barrier design and construction of barriers 1 and 2 in SX Tank Farm; proposes to establish dates for agreement of the surface area to be covered by barrier 3 in TX Tank Farm and barrier 4 in U Tank Farm; and proposes to modify the schedule dates for design and construction of barriers 3 and 4. This change control form would refine and detail the interim surface barrier work to be performed under M-045-92 in order to allow the work to progress in an orderly and timely fashion. Some of the interim dates will need to be adjusted and the entire package will need to be negotiated with Ecology. ORP received Ecology comments on the draft change control form on February 22, 2018, via email. Need to negotiate.

M-045-92R Complete Construction of Barrier 4 (U Tank Farm Barrier)

Due: October 31, 2020.

Status: At Risk. A joint decision between ORP and Ecology regarding the size of the barrier needs to be made to allow the design to progress. ORP sent draft TPA Change Control Form M-45-17-03 to Ecology via email on December 14, 2017. This change control form proposes to modify Milestone M-045-92 to incorporate an expansion of barrier design and construction of barriers 1 and 2 in SX Tank Farm; proposes to establish dates for agreement of the surface area to be covered by barrier 3 in TX Tank Farm and barrier 4 in U Tank Farm; and proposes to modify the schedule dates for design and construction of barriers 3 and 4. This change control form would refine and detail the interim surface barrier work to be performed under M-045-92 in order to allow the work to progress in an orderly and timely fashion. Some of the interim dates will need to be adjusted and the entire package will need to be negotiated with Ecology. ORP received Ecology comments on the draft change control form on February 22, 2018, via email. Need to negotiate.

M-045-85 Initiate Negotiations of HFFACO Interim Milestones for closure of Remaining WMAs

Due: January 31, 2022.

Status: On schedule.

M-045-00 Complete Closure of All SST Farms

Due: January 31, 2043.

Status: At risk. Decision document 2016-005 signed August 22, 2016, requires this milestone to be addressed with the negotiations supporting M-062-45. Negotiations began on September 8, 2016.

Significant Past Accomplishments

- ORP and Ecology agreed to locations for interim barrier 3 (TX Tank Farm) and interim barrier 4 (U Tank Farm) (Milestone M-045-92S) and ORP submitted the proposed change control form (M-45-17-03) for related activities.
- Ecology approved the SX Tank Farm expansion barrier design for construction on January 18, 2018, based on Ecology's review of the 60 percent and 90 percent designs.
- Ecology and ORP agreed to the approach for designing interim barrier 3 using three panels, and agreed to the outline of one of the three panels on March 20, 2018.

Significant Planned Activities in the Next Six Months

- Begin resolution of Ecology's comments on the *Resource Conservation and Recovery Act* tier 1, 2, and 3 closure plans.

- Begin resolution of Ecology's comments on the *Resource Conservation and Recovery Act* facility investigation report and corrective measures study report for C Tank Farm WMA
- Complete construction of the SX barrier evapotranspiration basin
- Complete construction of the SX south barrier (barrier 1)
- Complete construction of the SX north barrier (barrier 2).

