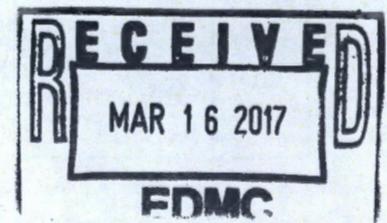

FINAL
Office of River Protection
Tri-Party Agreement
Report
March¹ 2017



¹ The narrative descriptions of progress in this report cover the period from February 01–28, 2017.
Earned Value Management System data and descriptions cover the period of January 01–31, 2017.

Tri-Party Agreement (TPA) Milestone Review

Page	Topic	Leads
2	Administrative Items/Milestone Status	B. Trimberger D. McDonald, J. Lyon
4	System Plan	K. Burnett J. Lyon, D. McDonald
5	Acquisition of New Facilities	J. Diediker J. Lyon, D. McDonald
6	Supplemental Treatment and Part B Permit Applications	S. Pfaff J. Lyon, D. McDonald
8	242-A Evaporator Status	P. Hernandez J. Lyon
10	Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility	R. Valle S. Schleif
11	Tank System Update	D. Stewart J. Lyon
13	Single-Shell Tank Integrity Assurance	D. Stewart J. Alzheimer
14	In-Tank Characterization and Summary	D. Stewart M. Barnes
16	Single-Shell Tank Closure Program	J. Bovier J. Lyon
19	Single-Shell Tank Retrieval Program	J. Rambo J. Lyon
19	Tank Waste Retrieval Work Plan Status	J. Rambo J. Lyon
20	Tank Operations Contract Overview	ORP TPA PMs J. Lyon
CD	Waste Treatment and Immobilization Plant (WTP) Overall TPA Summary and Milestone Status; see the Office of River Protection Consent Decree Monthly Report	J. Grindstaff D. McDonald

Administrative Items/Milestone Status

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2015				
M-062-45-T01	Complete Negotiations 6-Mo After Last Issuance of System Plan	04/30/2015		In Abeyance
M-062-45-ZZ	Negotiate a One Time Supplemental Treatment Selection	04/30/2015		In Abeyance
M-062-45-ZZ-A	Convert the M-062-31-T01 Through M-062-34-T01 to Interim Milestones	04/30/2015		In Abeyance
M-045-82	Submit Comp. Permit Modification Request for Tiers 1,2,3	09/30/2015		Change Control Form in public comment process
Fiscal Year 2016				
M-047-07	CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to Ecology	03/31/2016		In Abeyance
M-090-13	CD-1 for Interim Hanford Storage Project and CR for CD-2 to Ecology	03/31/2016		In Abeyance
M-062-31-T01	Complete Final Design & Submit RCRA Part B Permit Mod Request for Enhanced WTP & Supplemental Treatment	04/30/2016		In Abeyance
Fiscal Year 2017				
M-062-40E	Select a Minimum of Three Scenarios	10/31/2016	10/06/2016	Complete
M-045-61A	Submit to Ecology a primary doc. Phase 2 CMS, and Rev. 0 update to the RFI Report for WMA C	12/31/2016	12/29/2016	Complete
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA-C	6 mo. after CMS appr. (M-045-61A)		On Schedule
M-062-01AH	Submit Semi-Annual Project Compliance Report	01/31/2017	01/31/2017	Complete

Milestone	Title	Due Date	Completion Date	Status
M-045-84	Initiate Negotiations to Establish HFFACO Interim Milestones for Closure of 2nd SST WMA	04/03/2017		On schedule.
M-045-56M	Ecology and DOE Agree, at a Minimum, to Meet Yearly (by July)	07/31/2017		On Schedule
M-062-01AI	Submit Semi-Annual Project Compliance Report	07/31/2017		On Schedule
M-045-91E2	Provide SST Farms Dome Deflection Surveys Every Two Years	09/30/2017		On Schedule
M-045-92S	DOE And Ecology Will Agree On Locations For Barriers 3 And 4	09/30/2017		On Schedule
Fiscal Year 2018				
M-062-40F	Submit System Plan	10/31/2017		On Schedule
M-062-32-T01	Start Construction of Supplemental Vitrification Treatment Facility and/or WTP Enhancements	04/20/2018		In Abeyance
M-045-92O	Barrier 3 Design/Monitoring Plan Submitted to Ecology	06/30/2018		On Schedule
M-045-56N	Ecology And DOE Agree, At A Minimum, To Meet Yearly (By July)	07/31/2018		On Schedule
M-045-91I	Provide IQRPE Certification of SSTs Structural Integrity	09/30/2018		On Schedule
M-045-92T	Barrier 3 Design/Monitoring Plan Approved by Ecology	09/30/2018		On Schedule

CD-1/-2 critical decision-1/-2.
 CMS corrective measures study.
 CR change request.
 DOE U.S. Department of Energy.
 Ecology Washington State Department of Ecology.
 HFFACO Hanford Federal Facility Agreement and Consent Order.
 IQRPE independent qualified registered professional engineer

RCRA *Resource Conservation and Recovery Act.*
 RFI RCRA Facility Investigation.
 SST single-shell tank.
 WTP Waste Treatment and Immobilization Plant.
 WMA waste management area.
 WMA-C C Farm waste management area.

System Plan

One System Division Director: Jon Peschong

Federal Program Manager: Kaylin Burnett

Significant Past Accomplishments:

- Modeling for Cases 4 and 5 was completed and the results were reviewed by ORP and the Department of Ecology, in February.

Significant Planned Actions in the Next Six Months:

- Continue negotiations of the M-062-45 milestones with intent to utilize information from System Plan 8 in negotiations.
- Complete scenario modeling and life cycle cost modeling by April 10, 2017.

Issues:

- None.

Acquisition of New Facilities

Tank Farms Assistant Manager: Glyn Trenchard

Deputy Federal Project Director: Janet Diediker

- M-047-07** **Submit CD-1 for Secondary Liquid Waste Treatment and Change Request (CR) for CD-2 to Ecology**
Due: March 31, 2016
Status: 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-090-13** **Submit Critical Decision-1 for Interim Hanford Storage Project and TPA Change Request for CD-2 to Ecology**
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 Immobilized High-Level Waste (IHLW)**
Due: December 31, 2019
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** **Complete Work Necessary to Provide Facilities for Management of Secondary Waste from the Waste Treatment and Immobilization Plant (WTP)**
Due: December 31, 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.

