FINAL

Office of River Protection

Tri-Party Agreement
Monthly Summary Report
December 2013

Tri-Party Agreement

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Office of River Protection
Tri-Party Agreement Milestone Review
December 2013 (Monthly Summary Report/Project Earned Value Management System reflects October 2013 information)

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

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Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2014				
M-062-40C	Select a Minimum of Three Scenario's for the System Plan	12/15/2013	12/12/2013	Completed
M-062-01AB	Submit Semi-Annual TPA Project Compliance Report	01/31/2014		On Schedule
M-045-86C	Submit Retrieval Data Report to Ecology for C-104	03/21/2014		On Schedule
M-045-22-T02	Submit Results of Vadose Zone Characterization of 241-U to Ecology	04/30/2014		On Schedule
M-045-86F	Submit Retrieval Data Report to Ecology for C-108	05/01/2014		On Schedule
M-045-86G	Submit Retrieval Data Report to Ecology for C-109	06/04/2014		On Schedule
M-045-22-T03	Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology	07/31/2014		On Schedule
M-045-56J	Ecology and DOE Agree, at a Minimum, to Meet Yearly (by July)	07/31/2014		On Schedule
M-062-01AC	Submit Semi-Annual TPA Project Compliance Report	07/31/2014		On Schedule
M-045-91B-T01	Provide Ecology report on the Concrete Core from Tank A-106 or alt	09/30/2014		On Schedule
M-045-22-T01	Submit Results of Vadose Zone Characterization of 241-TX to Ecology	09/30/2014		On Schedule
M-047-07	CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to Ecology	09/30/2014		At Risk
M-090-13	CD-1 for Interim Hanford Storage Project and CR for CD-2 to Ecology	09/30/2014		At Risk
M-045-22	Review M-045-22-T03 Report and Determine Path Forward	09/30/2014		On Schedule
Fiscal Year 2015				
M-062-40D	Submit System Plan	10/31/2014		On Schedule
M-062-40ZZ	Submit One Time Tank Waste Supp Treatment Technologies Report	10/31/2014		On Schedule
M-045-91G-T03	Provide AOR Final Doc. for SSTs on 1,000,000 Gallon Tanks	10/31/2014		On Schedule
M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	12/26/2014		On Schedule
M-045-61	Phase 2 RCRA Facility Investigation/Corrective Measures Study	12/31/2014		To Be Missed
M-045-91G-T04	Provide AOR Final Doc. for SSTs on 55,000 Gallon Tanks	01/30/2015		On Schedule
M-045-91F-T02	Provide Report of Liner Failures for SSTs	03/31/2015		On Schedule
M-062-45-T01	Comp. Neg's 6-Mo After Last Issuance of System Plan	04/30/2015		On Schedule
M-062-45-ZZ	Negotiate a One Time Supplemental Treatment Selection	04/30/2015		On Schedule
M-062-45-ZZ-A	Convert M-062-31-T01 Thru M-062-34-T01 to Interim Milestones	04/30/2015		On Schedule
M-045-91F	Provide Summary Conclusions Report on Leak Integrity	06/30/2015		On Schedule
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA-C	06/30/2015		To Be Missed
M-045-92O	Barrier 3 Design/Monitoring Approval From Ecology	06/30/2015		On Schedule

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2015 Continued				
M-045-91G	Provide Summary Conclusions Report of AOR for SSTs	07/28/2015		On Schedule
M-045-56K	Ecology and DOE Agree, at a Minimum, to Meet Yearly (By July)	07/31/2015		On Schedule
M-045-91H	Submit Change Pkg (if necessary) to est. Additional Milestones	07/31/2015		On Schedule
M-045-82	Submit Comp. Permit Modification Request for Tiers 1,2,3	09/30/2015		To Be Missed

AOR = Analyses of Record
CR = change request
DOE = U.S. Department of Energy.
Ecology = Washington State Department of Ecology.
RCRA = Resource Conservation and Recovery Act.
SST = single-shell tank.
TPA = Tri-Party Agreement.
WMA-C = Waste Management Area C.

System Plan

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

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

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

Significant Past Accomplishments:

On October 24, 2013, Washington State Department of Ecology (Ecology) and U.S. Department of Energy (DOE), Office of River Protection (ORP) signed the Tri-Party Agreement (TPA) Change Control Form M-62-13-02, moving out the due date for this embedded milestone from October 31, 2013 to December 15, 2013, for selection of three, or more, scenarios to be modeled in the System Plan. Ecology has defined five scenarios to be analyzed in System Plan 7. Washington River Protection Solutions LLC has included a description of each scenario in the Selected Scenarios for the River Protection Project System Plan, Rev. 7 document released to ORP on December 4, 2013. See joint ORP and Ecology letter 13-TPD-0070, dated December 12, 2013, for completion and description of M-062-40C scenarios.

Significant Planned Actions in the Next 6 Months:

Ecology will continue to further define the five selected scenarios distinguishing assumptions.

Issues:

None.

Acquisition of New Facilities

M-090-13, Submit CD-1 for Interim Hanford Storage Project and Tri-Party Agreement (TPA) Change Request for CD-2 to Ecology, Due: September 30, 2014, Status: At risk. Created by TPA Change Control Form M-90-12-02, signed by ORP and Ecology on November 19, 2012, to "Submit to Ecology, a Conceptual Design Report Package (Critical Decision-1) for the Interim Hanford Storage Project (storage of the first two years of Hanford Site Immobilized High-Level Waste from WTP operations) and a TPA Change Request (in accordance with TPA Action Plan Section 12.0) to submit to Ecology, a Preliminary Design Report package (Critical Decision-2)."