Issues

- DOE/ORP-2014-02, *Clean Closure Practicality Demonstration for the Single-Shell Tanks*, Rev. 1 dated July 23, 2014. ORP received Ecology letter 15-NWP-149, "Department of Ecology's Response Comments Regarding Review of the *Clean Closure Practicability Demonstration for the Single-Shell Tanks*, DOE/ORP-2014-02," dated August 3, 2015. Ecology provided partial comments on the document, ORP met with Ecology in November 2017 to discuss path forward. Awaiting final Ecology comments.
- ORP and Ecology need to agree on the area to be covered by an interim surface barrier at TX Tank Farm to support Milestone M-045-92O. ORP provided a draft TPA Change Package via email to Ecology on December 14, 2017. ORP received Ecology comments on the draft change control form on February 22, 2018, via email. Need to negotiate.
- Document RPP-RPT-58858, *Tier 1 Closure Plan Single-Shell Tank System*. Submitted to Ecology September 30, 2015. Received partial comments on April 11, 2016. Awaiting final Ecology comments.
- Document RPP-RPT-58339, *Phase 2 RCRA Facility Investigation Report for Waste Management Area C*. Submitted to Ecology on December 29, 2016. Awaiting Ecology comments.
- Document RPP-RPT-59379, *Waste Management Area C Phase 2 Corrective Measures Study Report*, to complete Milestone M-045-61A. Submitted to Ecology on December 29, 2016. Awaiting Ecology comments.
- Document RPP-RPT-59389, *Tier 2 Resource Conservation and Recovery Act (RCRA) Closure Action Plan for Waste Management Area C*. Submitted to Ecology on May 15, 2017. Ecology requested a continuing extension on September 12, 2017, to provide comments by October 16, 2017. Ecology subsequently extended their response comments due date to November 22, 2017; to January 16, 2018; to February 28, 2018; and then to May 31, 2018 (M-045-82). Awaiting Ecology comments.
- Document RPP-RPT-59390, *Tier 3 Resource Conservation and Recovery Act (RCRA) Component Closure Action Plan for 241-C-200 Series Tanks*. Submitted to Ecology on May 15, 2017. Ecology requested a continuing extension on September 12, 2017, to provide comments by October 16, 2017. Ecology subsequently extended their response comments due date to November 22, 2017; to January 16, 2018; to February 28, 2018; and then to May 31, 2018 (M-045-82A). Awaiting Ecology comments.

Single-Shell Tank Retrieval Program

Tank Farms Assistant Manager: Glyn Trenchard
Federal Program Manager: Jeff Rambo
Ecology Project Manager: Jeff Lyon

M-045-86 Submit Retrieval Data Report (RDR) To Ecology for 19 Tanks Retrieved Under Consent Decree

Due: To be determined (12 months after retrieval certification).

Status: On schedule. Retrieval data report submitted when completed.

M-045-70 Complete Waste Retrieval from All Remaining Single Shell Tanks (SSTs)

Due: December 31, 2040.

Status: At risk. Decision document 2016-005 signed August 22, 2016, requires this milestone be addressed with the negotiations supporting Milestone M-062-45. Negotiations began on September 8, 2016.

Significant Past Accomplishments

- Refer to the Consent Decree monthly report for retrieval accomplishments.

Significant Planned Activities in the Next Six Months

- Refer to the Consent Decree monthly report for planned activities.

Issues

- Refer to the Consent Decree monthly report for retrieval issues.

Tank Operations Contract Overview

Earned Value Data: Fiscal Year 2018 February-18

Tank Farms ORP-0014 WBS 5 - River Protection Project										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	$61,045	$53,015	$51,943	($8,030)	$1,072	0.87	1.02			
FYTD	$263,940	$242,139	$242,544	($21,802)	($405)	0.92	1.00	$698,480		
CTD	$4,356,731	$4,310,802	$4,286,347	($45,929)	$24,455	0.99	1.00	$4,791,270	$4,783,153	$8,117

ACWP	actual cost of work performed.	CV	cost variance.
BAC	budget at completion.	EAC	estimate at completion.
BCWP	budgeted cost of work performed.	FYTD	fiscal year to date.
BCWS	budgeted cost of work scheduled.	SPI	schedule performance index.
CM	current month.	SV	schedule variance.
CPI	cost performance index.	VAC	variance at completion.
CTD	contract to date.		

The Earned Value Management System is intended to provide a status of how the contractor is progressing against its monthly planned work (i.e., schedule), and whether it is costing more or less to complete the work than planned. The earned value analysis is not intended to be a measurement of performance against existing TPA milestones.