Significant Past Accomplishments:

- None.

Significant Planned Actions in the Next Six Months:

- None.

Issues:

- None.

Supplemental Treatment and Part B Permit Applications

Tank Farms Assistant Manager: Glyn Trenchard

Federal Project Director: Steve Pfaff

- M-062-45-T01** **Every six years, within six months after last revision of the System Plan, negotiate tank waste retrieval sequencing**
Due: April 30, 2015
Status: 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** **(designation for M-062-45 item 3), 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 Part B permit modification request**
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 treatment 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 vitrification treatment 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** **No later than December 31, 2021, the DOE and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45, paragraphs 4 and 5**
Due: December 31, 2021
Status: On schedule.
- M-062-34-T01** **Complete hot commissioning of supplemental vitrification treatment facility and/or WTP enhancements**
Due: December 30, 2022
Status: 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 that demonstrates operation of the WTP**
Due: February 28, 2023
Status: At risk.
- M-062-00** **Complete Pretreatment Processing and Vitrification of High-Level Waste and 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 per decision by the Interagency Management Integration Team (IAMIT).

242-A Evaporator Status

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Paul Hernandez

The 242-A Evaporator campaign strategy for fiscal year (FY) 2016 through fourth quarter of FY 2017 is depicted in the following table:

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY 2016	EC-04	AP-104	AP-103	Completed April 15, 2016. WVR = 258 kgal
FY 2016	EC-05	AP-104	AP-104	Completed April 21, 2016. WVR = 46 kgal
FY 2017	EC-06	AY-101	AP-104	242-A Evaporator campaign EC-06 has been postponed until replacement of failed Radiation Monitoring systems RC-1, RC-2 and RC-3 are completed. This is expected midyear of CY2017.
FY 2017	EC-07	AW-106	AP-104	242-A Evaporator campaign EC-07 will immediately follow EC-06.
FY 2018	EC-08	AP 106/107 Blend	AP-103	Will require blending of waste in 102-AW, sampling, and sampling analysis prior to campaign start. This cannot occur until campaign EC-07 is completed.

FY fiscal year
 kgal thousand gallons.
 WVR waste volume reduction.

Significant Past Accomplishments:

- The class 2 permit modification covering the removal of the diesel generator requiring changes to Chapter 6.0, "Procedures to Prevent Hazards" and Chapter 7.0, "Contingency Plan," and updates to storage volumes in Chapter 1.0, "Part A Form" at the 242-A Evaporator were submitted to Ecology for informal review on November, 14, 2016.

Significant Planned Actions in the Next Six Months:

- Future campaign and outage scheduling
- Continue integrity assessment on 242-A Evaporator components
- Replace P-B-2 associated pressure relief valves.

- Replace radiation monitoring systems RC-1, RC-2, and RC-3
- Extend vessel vent stack height.

Issues:

- None.

Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Richard Valle

The Liquid Effluent Retention Facility (LERF) liquid levels, inventory, and received waste is 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)
Volume (as of February 27, 2017)	~ 5.68 Mgal	~ 2.05 Mgal	~ 7.42 Mgal
AZ-301 Tanker Shipments	-	-	-
MWT-31 and 34 Leachate	-	-	~ 98,000 gal
Other (325 Building Totes)	-	-	-
242-A Evaporator Campaigns	-	-	-

gal gallon.
Mgal million gallons.
MWT mixed waste trench.

Significant Past Accomplishments:

- Total FY 2017 volume processed (as of February 27, 2017): 1,682,000 gallons.

Significant Planned Actions in the Next Six Months:

- Replace LERF Basin 43 transfer pump
- Continue to empty LERF Basin 43 by processing waste through the Effluent Treatment Facility (ETF)
- Enter maintenance outage at the ETF to clean out plant
- Initiate LERF Basin 42 waste processing through the ETF
- LERF Basin cover procurement (issue request for proposal [RFP], award contract, etc.)

Issues:

- The LERF 43 pump failed on February 16, 2017. The pump will require replacement.

Tank System Update

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Dusty Stewart

Significant Past Accomplishments

Double-Shell Tank (DST) Integrity:

- Enhanced annulus video inspections:
Completed the inspection of AY-101.

Single-Shell Tanks (SST) Integrity:

- None.

Independent Qualified Registered Professional Engineer Activities

Planned Actions:

- Preparation of the independent qualified registered professional engineer (IQRPE) report for the 242-A Evaporator is ongoing Meier Engineering is reviewing data received to date, the facility is still conducting inspections (E-A-1 leak test and reboiler leak test is planned for May), and we are answering questions from the IQRPE. Work started on the draft integrity program plan (RPP-RPT-61349) for the Effluent Treatment Facility (ETF). The plan is expected to be released in May. These activities are to support the FY 2019 IQRPE integrity assessment.
- The initial planning for the IQRPE report for the 219-S facility at the 222-S Laboratory is continuing.
- The strategy for the 2018 IQRPE report for the SSTs has been laid out.

Significant Planned Actions in the Next Six Months:

DST Integrity:

- Continuing bi-weekly inspections of AY-102 waste accumulation site.
- Continuing bi-monthly comprehensive inspection of AY-102 annulus.
- Continuing quarterly comprehensive inspection of AY-101 annulus.
- FY 2017 enhanced annulus visual inspections have begun. The following tanks will be inspected in FY 2017:

- 241-AN-102	- 241-AP-107
- 241-AN-107	- 241-AW-105 (complete)
- 241-AP-101	- 241-AY-101 (complete)

- 241-AZ-101 (complete)
- 241-AZ-102 (complete)
- Work planning and execution for FY 2017 ultrasonic testing inspections has begun. The following tanks will be inspected in FY 2017:
 - 241-AN-106 (ongoing)
 - 241-AZ-101
 - 241-AY-101

SST Integrity:

