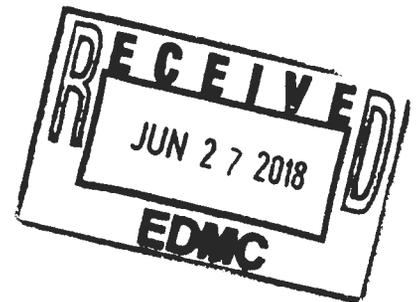


1249490
[0065289H]

FINAL

Office of River Protection
Tri-Party Agreement
Report
June¹ 2018



¹ The narrative descriptions of progress in this report cover the period from May 1-31, 2018. Earned Value Management System data and descriptions cover the period of April 1-30, 2018.

<u>TOPIC</u>	<u>PAGE</u>
ACRONYMS AND ABBREVIATIONS	2
ADMINISTRATIVE ITEMS/MILESTONE STATUS	3
SYSTEM PLAN	5
ACQUISITION OF NEW FACILITIES	6
SUPPLEMENTAL TREATMENT AND PART B PERMIT APPLICATIONS	8
DIRECT-FEED LOW-ACTIVITY WASTE PROJECTS.....	11
242-A EVAPORATOR STATUS	13
LIQUID EFFLUENT RETENTION FACILITY AND 200 AREA EFFLUENT TREATMENT FACILITY	14
TANK SYSTEM UPDATE.....	16
SINGLE-SHELL TANK INTEGRITY ASSURANCE	19
IN-TANK CHARACTERIZATION AND SUMMARY	20
SINGLE-SHELL TANK CLOSURE PROGRAM	22
SINGLE-SHELL TANK RETRIEVAL PROGRAM	26
TANK OPERATIONS CONTRACT OVERVIEW.....	27



Acronyms and Abbreviations

CV	cost variance
DFLAW	direct-feed low-activity waste
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
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 PM	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

Milestone	Title	Due Date	TPA PM	Status
M-045-92O	Barrier 3 (TX Tank Farm) Design/Monitoring Plan Submitted to Ecology	06/30/2018	Bovier, Jan B	To Be Missed
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.

PM = project manager.

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

- In May, U.S. Department of Energy, Office of River Protection (ORP), U.S. Environmental Protection Agency (EPA) and Washington State Department of Ecology (Ecology) agreed to an extension of negotiations related to M-062-45 Milestone. In a document signed on May 29, 2018, the Parties agreed that it was prudent to extend the completion of the negotiations in order to allow the Parties to further develop proposals. The new date for concluding negotiations is June 30, 2018.

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

- 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.

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 Milestone. 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 Milestone. 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 Milestone. Negotiations began on September 8, 2016.

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

Due: To Be Determined.

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

Significant Past Accomplishments

- In May, ORP, EPA and Ecology agreed to an extension of negotiations related to M-062-45 Milestone. In a document signed on May 29, 2018, the Parties agreed that it was prudent to extend the completion of the negotiations in order to allow the Parties to further develop proposals. The new date for concluding negotiations is June 30, 2018.

Significant Planned Actions in the Next Six Months

- Continue negotiations of the M-062-45 Milestone and related milestones.

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 Milestone. 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 Milestone. 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 Milestone. 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 Milestone. 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 Milestone. 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 Milestone. 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 Milestone. 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

- In May, ORP, EPA and Ecology agreed to an extension of negotiations related to M-062-45 Milestone. In a document signed on May 29, 2018, the Parties agreed that it was prudent to extend the completion of the negotiations in order to allow the Parties to further develop proposals. The new date for concluding negotiations is June 30, 2018.

Significant Planned Actions in the Next Six Months

- Continue negotiations of the M-062-45 Milestone and related milestones.

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

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

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

Low-Activity Waste Pretreatment System:

Significant Past Accomplishments

- Washington River Protection Solutions LLC (WRPS) continues design, testing, environmental permitting, and nuclear safety and licensing activities. Significant Planned Actions in the Next Six Months
- WRPS to continue design development of the optimized Low-Activity Waste Pretreatment System (LAWPS) with an informal 45 percent design review currently scheduled for the end of fiscal year (FY) 2018 and formal 60 percent and 90 percent design reviews scheduled for FY 2019.
- The ORP will evaluate the LAWPS path forward.

Issues

- The LAWPS path forward is under evaluation by ORP.