The project plan is measured by expressing the schedule in terms of dollars spread over the anticipated project duration, and then for each month, determining how much of the planned work was accomplished or "earned," as measured in equivalent dollars. If more work is accomplished than planned, then the project is ahead of schedule and has a favorable schedule variance (SV). Similarly, if less work is accomplished, the project is behind schedule and has an unfavorable SV. Accomplished work is reported in the month it was completed, which may not be when it was planned. For example, work completed in a month earlier than planned would be reported as a favorable SV for the month in which it was completed, but would be reported as an unfavorable SV in the month it was planned. The end result would be a net zero overall cumulative SV over these months. Likewise, work completed late will recover an earlier reported unfavorable SV.

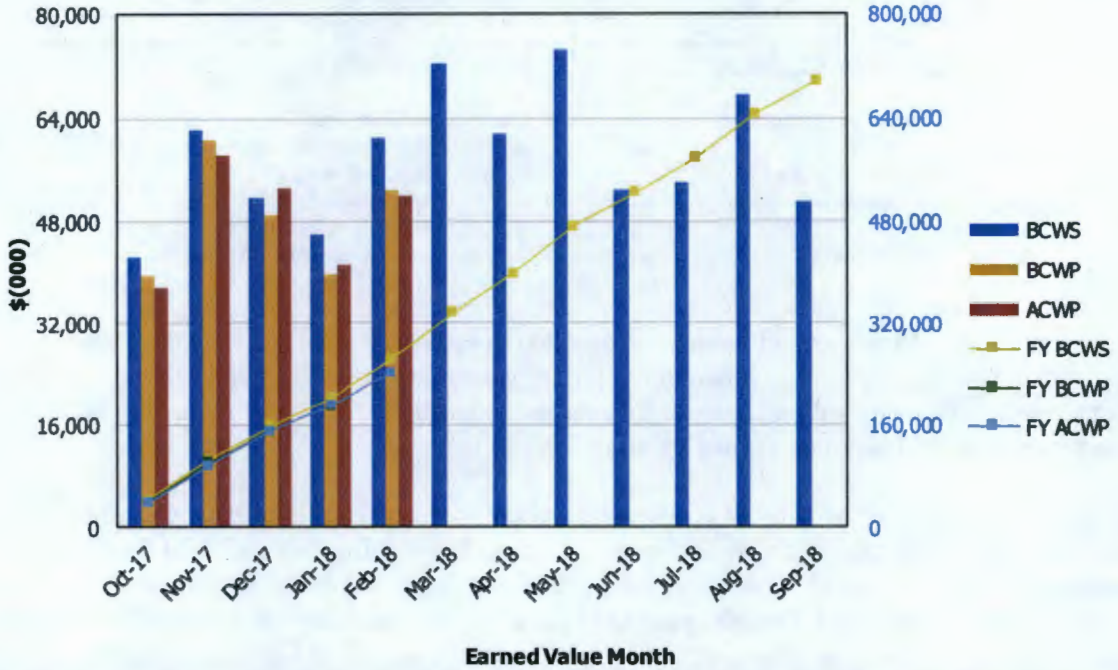
The cost variance (CV) measures the actual cost of work performed against the earned dollar value of that performed work. As an example, assume $10,000 of work was planned to-date, $8,000 was reported as being performed (earned), at an actual cost of $9,000. This work would be reported as being $2,000 behind schedule [a negative or unfavorable SV: $8,000–$10,000 = ($2,000)], and has cost $1,000 more [a negative or unfavorable CV: $8,000–$9,000 = ($1,000)] than was planned for completing that work scope. Likewise, a favorable or positive CV would be reported if it cost less to complete the work than the performed dollar value of the work.

The SV and CV are reported for each monthly period, FY-to-date, as well as for the contract-to-date value. The monthly variances can fluctuate significantly (for reasons noted earlier), so the FY or contract-to-date report provides a better indicator of the overall project completion status and can give a reasonable projection of how the project will finish, based on the progress-to-date.