- The FY 2016 SST Visual Inspection Report (RPP-RPT-59272) is in review at WRPS. This report documents the results of 14 SST video inspections.
- Work planning for FY 2017 in-tank video inspections has already begun. The following tanks will be inspected in FY 2017 (note SX-113 was deleted and S-104 was added)
 - 241-BX-102
 - 241-BX-107
 - 241-BY-109
 - 241-S-104
 - 241-SX-110
 - 241-T-104
 - 241-T-106
 - 241-T-109
 - 241-TX-105
 - 241-TX-106
 - 241-TX-109
 - 241-U-107
- Intrusion mitigation (M-045-56):
 - The POR-006 exhauster remains out of service at T-111. Parts were ordered to repair the malfunctioning instrument cabinet heater. Data collection and reporting software are still not working. The total volume of water evaporated from T-111 since mid-July 2015 was very roughly estimated at 7,100 gal.
 - The exhauster will continue operation as resource availability permits, but the evaporation is no longer being tracked. Periodic video inspections may be conducted to visually observe changes to the liquid pool in the tank if the exhauster is able to operate for a sufficiently long period.
 - A report has been drafted to document the exhauster operation and it is currently in the WRPS review process.

Issues:**DST Integrity:**

- None.

SST Integrity:

- None.

Single-Shell Tank Integrity Assurance

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Dusty Stewart

M-045-91I **Provide to Ecology an Independent, Qualified, Registered Professional Engineer (IQRPE) certification of single-shell tanks (SST) structural integrity for the remainder of the mission, or for such time as the IQRPE believes he/she can reasonably certify.**

Due: September 30, 2018

Status: On schedule.

Significant Past Accomplishments:

- None.

Significant Planned Actions in the Next Six Months:

- Prepare an Integrity Assessment Plan for the SST IQRPE assessment
- Award a contract to an IQRPE

Issues:

- None.

In-Tank Characterization and Summary

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Dusty Stewart

Accomplishments:

For the period from February 01 through February 28, 2017, the following reports were completed or issued:

- Completed RPP-RPT-44740, *Derivation of Best-Basis Inventory for Tank 241-AX-102 as of January 1, 2017*, Rev 1.
- Completed RPP-RPT-59876, *Derivation of Best-Basis Inventory for Tank 241-BY-110 as of January 1, 2017*, Rev 0.
- Completed RPP-RPT-59895, *Derivation of Best-Basis Inventory for Tank 241-C-204 as of January 1, 2017*, Rev 0.
- Completed RPP-RPT-59860, *Derivation of Best-Basis Inventory for Tank 241-C-203 as of January 1, 2017*, Rev 0.
- Completed RPP-RPT-59883, *Derivation of Best-Basis Inventory for Tank 241-BX-112 as of January 1, 2017*, Rev 0.
- RPP-RPT-59836, *Tank 241-AY-102 Monthly Monitoring Report November 2016*, Rev 0, has been released.
- HNF-SD-WM-OCD-015, *Tank Farms Waste Transfer Compatibility Program*, Rev 43, has been released.
- RPP-RPT-59720, *Boildown Test Final Report: 242-A Evaporator Campaign EC-01*, Rev 0, has been released

Planned Action within the Next Six Months:

Tank sampling:

- Tank 241-AW-104 grab sampling is planned for March 2017.
- Tank 241-AP-105 grab sampling is planned to for March 2017.
- Tank 241-AP-107 grab sampling is planned for March 2017.
- Tank 241-AY-102 grab sampling is planned for April 2017.
- Tank 241-A-105 grab sampling is planned for May 2017.
- Tank 241-C-105 grab sampling is planned for June 2017.
- Tank 241-AN-107 grab sampling is planned for September 2017.

Best-Basis Inventory updates:

Best-basis inventory updates for the following tanks were completed in February 2017:

- 241-AX-102
- 241-BX-112
- 241-BY-110
- 241-C-203
- 241-C-204

Best-basis inventory updates for the following tanks currently are planned to be completed in March 2017:

- 241-A-101
- 241-AW-103
- 241-S-102
- 241-U-102
- 241-U-103
- 241-U-105
- 241-U-109

Data Quality Objectives (DQO) updates:

- RPP-8532, *Double-Shell Tanks Chemistry Control Data Quality Objectives*, Rev. 15, is in-process to identify additional analyses for corrosion mitigation and to simplify quality control parameters is planned to be completed in March 2017.

Issues:

- None.

Single-Shell Tank Closure Program

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Jan Bovier

- M-045-59** **Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST Waste Management Areas (WMA) (pending the Corrective Measures Study report, Milestone M-45-58, and implementation of other interim corrective measures)**
Due: To be determined
Status: To be determined.
- M-045-82** **Submit complete permit modification requests for Tiers 1, 2, and 3 of the SST System**
Due: September 30, 2015
Status: TPA Change Control Form in public comment process. A tentative agreement between Ecology and DOE-ORP to resolve this dispute was signed November 22, 2016 (16-TF-0127). "Transmittal of Tentative Agreement on Negotiations of Hanford Federal Facility and Consent Order Revisions on Interim Milestone M-045-82, Submit Complete Permit Modification Requests for Tiers 2 & 3 of the Single-Shell Tank System to Support Final Closure Requirements for Waste Management Area C"). The tentative agreement is to implement a *Hanford Federal Facility Agreement and Consent Order* (HFFACO) Change Control Form (M-45-16-01) to (1) modify the M-045-82 milestone for submittal of the draft Tier 2 closure plan, (2) create a new milestone (M-045-82A) to submit the draft Tier 3 closure plans for the C-200 tanks, (3) modify the M-045-62 milestone to require submittal of a Tier 3 closure plan for corrective measures agreed upon through a Corrective Measures Implementation Work Plan, and (4) modify the M-045-83 milestone for completion of closure of C Farm waste management area (WMA-C). The HFFACO Change Control Form is undergoing a 45-day public comment ending on March 17, 2017.
- M-045-61A** **Submit to Ecology for review and approval as an Agreement primary document, a Phase 2 Corrective Measures Study, and Revision 0 update to the RFI Report for WMA-C.**
Due: December 31, 2016
Status: Complete. Both were submitted to Ecology on December 29, 2016, via letter 16-TF-0142, "The U.S. Department of Energy, Office of River of Reports Protection Submittal for the Resource Conservation and Recovery Act Facility Investigation and Corrective Measures Study for Waste Management Area C in Completion of HFFACO Milestone M-045-61 A."