Tank-Side Cesium Removal:

Significant Past Accomplishments

- WRPS received the best and final offer proposal from vendors on April 11. The Source Evaluation Board provided a vendor recommendation to WRPS and documented their recommendation in a Source Evaluation Board report completed on April 30. WRPS is evaluating the recommendation and preparing to enter into contract negotiations.

Significant Planned Actions in the Next Six Months

- ORP has and will continue to engage in discussions with DOE management, OMB, Ecology and Congress, as appropriate, related to TSCR project management and funding..
- WRPS to award a contract for the design, fabrication, and factory acceptance testing of the tank-side cesium removal (TSCR) system. The contract is on track to be awarded in the near future.

- 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

- Appropriate funding streams and project management approaches for TSCR are being assessed.

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	Campaign EC-08 was completed on May 4, 2018 with a waste volume reduction of 166,000 gallons.
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

- Completed sample analysis at 222-S Laboratory in support of EC-09
- Completed replacement of control room air-conditioning units
- Completed campaign EC-08.

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 May 31, 2018)	~ 0.55 Mgal	~ 6.29 Mgal	~ 7.45 Mgal

Waste Received			
AZ-301 Tanker Shipments	-	-	-
MWT-31 and 34 Leachate	-	~ 35,000 gal	-
Other (e.g., PNNL totes)	-	~ 1,200 gal	-
242-A Evaporator Campaigns	-	~ 49,000 gal	-

gal = gallon.

Mgal = million gallons.

MWT = mixed waste trench.

PNNL = Pacific Northwest National Laboratory

Significant Past Accomplishments

- Total FY 2018 volume processed (as of May 31, 2018): Approximately 1,170,000 gallons
- Completed repairs to the Effluent Treatment Facility thin film dryer system
- Continued dewatering of LERF Basin 42 to support the cover replacement project
- Released RPP-RPT-60479, *Ultrasonic Inspection Results for Effluent Treatment Facility – FY 2017*, Rev. 0, which will be provided to the independent qualified registered professional engineer (IQRPE).

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 for camera visual inspections in support of the Effluent Treatment Facility integrity assessment

- Continue design, procurement/fabrication, and work planning for the LERF Basin 42 cover replacement project before beginning subcontractor training and mobilization.

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 2018 transfers to LERF Basin 43 were completed (not including final dewatering for construction activities for the LERF 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 LERF Basin 43 will not stabilize for several months following the pumping of the excess leachate. Leachate rates continue to be maintained below regulatory limits and continued to drop in May.

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 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.
- WRPS and ORP met with the Tank Integrity Expert Panel Corrosion Subgroup on April 19 and 20, 2018, to discuss recent inspection findings and chemistry control specifications.

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-108
– 241-AP-103	– 241-AW-101
– 241-AP-104	– 241-AW-102
– 241-AP-105	– 241-AW-104.
– 241-AP-106	
- Ultrasonic testing inspections are planned for the following tanks in FY 2018:

– 241-AY-101 (completed)	– 241-AZ-102.
– 241-AZ-101 (ongoing)	
- In response to receipt of 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.
- Continue 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.
- 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

- Complete M-045-91I report RPP-IQRPE-50028, *Single-Shell Tank System Structural Integrity Assessment Report*
- Complete the FY 2017 and FY 2018 SST visual inspection reports.

Issues

- None.

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

Independent Qualified Registered Professional Engineer Activities:**Significant Past Accomplishments**

- Document RPP-PLAN-61510, *Single-Shell Tank Structural Integrity Assessment Plan*, 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.
- 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 structural integrity assessment report.
- Complete M-045-91I report RPP-IQRPE-50028
- Work will continue on document RPP-PLAN-61349, *Effluent Treatment Facility Integrity Program Plan*. The plan will support the FY 2019 IQRPE Effluent Treatment Facility integrity assessment. Released RPP-RPT-60479, Rev. 0, *Ultrasonic Inspection Results for Effluent Treatment Facility – 2017*, which will be provided to the IQRPE.
- Continue planning 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 Milestone (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.
- Complete M-045-91I report.