Earned Value Data: Fiscal Year 2018 February-18

Tank Farms ORP-0014
WBS 5 - River Protection Project

EVMS Monthly and Fiscal Year Values



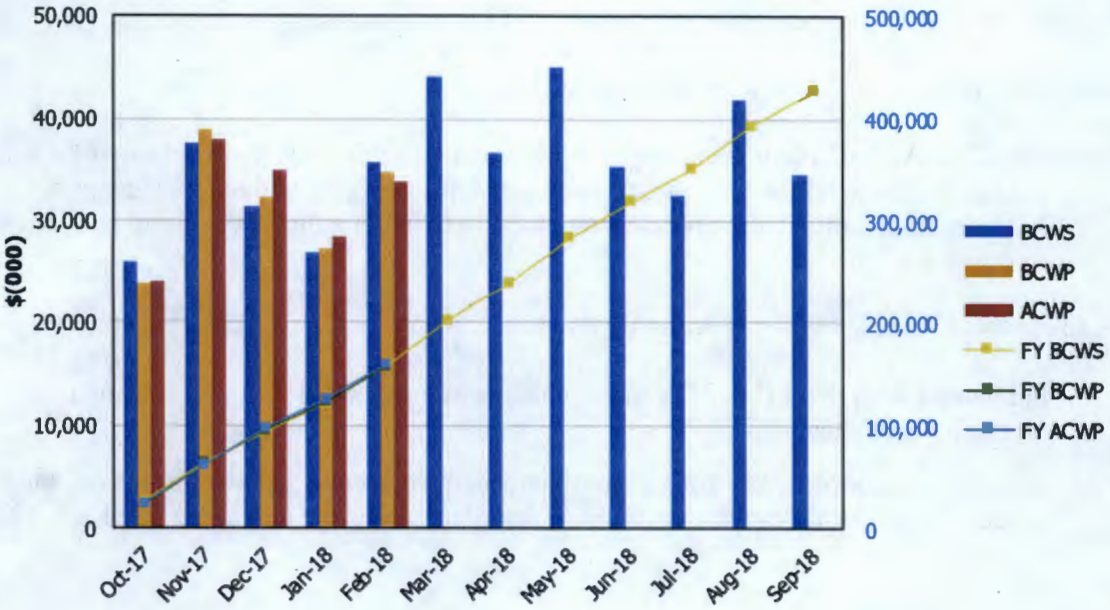
Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2017	$42,505	$39,501	$37,634	0.93	1.05	$42,505	$39,501	$37,634	0.93	1.05
Nov 2017	$62,362	$60,635	$58,396	0.97	1.04	$104,867	$100,136	$96,029	0.95	1.04
Dec 2017	$51,860	$49,124	$53,170	0.95	0.92	$156,727	$149,260	$149,199	0.95	1.00
Jan 2018	$46,168	$39,864	$41,402	0.86	0.96	$202,896	$189,124	$190,601	0.93	0.99
Feb 2018	$61,045	$53,015	$51,943	0.87	1.02	$263,940	$242,139	$242,544	0.92	1.00
Mar 2018	$72,443					$336,384				
Apr 2018	$61,586					$397,969				
May 2018	$74,537					$472,506				
Jun 2018	$53,080					$525,586				
Jul 2018	$54,093					$579,678				
Aug 2018	$67,665					$647,343				
Sep 2018	$51,137					$698,480				
CTD	$4,356,731	$4,310,802	$4,286,347	0.99	1.01					

ACWP	actual cost of work performed.	CM	current month.
BCWP	budgeted cost of work performed.	CTD	contract to date.
BCWS	budgeted cost of work scheduled.	FY	fiscal year.
CPI	cost performance index.	SPI	schedule performance index.