- M-045-62** **Submit to Ecology for review and approval as an agreement primary document, a Phase 2 Corrective Measures Implementation Work Plan for WMA-C**
Due: Six months after the approval of the corrective measures study submitted under milestone M-045-61A.
Status: On schedule. This milestone will be modified through resolution of the dispute on M-045-82.
- M-045-84** **Initiate negotiations to establish HFFACO interim milestones for closure of second SST WMA**
Due: April 3, 2017
Status: On schedule.
- M-045-56M** **Complete Implementation of Agreed to Interim Measures**
Due: July 28, 2017
Status: On schedule. An annual meeting is held between ORP and Ecology to discuss the prior FY accomplishments and the next FY proposed interim measures to be scheduled in July 2017.
- M-045-92S** **DOE and Ecology agree on locations for Barriers 3 and 4**
Due: September 30, 2017
Status: On schedule.
- M-045-92O** **Barrier 3 Design and Monitoring Plan Submitted to Ecology**
Due: June 30, 2018
Status: On schedule.
- M-045-92T** **Barrier 3 Design and Monitoring Plan Approved by Ecology**
Due: September 30, 2018
Status: On schedule.
- M-045-92N** **Complete construction of Barriers 1 and 2 in SX Farm**
Due: October 31, 2018
Status: On schedule.
- M-045-83** **Complete the closure of WMA-C**
Due: June 30, 2019
Status: To be missed. Please see status explanation under M-045-82.
- M-045-92Q** **Barrier 4 Design and Monitoring Plan Submitted to Ecology**
Due: June 30, 2019
Status: On schedule.
- M-045-92U** **Barrier 4 Design and Monitoring Plan Approved by Ecology**
Due: September 30, 2019
Status: On schedule.
- M-045-92P** **Complete construction of Barrier 3**

Due: October 31, 2019
Status: On schedule.

M-045-92R **Complete construction of Barrier 4**
Due: October 31, 2020
Status: On schedule.

M-045-85 **Initiate negotiations to establish HFFACO interim milestones for closure of remaining SST 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 be addressed with the negotiations supporting M-062-45.

Significant Past Accomplishments:

- Working with Ecology on review of the WMA-C Performance Assessment.

Significant Planned Activities in the Next Six Months:

- Continue data collection for T Farm and TY Farm interim surface barrier monitoring and develop the annual interim barrier monitoring report for FY 2016.
- The 45-day public comment period for the M-045-82 HFFACO Change Control Form (M-45-16-01) will end on March 17, 2017.
- Begin resolution of Ecology's comments on the *Resource Conservation and Recovery Act of 1976 (RCRA) Tier 1 Closure Plan*.
- Submit the draft Tier 2 Closure Plan for WMA C, and a draft Tier 3 Closure Plan for the C-200 Series Tanks to Ecology for review.
- Begin discussions on locations for Barriers 3 and 4.

Issues:

- Developing path forward for resolving Ecology's comments on the RCRA Tier 1 Closure Plan. Three meetings have been held with Ecology and a primary resolution of a significant issue as to whether this Closure Plan should be submitted in accordance to the HFFACO, in anticipation of the current draft Rev. 9 permit, or a "hybrid" approach needs to be elevated to ORP and Nuclear Waste Program Managers.

Single-Shell Tank Retrieval Program

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Jeff Rambo

M-045-86 **Submit retrieval data report (RDR) to Ecology for 19 tanks retrieved**
Due: To be determined (12 months after retrieval certification).
Status: Ongoing, RDR submitted when completed.

M-045-70 **Complete waste retrieval from all remaining 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. Negotiations have begun.

Significant Past Accomplishments:

- Refer to Consent Decree Monthly Report for ongoing retrieval activities.

Significant Planned Activities in the Next Six Months:

- Refer to Consent Decree Monthly Report for ongoing retrieval activities.

Issues:

- Refer to Consent Decree Monthly Report for ongoing retrieval issues.

Tank Waste Retrieval Work Plan Status

Tank Farms Assistant Manager: Glyn Trenchard

Federal Program Manager: Jeff Rambo

Significant Accomplishments:

- None.

Significant Planned Activities in the Next Three Months:

- Finalize AX Farm tank retrieval work plans.
- Incorporate third retrieval technology in the C-105 Tank Waste Retrieval Work Plan

Issues:

- None.

Tank Operations Contract Overview

Project Performance:

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

January-17										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	46,477	39,027	32,764	(7,450)	6,263	0.84	1.19			
FYTD	180,998	165,887	156,009	(15,111)	9,878	0.92	1.06	629,855		
CTD	3,636,947	3,601,022	3,564,873	(35,925)	36,149	0.99	1.01	4,759,316	4,744,499	14,791

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.		