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 May 1 through May 31, 2018, the following reports were completed (internal access only) or released (external access):

- Completed:
 - RPP-PLAN-62181, *Tank 241-AZ-102 Grab Sampling and Analysis Plan – Post-Recirculation*, Rev. 0
 - RPP-RPT-60718, *Final Analytical Report for Tank 241-AW-106 Grab Samples in Support of Evaporator Campaign EC-09*, Rev. 0
 - RPP-RPT-60261, *Final Report for Tank 241-AW-104 Grab Sampling 2017*, Rev. 2
 - RPP-RPT-60671, *Final Analytical Report for Tank 241-AP-107 DFLAW Grab Sampling and Analysis Plan – Fiscal Year 2018*, Rev. 2
- Released:
 - HNF-EP-0182, *Waste Tank Summary Report for Month Ending April 30, 2018*, Rev. 364
 - RPP-RPT-43979, *Derivation of Best-Basis Inventory for Tank 241-AY-101 as of April 1, 2018*, Rev. 18
 - RPP-RPT-51343, *Derivation of Best-Basis Inventory for Tank 241-C-109 as of April 1, 2018*, Rev. 6
 - RPP-RPT-46792, *Derivation of Best-Basis Inventory for Tank 241-AW-102 as of April 1, 2018*, Rev. 15
 - RPP-RPT-44814, *Derivation of Best-Basis Inventory for Tank 241-AN-101 as of April 1, 2018*, Rev. 24
 - RPP-RPT-49876, *Derivation of Best-Basis Inventory for Tank 241-C-110 as of May 1, 2018*, Rev. 4
 - RPP-RPT-58456, *Derivation of Best-Basis Inventory for Tank 241-AP-103 as of April 1, 2018*, Rev. 6
 - RPP-RPT-59981, *Derivation of Best-Basis Inventory for Tank 241-AP-108 as of April 1, 2018*, Rev. 1
 - RPP-RPT-43493, *Derivation of Best-Basis Inventory for Tank 241-AP-106 as of April 1, 2018*, Rev. 6

- RPP-RPT-59356, *Derivation of Best-Basis Inventory for BX-102 as of May 1, 2018*, Rev. 1.

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

- Completed Tank 241-AY-101 post-recirculation liquid grab sampling May 2, 2018. Five samples were received at the laboratory.

Significant Planned Actions in the Next Six Months

Tank Sampling:

- Tank 241-AZ-102 post-recirculation liquid grab sampling is planned for June 2018.
- Tank 241-AZ-102 leak detector pit sampling is planned for July 2018.
- Tank 241-AW-105 liquid grab sampling is planned for July 2018.
- Tank 241-A-105 off-riser sampling system solids sampling is planned for August 2018.
- Tank 241-AY-102 solids grab sampling is planned for October 2018.

Issues

- None.

Best-Basis Inventory Updates

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

- | | |
|--------------|--------------|
| • 241-AN-101 | • 241-BX-102 |
| • 241-AP-103 | • 241-C-109 |
| • 241-AP-106 | • 241-C-110. |
| • 241-AP-108 | |
| • 241-AW-102 | |
| • 241-AY-101 | |

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

- | | |
|--------------|---------------|
| • 241-AP-102 | • 241-SY-103 |
| • 241-AX-102 | • 241-T-109 |
| • 241-SX-101 | • 241-TX-106. |
| • 241-SY-102 | |

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, M-45-58 Milestone, and implementation of other interim corrective measures).

Status: On Schedule.

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

Due: To Be Determined. To be established in accordance with the date identified in the M-45-82 Milestone 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 Determined. To be established in accordance with the date identified in the M-45-82 Milestone 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: Completed (March 14, 2017). Negotiations initiated on March 14, 2017.

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

M-045-920 Barrier 3 (TX Tank Farm Barrier) Design/Monitoring Plan Submitted to Ecology

Due: June 30, 2018.

Status: To be missed. This was negotiated as part of draft Change Control Form M-45-17-03. M-45-17-03 was subsequently replaced by draft Change Control Form M-45-18-03. Negotiation of draft Change Control Form M-45-18-03 which would establish new TPA milestones for interim surface barriers through interim surface Barrier 4 is ongoing; however, ORP and Ecology tentatively agreed to the size of Barrier 3 on May 10, 2018.

- M-045-92T Barrier 3 (TX Tank Farm Barrier) Design/Monitoring Plan Approved by Ecology**
Due: September 30, 2018.
Status: At Risk. This milestone is being negotiated as part of draft Change Control Form M-45-18-03 discussed under M-045-92O Milestone.
- 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. This milestone is being negotiated as part of draft Change Control Form M-45-18-03 discussed under M-045-92O Milestone.
- 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. This milestone is being negotiated as part of draft Change Control Form M-45-18-03 discussed under M-045-92O Milestone.
- M-045-92P Complete Construction of Barrier 3 (TX Tank Farm Barrier)**
Due: October 31, 2019.
Status: At Risk. This milestone is being negotiated as part of draft Change Control Form M-45-18-03 discussed under M-045-92O Milestone.
- 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. This milestone is being negotiated as part of draft Change Control Form M-45-18-03 discussed under M-045-92O Milestone.
- 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 Milestone. Negotiations began on September 8, 2016.