Earned Value Data: Fiscal Year 2018 February-18

Tank Farms ORP-0014
WBS 5.1 - Base Operations

EVMS Monthly and Fiscal Year Values



Earned Value Month

Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2017	$25,995	$23,854	$24,021	0.92	0.99	$25,995	$23,854	$24,021	0.92	0.99
Nov 2017	$37,542	$38,850	$37,961	1.03	1.02	$63,537	$62,704	$61,982	0.99	1.01
Dec 2017	$31,376	$32,304	$35,027	1.03	0.92	$94,913	$95,008	$97,009	1.00	0.98
Jan 2018	$26,992	$27,266	$28,456	1.01	0.96	$121,905	$122,274	$125,465	1.00	0.97
Feb 2018	$35,800	$34,837	$33,927	0.97	1.03	$157,704	$157,111	$159,392	1.00	0.99
Mar 2018	$44,112					$201,816				
Apr 2018	$36,710					$238,526				
May 2018	$45,062					$283,588				
Jun 2018	$35,405					$318,993				
Jul 2018	$32,452					$351,445				
Aug 2018	$41,954					$393,399				
Sep 2018	$34,566					$427,964				
CTD	$2,882,909	$2,863,856	$2,833,777	0.99	1.01					

ACWP	actual cost of work performed.	CM	current month.
BCWP	budgeted cost of work performed.	CTD	contract to date.
BCWS	budgeted cost of work scheduled.	FY	fiscal year.
CPI	cost performance index.	SPI	schedule performance index.

Tank Farms Assistant Manager: Glyn Trenchard

Federal Project Director: Ellen Mattlin

5.01 – Base Operations

The February 2018 variances below do not impact TPA milestones.

The **unfavorable** SV of ($963,000) is primarily due to:

- The Tank AZ-102 pump and jumper replacement is behind schedule because of a delay to field activities to remove the pump. Field activities are delayed due to a change in location of the bottled air supply/change facility to better support the pump and jumper replacement.

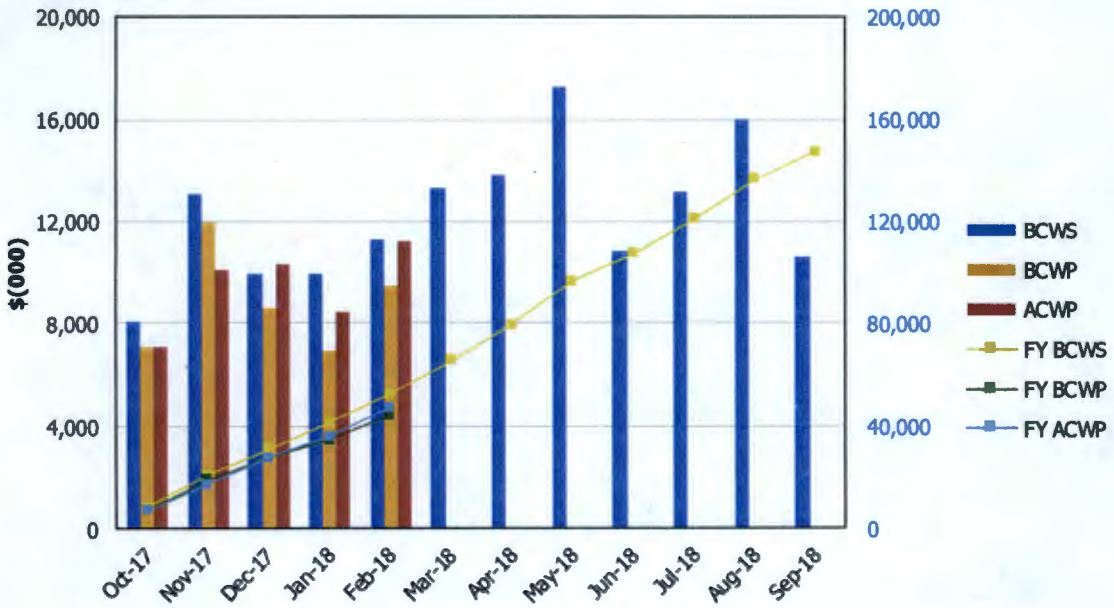
The **favorable** CV of $909,800 is primarily due to:

- Fabricated equipment (NUCON vapor abatement unit) actual cost was less than originally estimated.
- Efficiencies gained by the utilization of extended work days, resulted in less days that subcontractor resources were required to complete ultrasonic testing on Tank AY-101.