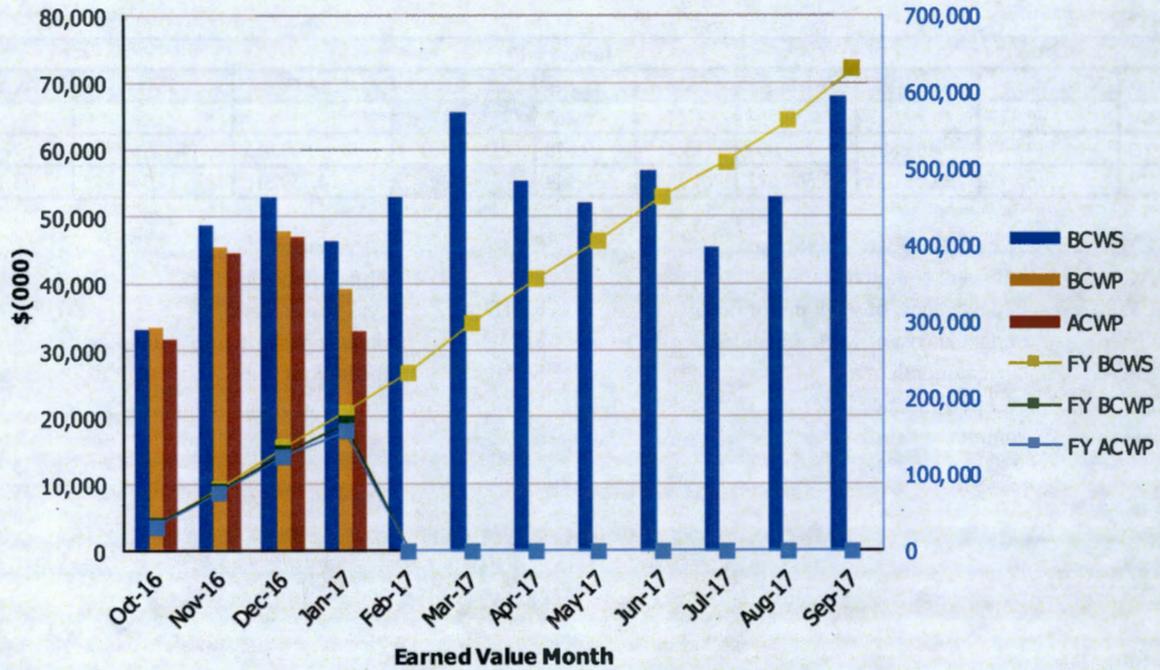
EXC-01a: Fiscal Year Cost and Schedule Report

Earned Value Data: Fiscal Year 2017

January-17

Tank Farms ORP-0014

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2016	\$33,051	\$33,501	\$31,798	1.01	1.05	\$33,051	\$33,501	\$31,798	1.01	1.05
Nov 2016	\$48,628	\$45,386	\$44,614	0.93	1.02	\$81,679	\$78,887	\$76,412	0.97	1.03
Dec 2016	\$52,841	\$47,972	\$46,833	0.91	1.02	\$134,520	\$126,859	\$123,246	0.94	1.03
Jan 2017	\$46,477	\$39,027	\$32,764	0.84	1.19	\$180,997	\$165,886	\$156,009	0.92	1.06
Feb 2017	\$52,867	\$0	\$0	0.00	0.00	\$233,864	\$0	\$0	0.00	0.00
Mar 2017	\$65,547	\$0	\$0	0.00	0.00	\$299,412	\$0	\$0	0.00	0.00
Apr 2017	\$55,460	\$0	\$0	0.00	0.00	\$354,872	\$0	\$0	0.00	0.00
May 2017	\$51,941	\$0	\$0	0.00	0.00	\$406,812	\$0	\$0	0.00	0.00
Jun 2017	\$56,717	\$0	\$0	0.00	0.00	\$463,529	\$0	\$0	0.00	0.00
Jul 2017	\$45,462	\$0	\$0	0.00	0.00	\$508,992	\$0	\$0	0.00	0.00
Aug 2017	\$52,912	\$0	\$0	0.00	0.00	\$561,903	\$0	\$0	0.00	0.00
Sep 2017	\$67,952	\$0	\$0	0.00	0.00	\$629,855	\$0	\$0	0.00	0.00

CTD	\$3,636,947	\$3,601,022	\$3,564,873	0.99	1.01
-----	-------------	-------------	-------------	------	------

- | | | | |
|------|----------------------------------|------|---------------------------------|
| ACWP | actual cost of work performed. | CTD | contract to date |
| BCWP | budgeted cost of work performed. | EVMS | Earned Value Management System. |
| BCWS | budgeted cost of work scheduled. | FY | fiscal year. |
| CPI | cost performance index. | SPI | schedule performance index |

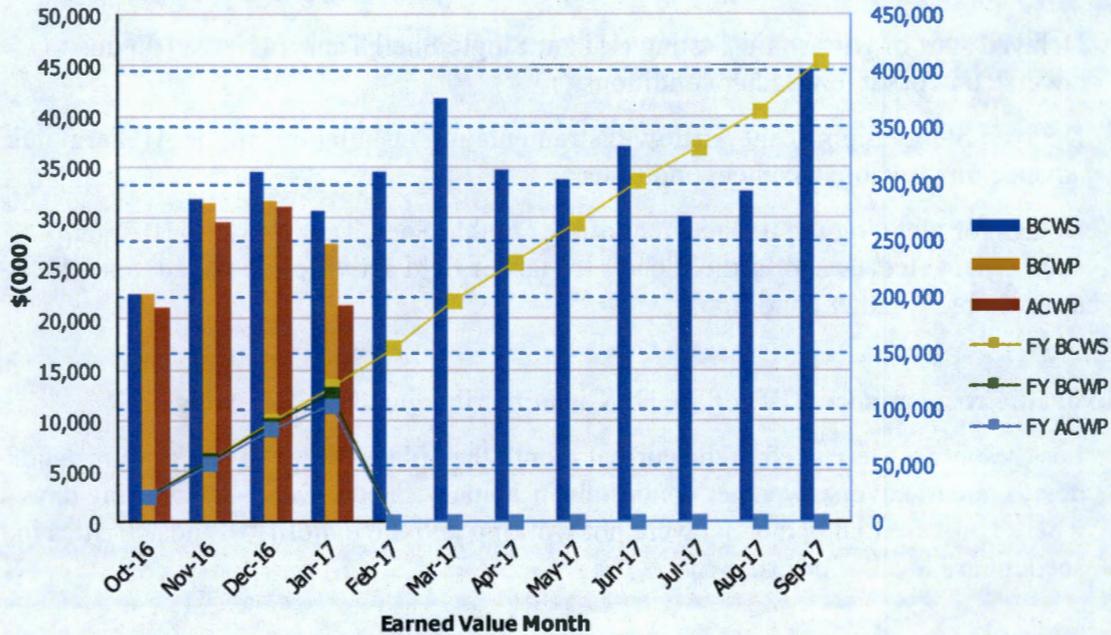
EXC-01a: Fiscal Year Cost and Schedule Report