Significant Past Accomplishments

- Completed construction of the SX barrier evapotranspiration basin. The SX barrier evapotranspiration basin will dispose of water collected on the SX interim surface barriers.
- ORP and Ecology agreed to locations for interim barrier 3 (TX Tank Farm) and interim barrier 4 (U Tank Farm) (M-045-92S Milestone) 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.
- On May 10, 2018, Ecology and ORP tentatively agreed to the size of interim Barrier 3 at TX Tank Farm.

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 negotiations of near-term M-045-92 milestones through TPA Change Control Form M-45-18-03
- 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 Practicality 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.
- 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 M-045-61A, Milestone 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 Milestone). 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 M-062-45 Milestone. 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										April-18
Tank Farms ORP-0014 WBS 5 - River Protection Project in (\$000s)										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	\$58,100	\$53,939	\$54,269	(\$4,161)	(\$330)	0.93	0.99			
FYTD	\$367,901	\$356,066	\$361,252	(\$11,835)	(\$5,185)	0.97	0.99	\$659,310		
CTD	\$4,460,691	\$4,424,729	\$4,405,054	(\$35,962)	\$19,675	0.99	1.00	\$4,752,100	\$4,745,780	\$6,320

ACWP actual cost of work performed.

BAC budget at completion.

BCWP budgeted cost of work performed.

BCWS budgeted cost of work scheduled.

CM current month.

CPI cost performance index.

CTD contract to date.

CV cost variance.

EAC estimate at completion.

FYTD fiscal year to date.

SPI schedule performance index.

SV schedule variance.

VAC variance at completion.

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.

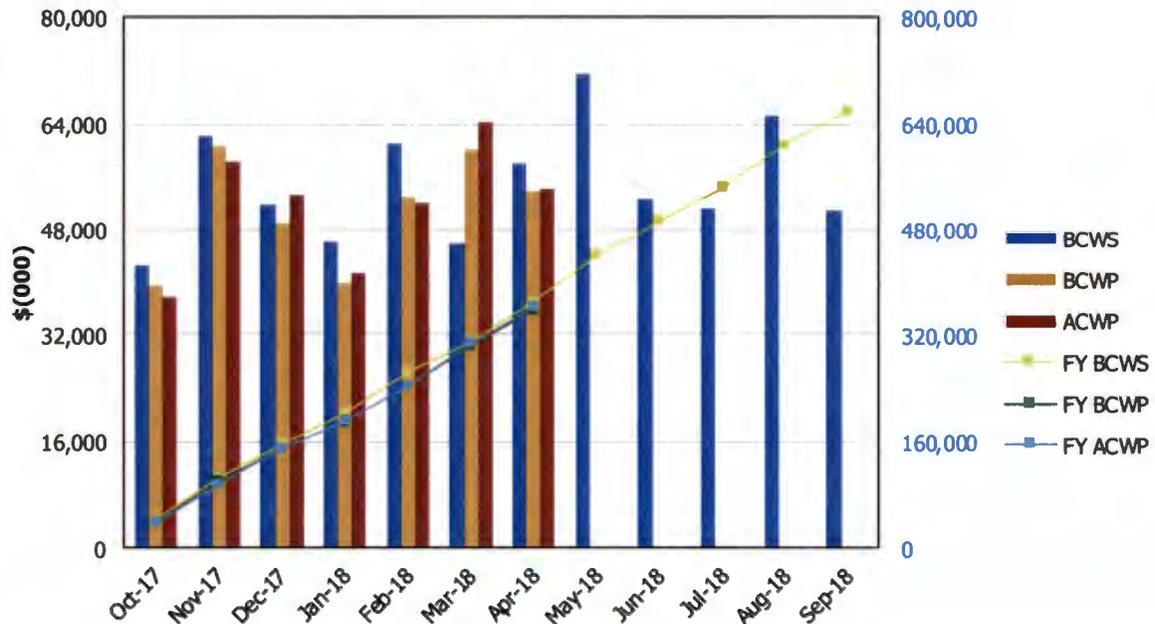
The SV and CV are reported for each monthly period, FY-to-date, as well as for the contract-to-date value. The monthly variances can fluctuate significantly (for reasons noted earlier), so the FY or contract-to-date report provides a better indicator of the overall project completion status and can give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