Earned Value Data: Fiscal Year 2018 February-18

Tank Farms ORP-0014
WBS 5.2 - Retrieve and Close SSTs

EVMS Monthly and Fiscal Year Values



Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2017	$8,053	$7,119	$7,127	0.88	1.00	$8,053	$7,119	$7,127	0.88	1.00
Nov 2017	$13,058	$11,996	$10,119	0.92	1.19	$21,111	$19,115	$17,246	0.91	1.11
Dec 2017	$9,964	$8,572	$10,318	0.86	0.83	$31,075	$27,686	$27,563	0.89	1.00
Jan 2018	$9,940	$6,911	$8,464	0.70	0.82	$41,015	$34,597	$36,027	0.84	0.96
Feb 2018	$11,310	$9,456	$11,225	0.84	0.84	$52,326	$44,053	$47,252	0.84	0.93
Mar 2018	$13,313					$65,639				
Apr 2018	$13,839					$79,477				
May 2018	$17,292					$96,770				
Jun 2018	$10,845					$107,614				
Jul 2018	$13,133					$120,747				
Aug 2018	$15,991					$136,738				
Sep 2018	$10,612					$147,350				

CTD	$855,897	$848,716	$885,803	0.99	0.96

ACWP	actual cost of work performed.	CM	current month.
BCWP	budgeted cost of work performed.	CTD	contract to date.
BCWS	budgeted cost of work scheduled.	FY	fiscal year.
CPI	cost performance index.	SPI	schedule performance index.

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Jeff Rambo

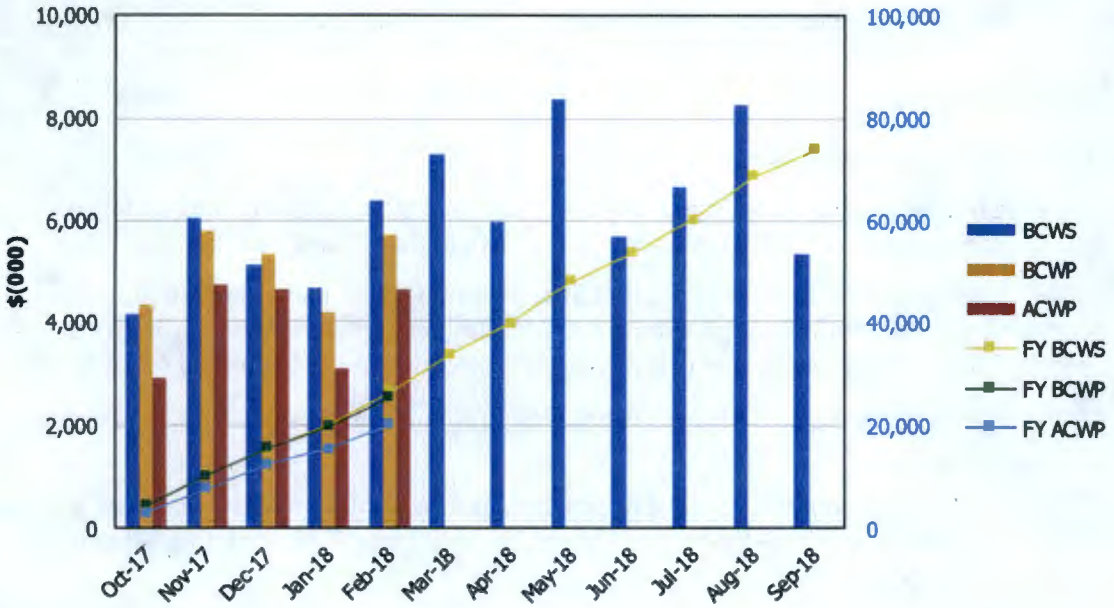
5.02 – Retrieve and Close Single-Shell Tanks

For the retrieval portion see the Consent Decree monthly report for cost and schedule status.