Earned Value Data: Fiscal Year 2017

January-17

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2016	\$22,507	\$22,546	\$21,216	1.00	1.06	\$22,507	\$22,546	\$21,216	1.00	1.06
Nov 2016	\$31,885	\$31,496	\$29,527	0.99	1.07	\$54,392	\$54,042	\$50,743	0.99	1.07
Dec 2016	\$34,394	\$31,547	\$31,032	0.92	1.02	\$88,786	\$85,589	\$81,775	0.96	1.05
Jan 2017	\$30,657	\$27,462	\$21,370	0.90	1.29	\$119,443	\$113,051	\$103,146	0.95	1.10
Feb 2017	\$34,475	\$0	\$0	0.00	0.00	\$153,918	\$0	\$0	0.00	0.00
Mar 2017	\$41,794	\$0	\$0	0.00	0.00	\$195,712	\$0	\$0	0.00	0.00
Apr 2017	\$34,634	\$0	\$0	0.00	0.00	\$230,346	\$0	\$0	0.00	0.00
May 2017	\$33,685	\$0	\$0	0.00	0.00	\$264,031	\$0	\$0	0.00	0.00
Jun 2017	\$37,029	\$0	\$0	0.00	0.00	\$301,060	\$0	\$0	0.00	0.00
Jul 2017	\$30,092	\$0	\$0	0.00	0.00	\$331,152	\$0	\$0	0.00	0.00
Aug 2017	\$32,631	\$0	\$0	0.00	0.00	\$363,783	\$0	\$0	0.00	0.00
Sep 2017	\$44,592	\$0	\$0	0.00	0.00	\$408,375	\$0	\$0	0.00	0.00
CTD	\$2,418,121	\$2,405,374	\$2,370,571	0.99	1.01					

ACWP	actual cost of work performed.	CTD	contract to date
BCWP	budgeted cost of work performed.	EVMS	Earned Value Management System.
BCWS	budgeted cost of work scheduled.	FY	fiscal year.
CPI	cost performance index.	SPI	schedule performance index

Deputy Federal Project Director: Dawn MacDonald

Base Operations and Tank Farm Projects (5.01)

The January 2017, variances below do not directly impact or delay TPA milestones.

The **unfavorable** schedule variance (SV) of (\$3,195K) is primarily due to the following:

- Delayed start of Ultrasonic Testing (UT) at Single Shell Tank 241-AN-106 due to adverse unworkable weather conditions.
- Delayed Safety Significant Airflow Instrumentation installations in the AP Farm due to adverse unworkable weather conditions.
- Delays for planning the replacement of the Double Shell Tank 241-AP-102 pump encasement sleeves and further delays to start of field activities due to adverse unworkable weather conditions.

The **favorable** cost variance (CV) of \$6,091K is primarily due to the following:

- Less resources were used in the current month than planned due to site closures and delays due to adverse weather conditions in January. There were ~10 working days where non-essential personnel were not working and the majority of the activities in this account are level of effort.

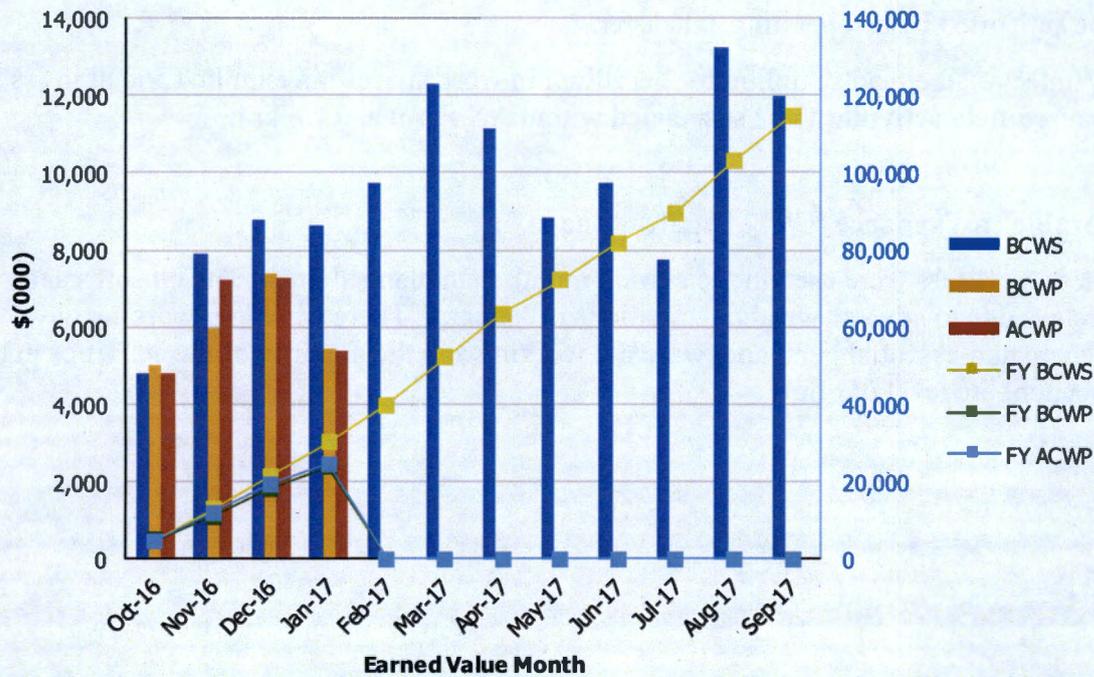
EXC-01a: Fiscal Year Cost and Schedule Report

Earned Value Data: Fiscal Year 2017

January-17

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2016	\$4,816	\$4,996	\$4,822	1.04	1.04	\$4,816	\$4,996	\$4,822	1.04	1.04
Nov 2016	\$7,924	\$5,969	\$7,241	0.75	0.82	\$12,740	\$10,965	\$12,063	0.86	0.91
Dec 2016	\$8,772	\$7,401	\$7,262	0.84	1.02	\$21,512	\$18,365	\$19,325	0.85	0.95
Jan 2017	\$8,646	\$5,422	\$5,360	0.63	1.01	\$30,158	\$23,787	\$24,685	0.79	0.96
Feb 2017	\$9,716	\$0	\$0	0.00	0.00	\$39,874	\$0	\$0	0.00	0.00
Mar 2017	\$12,286	\$0	\$0	0.00	0.00	\$52,160	\$0	\$0	0.00	0.00
Apr 2017	\$11,137	\$0	\$0	0.00	0.00	\$63,298	\$0	\$0	0.00	0.00
May 2017	\$8,865	\$0	\$0	0.00	0.00	\$72,163	\$0	\$0	0.00	0.00
Jun 2017	\$9,738	\$0	\$0	0.00	0.00	\$81,901	\$0	\$0	0.00	0.00
Jul 2017	\$7,769	\$0	\$0	0.00	0.00	\$89,670	\$0	\$0	0.00	0.00
Aug 2017	\$13,258	\$0	\$0	0.00	0.00	\$102,928	\$0	\$0	0.00	0.00
Sep 2017	\$11,973	\$0	\$0	0.00	0.00	\$114,901	\$0	\$0	0.00	0.00
CTD	\$739,326	\$721,837	\$745,359	0.98	0.97					