Earned Value Data: Fiscal Year 2018

April-18

Tank Farms ORP-0014
WBS 5 - River Protection Project

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	\$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	\$45,861	\$59,989	\$64,439	1.31	0.93	\$309,802	\$302,128	\$306,983	0.98	0.98
Apr 2018	\$58,100	\$53,939	\$54,269	0.93	0.99	\$367,901	\$356,066	\$361,252	0.97	0.99
May 2018	\$71,631					\$439,532				
Jun 2018	\$52,754					\$492,286				
Jul 2018	\$51,029					\$543,315				
Aug 2018	\$65,172					\$608,487				
Sep 2018	\$50,823					\$659,310				
CTD	\$4,460,691	\$4,424,729	\$4,405,054	0.99	1.00					

ACWP actual cost of work performed.
 BCWP budgeted cost of work performed.
 BCWS budgeted cost of work scheduled.
 CPI cost performance index.

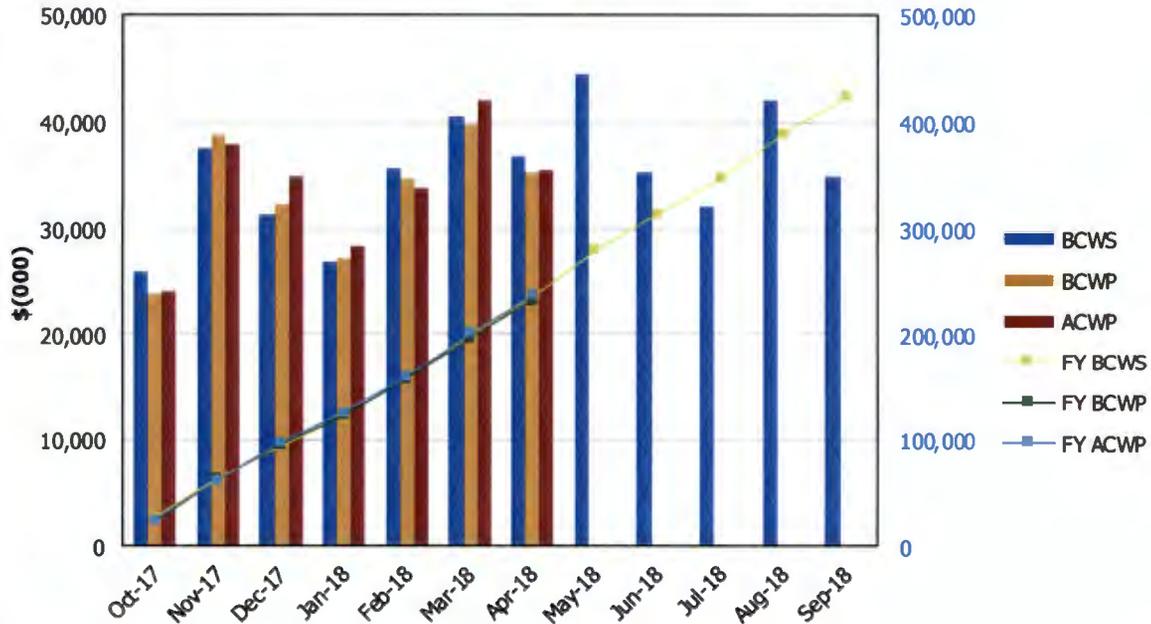
CM current month.
 CTD contract to date.
 FY fiscal year.
 SPI schedule performance index.

Earned Value Data: Fiscal Year 2018

April-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	\$40,641	\$39,755	\$42,150	0.98	0.94	\$198,346	\$196,865	\$201,541	0.99	0.98
Apr 2018	\$36,747	\$35,279	\$35,441	0.96	1.00	\$235,093	\$232,144	\$236,982	0.99	0.98
May 2018	\$44,451					\$279,543				
Jun 2018	\$35,363					\$314,907				
Jul 2018	\$32,236					\$347,143				
Aug 2018	\$42,094					\$389,237				
Sep 2018	\$35,042					\$424,279				
CTD	\$2,960,297	\$2,938,890	\$2,911,367	0.99	1.01					

ACWP actual cost of work performed.
 BCWP budgeted cost of work performed.
 BCWS budgeted cost of work scheduled.
 CPI cost performance index.