Earned Value Data: Fiscal Year 2018 February-18

Tank Farms ORP-0014
WBS 5.3 - WFD/Treatment Plng/DST Retrieval/Closure

EVMS Monthly and Fiscal Year Values



Earned Value Month

Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2017	$4,163	$4,326	$2,909	1.04	1.49	$4,163	$4,326	$2,909	1.04	1.49
Nov 2017	$6,068	$5,798	$4,754	0.96	1.22	$10,231	$10,124	$7,663	0.99	1.32
Dec 2017	$5,132	$5,334	$4,651	1.04	1.15	$15,363	$15,458	$12,314	1.01	1.26
Jan 2018	$4,660	$4,193	$3,092	0.90	1.36	$20,023	$19,651	$15,406	0.98	1.28
Feb 2018	$6,383	$5,712	$4,641	0.89	1.23	$26,406	$25,363	$20,047	0.96	1.27
Mar 2018	$7,286					$33,692				
Apr 2018	$5,971					$39,663				
May 2018	$8,392					$48,056				
Jun 2018	$5,674					$53,730				
Jul 2018	$6,642					$60,372				
Aug 2018	$8,284					$68,656				
Sep 2018	$5,354					$74,010				
CTD	$459,163	$455,682	$416,858	0.99	1.09					

ACWP	actual cost of work performed.	CM	current month.
BCWP	budgeted cost of work performed.	CTD	contract to date.
BCWS	budgeted cost of work scheduled.	FY	fiscal year.
CPI	cost performance index.	SPI	schedule performance index.

One System Division Director: Jon Peschong

Federal Program Manager: Kaylin Burnett

5.03 – Waste Feed Delivery/Treatment

The February 2018 variances below do not impact TPA milestones.

The **unfavorable** SV of ($671,100) is primarily due to:

- Small delays among numerous projects
  - The TSCR Upgrades Project experienced a late start on the scoping and design updates due to WRPS resources working on higher priority work.
  - The Integrated Disposal Facility Glass Testing Project had a three month delay in the single pass flow-through testing and analysis performed by the Pacific Northwest National Laboratory due to delayed glass selection at the beginning of FY 2018.
  - In the Waste Feed Delivery Technology Program, three projects are experiencing delays:
    - The duration of the proof of principle testing for the mechanical waste gathering system is taking longer than originally anticipated, resulting in a delay in the start of design activities.
    - The nondestructive evaluation functions and requirements document was more complicated and took longer than planned.
    - Start of on-line monitoring activities was delayed to ensure there was not a duplication in other ongoing testing.
  - There has also been a delay in the DFLAW solid secondary waste Phase 3 testing due to contracting/procurement issues with Savannah River National Laboratory.