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

CTD contract to date
 EVMS Earned Value Management System.
 FY fiscal year.
 SPI schedule performance index

Federal Program Manager: Jeff Rambo

Retrieve and Close Single-Shell Tanks (5.02)

The January 2017 variances below have a no impact on TPA milestones for tank retrieval.

The **unfavorable** schedule variance (SV) of (\$3,224K) is due to:

- DOE delayed removal of in-tank legacy equipment within AX Farm until this work could be supported by an operating exhauster.
- Winter weather and sampling for beryllium in work spaces have limited and at times have caused field activities to be suspended within AX Farm and C Farm.

The **favorable** cost variance (CV) of \$62K is due to:

- Less resources were used in the current month than planned due to site closures and delays due to adverse weather conditions in January. There were ~10 working days where non-essential personnel were not working and the majority of the activities in this account are level of effort.

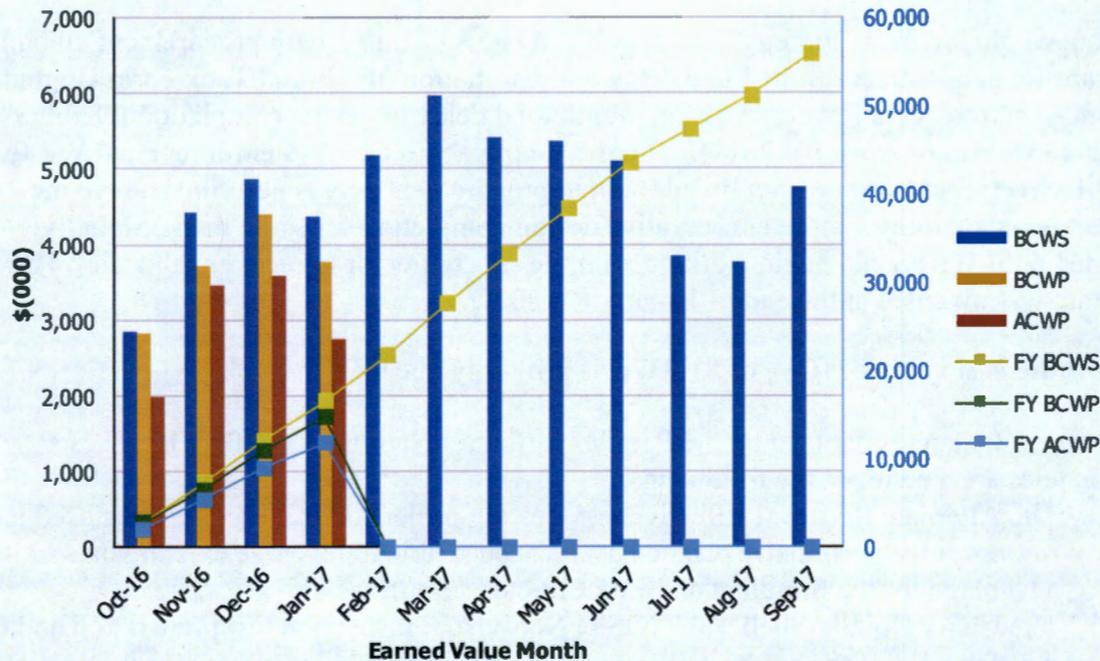
EXC-01a: Fiscal Year Cost and Schedule Report

Earned Value Data: Fiscal Year 2017

January-17

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2016	\$2,840	\$2,829	\$1,990	1.00	1.42	\$2,840	\$2,829	\$1,990	1.00	1.42
Nov 2016	\$4,428	\$3,728	\$3,446	0.84	1.08	\$7,267	\$6,557	\$5,436	0.90	1.21
Dec 2016	\$4,878	\$4,404	\$3,589	0.90	1.23	\$12,146	\$10,961	\$9,026	0.90	1.21
Jan 2017	\$4,371	\$3,773	\$2,737	0.86	1.38	\$16,516	\$14,734	\$11,762	0.89	1.25
Feb 2017	\$5,176	\$0	\$0	0.00	0.00	\$21,692	\$0	\$0	0.00	0.00
Mar 2017	\$5,962	\$0	\$0	0.00	0.00	\$27,655	\$0	\$0	0.00	0.00
Apr 2017	\$5,428	\$0	\$0	0.00	0.00	\$33,082	\$0	\$0	0.00	0.00
May 2017	\$5,358	\$0	\$0	0.00	0.00	\$38,441	\$0	\$0	0.00	0.00
Jun 2017	\$5,109	\$0	\$0	0.00	0.00	\$43,550	\$0	\$0	0.00	0.00
Jul 2017	\$3,851	\$0	\$0	0.00	0.00	\$47,401	\$0	\$0	0.00	0.00
Aug 2017	\$3,778	\$0	\$0	0.00	0.00	\$51,178	\$0	\$0	0.00	0.00
Sep 2017	\$4,756	\$0	\$0	0.00	0.00	\$55,934	\$0	\$0	0.00	0.00
CTD	\$388,901	\$385,754	\$356,617	0.99	1.08					

ACWP	actual cost of work performed.	CTD	contract to date
BCWP	budgeted cost of work performed.	EVMS	Earned Value Management System.
BCWS	budgeted cost of work scheduled.	FY	fiscal year.
CPI	cost performance index.	SPI	schedule performance index

Federal Program Manager: Kaylin Burnett

Waste Feed Delivery/Treatment (5.03)

The January 2017 variances below have no impacts on the TPA milestones.