CM current month.
 CTD contract to date.
 FY fiscal year.
 SPI schedule performance index.

Tank Farms Assistant Manager: Glyn Trenchard

Federal Project Director: Ellen Mattlin

5.01 – Base Operations

The April 2018 variances below do not impact TPA milestones.

The **unfavorable** SV of (\$1,468,000) is primarily due to:

- Schedule delays in finalizing the design specifications and considerations necessary for the tank farms AW, AN, 702-AZ, and AX new stack monitors. In turn, the design has delayed the planning and the field work.
- Schedule delays due to performance of the LERF campaigns. The Effluent Treatment Facility main treatment train operation was limited due to the failure of a valve within the thin film dryer system. Shut-down of operations was initiated to perform troubleshooting and corrective maintenance.

The **unfavorable** CV of (\$162,000) is primarily due to:

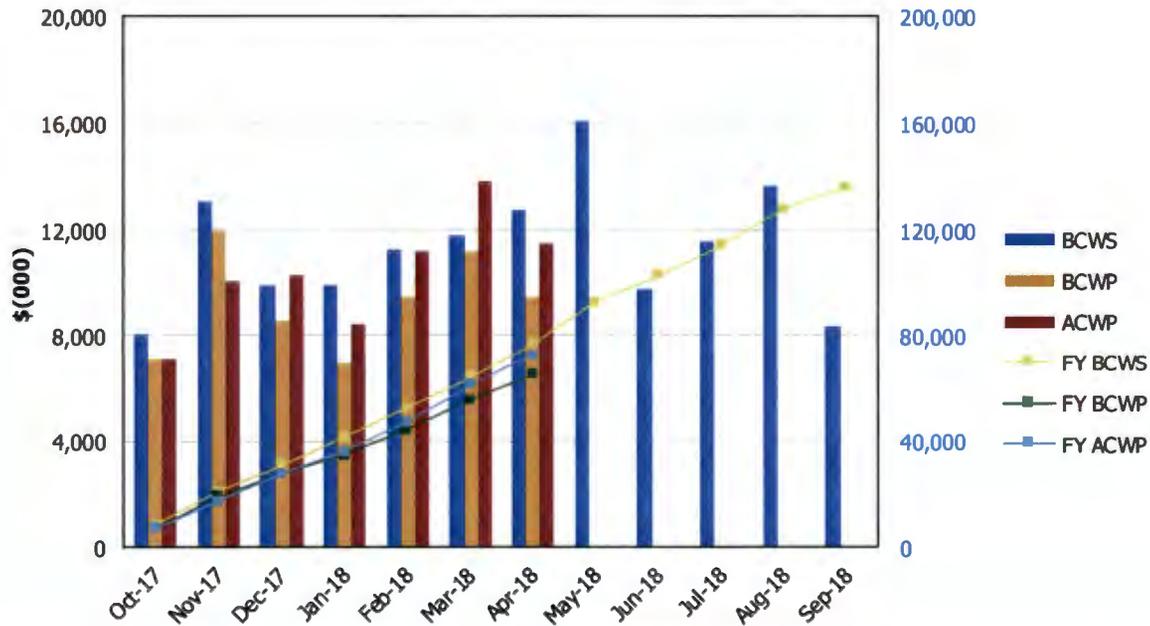
- Increased use of labor and material associated with troubleshooting plant issues and necessary facility repairs required to support restart of Effluent Treatment Facility operations.

Earned Value Data: Fiscal Year 2018

April-18

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

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	\$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	\$11,787	\$11,248	\$13,799	0.95	0.82	\$64,113	\$55,301	\$61,051	0.86	0.91
Apr 2018	\$12,763	\$9,509	\$11,495	0.75	0.83	\$76,875	\$64,810	\$72,546	0.84	0.89
May 2018	\$16,114					\$92,989				
Jun 2018	\$9,787					\$102,776				
Jul 2018	\$11,605					\$114,380				
Aug 2018	\$13,718					\$128,098				
Sep 2018	\$8,340					\$136,438				
CTD	\$880,447	\$869,473	\$911,098	0.99	0.95					

ACWP actual cost of work performed.
 BCWP budgeted cost of work performed.
 BCWS budgeted cost of work scheduled.
 CPI cost performance index.

CM current month.
 CTD contract to date.
 FY fiscal year.
 SPI schedule performance index.