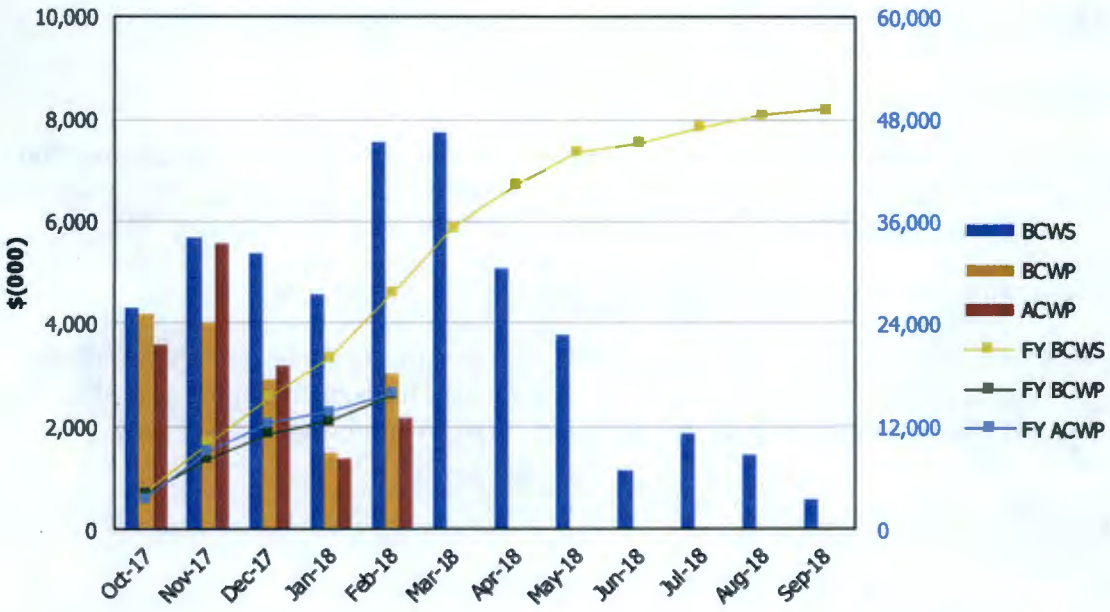
The **favorable** CV of $1,070,700 is primarily due to:

- Many small variances, but a few of the larger variances include the following:
  - The Waste Feed Delivery Technical Baseline Project has experienced delayed work in predictive maintenance due to a delay in receiving materials.
  - Resource efficiencies in three projects:
    - The DFLAW Liquid Secondary Waste Stream Project, experienced cost savings in the completion of melter system modifications and glass simulant material costs.
    - The Waste Treatment and Immobilization Plant Transition Support Project required less resources than planned for the Low-Activity Waste Facility melter transportation test work scope.
    - The Technology Maturation and Analysis Project required less management oversight/support than was originally planned.

Earned Value Data: Fiscal Year 2018 February-18

Tank Farms ORP-0014
WBS 5.5 - Treat Waste

EVMS Monthly and Fiscal Year Values



Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2017	$4,294	$4,202	$3,576	0.98	1.17	$4,294	$4,202	$3,576	0.98	1.17
Nov 2017	$5,693	$3,992	$5,562	0.70	0.72	$9,988	$8,193	$9,139	0.82	0.90
Dec 2017	$5,389	$2,914	$3,174	0.54	0.92	$15,377	$11,108	$12,313	0.72	0.90
Jan 2018	$4,576	$1,494	$1,391	0.33	1.07	$19,953	$12,601	$13,704	0.63	0.92
Feb 2018	$7,552	$3,010	$2,150	0.40	1.40	$27,504	$15,612	$15,854	0.57	0.98
Mar 2018	$7,732					$35,236				
Apr 2018	$5,066					$40,303				
May 2018	$3,790					$44,093				
Jun 2018	$1,155					$45,248				
Jul 2018	$1,866					$47,115				
Aug 2018	$1,436					$48,550				
Sep 2018	$604					$49,155				
CTD	$138,653	$122,438	$130,747	0.88	0.94					

ACWP	actual cost of work performed.	CM	current month.
BCWP	budgeted cost of work performed.	CTD	contract to date.
BCWS	budgeted cost of work scheduled.	FY	fiscal year.
CPI	cost performance index.	SPI	schedule performance index.

Tank Farms Assistant Manager: Glyn Trenchard

Deputy Federal Project Director: Janet Diediker

5.05 – Treat Waste

The February 2018 variances below do not impact the TPA milestones.

The **unfavorable** SV of ($4,541,500) is primarily due to:

- The schedule variance resulted primarily from U.S. Department of Energy direction to WRPS to cease certain aspects of the current LAWPS design strategy and submit a contract change proposal for an optimized LAWPS design strategy.

The **favorable** CV of $860,200 is primarily due to:

- Fewer labor hours than planned are being charged by the Architect Engineer (A/E) contractor for support in level-of-effort accounts. This is the result of reduced duration and effort needed to support the development of an optimized design strategy.