The **unfavorable** schedule variance (SV) of (\$597K) is primarily due to:

- Prolonged procurement strategy discussions and late agreement with procurement on path forward for subcontract resulted in a delay to the initiation of AP-105 Tank Farm Upgrades design. The project is forecasting a six month total delay in design completion (October FY 2018 vs. end of April FY 2017). There is no impact to One System Integrated Waste Feed Delivery Plan at this time. In addition to procurement delays described above the project is maintaining a more conservative design completion schedule than originally planned until WRPS can begin working with the subcontractor to recover schedule. The contract was awarded at the end of January FY 2017.

The **favorable** cost variance (CV) of \$1,037K is primarily due to:

- Resource efficiencies realized by the Pacific Northwest National Lab (PNNL). These efficiencies are a result of the following:
 - The Alternate Retrieval Effectiveness Testing project definition phase has used less resources than originally planned as it has been able to leverage existing data to its advantage for the Simulant and End Effector definition.
 - The Under Double-Shell Tank (DST) Non-visual Inspection test preparation and the development of the associated test protocol has required less resources than originally planned.
- Less resources were used in the current month than planned due to site closures and delays due to adverse weather conditions in January. There were ~10 working days where non-essential personnel were not working and the majority of the activities in this account are level of effort.

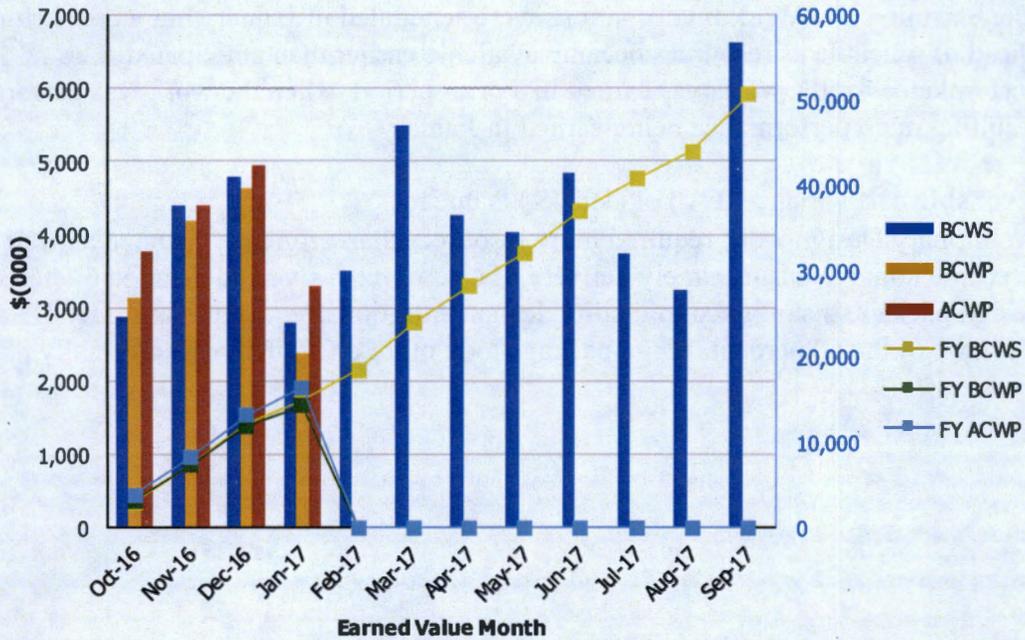
EXC-01a: Fiscal Year Cost and Schedule Report

Earned Value Data: Fiscal Year 2017

January-17

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2016	\$2,889	\$3,131	\$3,770	1.08	0.83	\$2,889	\$3,131	\$3,770	1.08	0.83
Nov 2016	\$4,391	\$4,193	\$4,400	0.95	0.95	\$7,280	\$7,324	\$8,170	1.01	0.90
Dec 2016	\$4,796	\$4,620	\$4,950	0.96	0.93	\$12,076	\$11,944	\$13,119	0.99	0.91
Jan 2017	\$2,804	\$2,370	\$3,297	0.85	0.72	\$14,880	\$14,314	\$16,417	0.96	0.87
Feb 2017	\$3,500	\$0	\$0	0.00	0.00	\$18,380	\$0	\$0	0.00	0.00
Mar 2017	\$5,504	\$0	\$0	0.00	0.00	\$23,885	\$0	\$0	0.00	0.00
Apr 2017	\$4,261	\$0	\$0	0.00	0.00	\$28,146	\$0	\$0	0.00	0.00
May 2017	\$4,032	\$0	\$0	0.00	0.00	\$32,178	\$0	\$0	0.00	0.00
Jun 2017	\$4,841	\$0	\$0	0.00	0.00	\$37,019	\$0	\$0	0.00	0.00
Jul 2017	\$3,750	\$0	\$0	0.00	0.00	\$40,769	\$0	\$0	0.00	0.00
Aug 2017	\$3,245	\$0	\$0	0.00	0.00	\$44,014	\$0	\$0	0.00	0.00
Sep 2017	\$6,631	\$0	\$0	0.00	0.00	\$50,645	\$0	\$0	0.00	0.00
CTD	\$70,489	\$67,948	\$73,165	0.96	0.93					

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

CTD contract to date
 EVMS Earned Value Management System.
 FY fiscal year.
 SPI schedule performance index

Deputy Federal Project Director: Janet Diediker

Treat Waste (5.5)

The January 2017 variances below have no impacts on TPA milestones.

The **unfavorable** schedule variance (SV) of (\$434K) is due to:

- The Seismic Field Work Investigations were scheduled in January but were performed ahead of schedule as resources became available earlier than anticipated. The performance for the work was earned in a prior period, when the work was performed, resulting in no performance being earned in January.

The **unfavorable** cost variance (CV) of (\$927K) is due to:

- Preliminary Design work required more resources than originally planned as well as overtime hours to ensure timely delivery of a comprehensive and detailed 60 percent design package that aligned to facility design. Additionally, completing Inter-Discipline Reviews of the 60 percent design package took more effort than was originally planned.