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Jeff Rambo

5.02 – Retrieve and Close Single-Shell Tanks

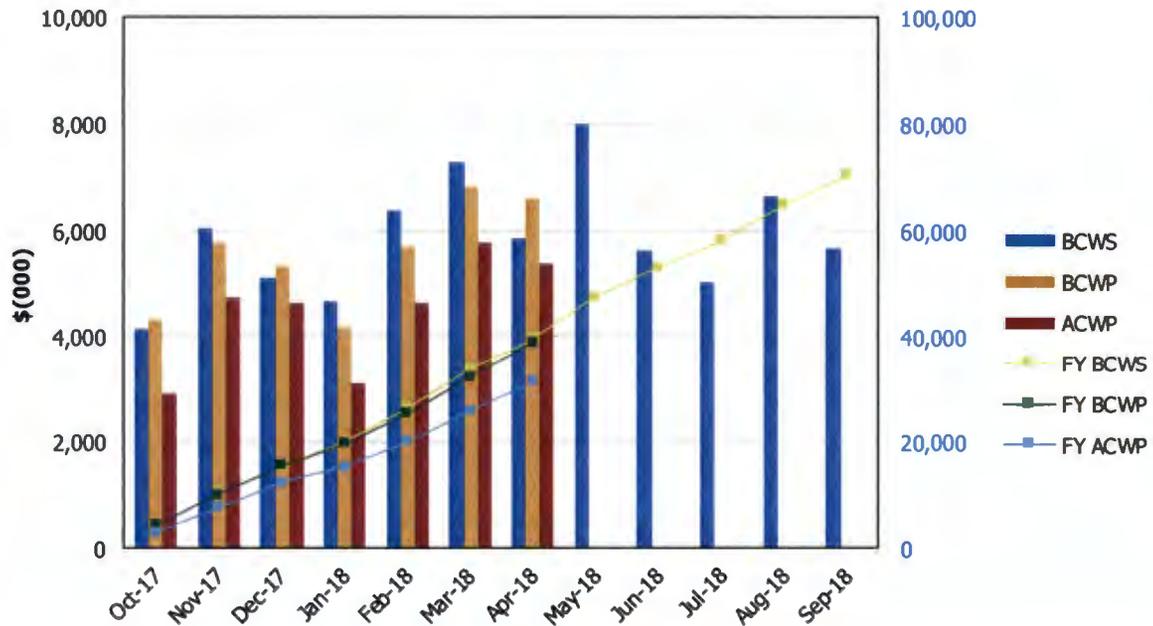
For the retrieval portion see the Consent Decree monthly report for cost and schedule status.

Earned Value Data: Fiscal Year 2018

April-18

Tank Farms ORP-0014
WBS 5.3 - WFD/Treatment Png/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	\$7,279	\$6,836	\$5,798	0.94	1.18	\$33,685	\$32,199	\$25,845	0.96	1.25
Apr 2018	\$5,875	\$6,634	\$5,394	1.13	1.23	\$39,560	\$38,833	\$31,238	0.98	1.24
May 2018	\$8,015					\$47,574				
Jun 2018	\$5,638					\$53,212				
Jul 2018	\$5,063					\$58,276				
Aug 2018	\$6,645					\$64,920				
Sep 2018	\$5,676					\$70,596				
CTD	\$472,316	\$469,152	\$428,050	0.99	1.10					

ACWP actual cost of work performed.
 BCWP budgeted cost of work performed.
 BCWS budgeted cost of work scheduled.
 CPI cost performance index.

CM current month.
 CTD contract to date.
 FY fiscal year.
 SPI schedule performance index.

One System Division Director: Jon Peschong

Federal Program Manager: Kaylin Burnett

5.03 – Waste Feed Delivery/Treatment

The April 2018 variances below do not impact TPA milestones.

The **favorable** SV of \$759,600 is primarily due to:

- The AP-105 Tank Farms Upgrades Project's pit upgrade work is ahead of schedule.
- The Liquid Secondary Waste Stream Technology Maturation Project completed the DM10 melter modifications and melter testing ahead of schedule.
- The Solid Secondary Waste Stream Technology Maturation Project completed the DFLAW Solid Secondary Waste Phase 3 testing, part 1 from FY 2017.
- The WTP Transition Support Project procurement strategy for WTP long-lead spare parts and consumables was completed with less hours expended than originally planned.

The **favorable** CV of \$1,240,600 is primarily due to:

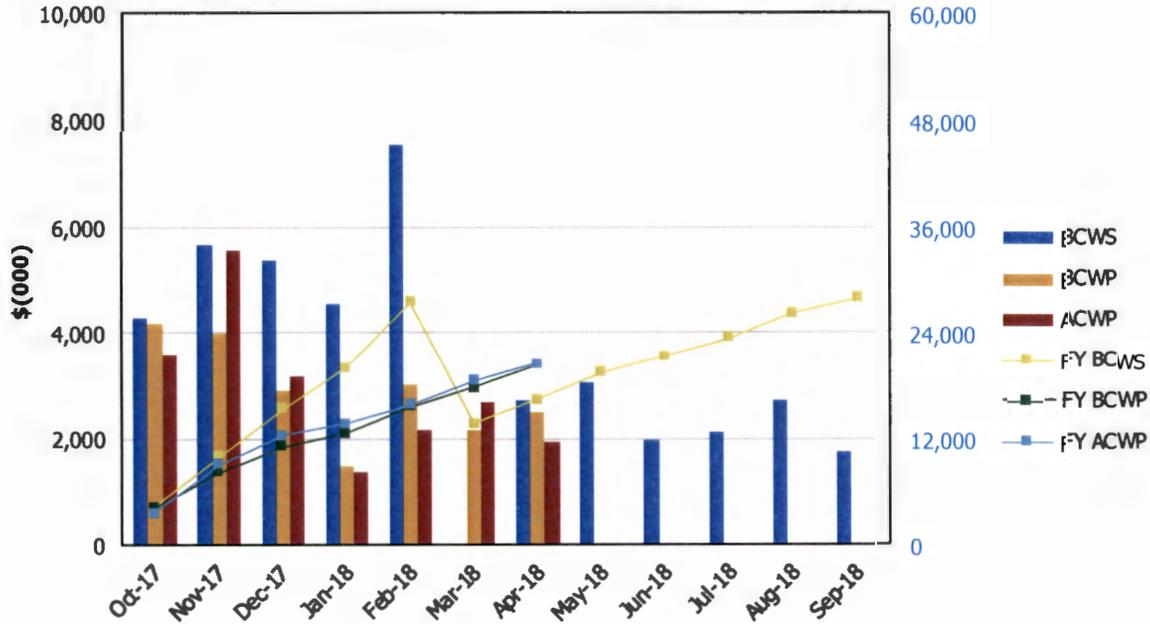
- The Waste Feed Delivery Technical Baseline Project experienced delays in procurement and delivery of the materials in predictive maintenance, which created a cost savings in labor.
- The WTP Transition Support Project procurement strategy for WTP long-lead spare parts and consumables was completed with less hours expended than originally planned. This contributed to a WRPS labor resource usage efficiency.
- Resource efficiencies in labor in two projects and costs in one project:
 - Project Management Upgrades Support DFLAW Project required less management support than was originally planned.
 - The Technology Maturation and Analysis Project required less management oversight/support than originally planned.
 - The Solid Secondary Waste Stream Technology Maturation Project closed two contracts at less cost than originally anticipated.

Earned Value Data: Fiscal Year 2018

April-18

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

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	\$4,294	\$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	(\$13,846)	\$2,151	\$2,692	-0.16	0.80	\$13,658	\$17,762	\$18,546	1.30	0.96
Apr 2018	\$2,715	\$2,517	\$1,940	0.93	1.30	\$16,373	\$20,279	\$20,485	1.24	0.99
May 2018	\$3,052					\$19,425				
Jun 2018	\$1,966					\$21,391				
Jul 2018	\$2,126					\$23,516				
Aug 2018	\$2,716					\$26,232				
Sep 2018	\$1,764					\$27,996				
CTD	\$127,522	\$127,105	\$135,379	1.00	0.94					

ACWP actual cost of work performed.
 BCWP budgeted cost of work performed.
 BCWS budgeted cost of work scheduled.
 CPI cost performance index.

CM current month.
 CTD contract to date.
 FY fiscal year.
 SPI schedule performance index.

Tank Farms Assistant Manager: Glyn Trenchard

Deputy Federal Project Director: Janet Diediker

5.05 – Treat Waste

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

The current month **unfavorable** SV of (\$199,000) is due to:

- Delays in vendor progress on geotechnical engineering scope for the new LAWPS site location and on LAWPS Technology Maturation Plan.

The current month **favorable** CV of \$577,000 is due to:

- The initiation of the LAWPS South project model and drawing were completed more efficiently than planned as the architect engineer (AE) was able to utilize more of the previous design media than anticipated.