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

M-047-07, Submit CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to Ecology, Due: September 30, 2014, Status: At risk. Created by TPA Change Control Form M-47-12-02, signed by ORP and Ecology on November 19, 2012, to "Submit to Ecology, a Conceptual Design Report package (Critical Decision-1) for the Secondary Liquid Waste Treatment Project and a TPA Change Request (in accordance with TPA Action Plan Section 12.0) to submit to Ecology, a Preliminary Design Report package (Critical Decision-2)."

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

Significant Past Accomplishments:

None.

Significant Planned Actions in the Next 6 Months:

None.

Issues:

ORP will need to discuss impacts to the above at risk milestones and other TPA work scope priorities with Ecology per TPA paragraphs 148/149 due to funding constraints.

Supplemental Treatment and Part B Permit Applications

M-062-40ZZ, Submit a one-time Tank Waste Supplemental Treatment Technologies Report if a supplemental treatment technology is proposed other than a second Low-Activity Waste (LAW), Due: October 31, 2014, Status: On schedule.

M-062-45ZZ (designation for M-062-45 item #3), Negotiate a one-time supplemental treatment selection, Due: April 30, 2015, Status: On schedule. Negotiations are not yet underway.

M-062-45ZZ-A, Convert M-062-31-T01 through M-062-34-T01 to Interim Milestones, Due: April 30, 2015, Status: On schedule.

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

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

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

M-062-45XX, No later than December 31, 2021, the DOE and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45, paragraphs 4 and 5, Due: December 31, 2021, Status: On schedule.

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

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

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

Significant Past Accomplishments:

None.

Significant Planned Actions in the Next 6 Months:

None.

Issues:

ORP and Ecology are in discussions on the requirement for the one-time supplemental treatment technologies report (M-062-40ZZ) and the requirements for negotiation of supplemental treatment milestones (M-062-45, item #3).

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

242-A Campaign Strategy:

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

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY 2010	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and completing in early October 2010. Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY 2010	10-02	AW-106	AW-106	
FY 2011	NA	NA	NA	No campaign conducted in FY 2011 due to ongoing 242-A and tank farm facility life extension and *American Recovery and Reinvestment Act* funded upgrades.
FY 2012	NA	NA	NA	No campaign conducted in FY 2012 due to ongoing 242-A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis.
FY 2013	NA	NA	NA	No campaigns to be conducted in FY 2013 due to ongoing 242-A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis.
FY 2014	13-01	AP-107	AP-107	Estimated start April 2014. Requires two passes to achieve waste volume reduction.
FY 2014	14-01	AW-106	AP-107	Estimated start late May 2014.
FY 2014	14-02	AZ-102	AP-103	Estimated start August 2014.
FY 2015	15-01	AW-106	AP-103	Estimated start October 2014.
FY 2015	15-02	AZ-102	AP-103	Estimated start March 2015.

FY = fiscal year.
NA = not applicable.

Single-Shell Tank Integrity Assurance

M-045-91G-T03, Provide to Ecology the structural analyses of record final documentation for single-shell tanks (SST) for 1,000,000 gallon tanks (A-, AX-, and SX-Farms), Due: October 31, 2014, Status: On schedule.

M-045-91F-T04, Provide to Ecology, as a Hanford Federal Facility Agreement and Consent Order secondary document, a report on the 100-series SSTs, which have been or will be identified as having leaked in RPP-32681, Revision 0, Due: December 26, 2014, Status: On schedule.

M-045-91G-T04, Provide to Ecology the structural analyses of record final documentation for SSTs for 55,000 gallon tanks (B-, C-, T-, and U-Farms), Due: January 30, 2015, Status: On schedule.

M-045-91B-T01, Provide Ecology a report containing the results and interpretation of testing and analysis, performed on the concrete core obtained from Tank A-106 or an alternate tank, Due: January 31, 2015, Status: On schedule.

M-045-91F-T02, Provide to Ecology as a Hanford Federal Facility Agreement and Consent Order secondary document a report evaluating the common factors of liner failures for SSTs that have leaked and will provide recommendations as appropriate, such as enhanced leak detection, monitoring, and mitigation, Due: March 31, 2015, Status: On schedule.

M-045-91F, Provide to Ecology a report (Summary Conclusions Report on Leak Integrity) summarizing and evaluating the information submitted under M-045-91F-T01 through M-045-91F-T04, Due: June 30, 2015 Status: On schedule.

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

M-045-91H, Submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones based on information obtained from the actions in the preceding M-045-91 series of milestones to date, Due: July 31, 2015, Status: On schedule.

M-045-91I, Provide to Ecology an Independent, Qualified, Registered Professional Engineer (IQRPE) certification of SSTs structural integrity for the remainder of the mission, or for such time as the IQRPE believes he/she can reasonably certify, Due: September 30, 2018, Status: On schedule.

Significant Past Accomplishments:

None.

Significant Planned Actions in the Next 6 Months:

None.

Issues:

None.

In Tank Characterization and Summary

For the period from November 1 through November 30, 2013:

Accomplishments:

- Completed RPP-PLAN-54751, *Tank Sampling and Analysis Plan for Tank 241-C-112 Hard Heel Dissolution*, Rev. 1.
- Completed RPP-54750, *C-112 Hard Heel Dissolution Data Quality Objectives*, Rev. 1.
- Completed RPP-PLAN-55733, *Tank 241-AZ-102 Grab Sampling and Analysis Plan in Support of Evaporator Campaign for Fiscal Year 2014*, Rev. 1.
- Completed sampling of the tank 241-AY-102A Leak Detector Pit. Four samples were collected and delivered to the lab on November 5, 2013.

Planned Action within the next 6 Months:

Tank sampling:

- Tank 241-AZ-102 Leak Detector Pit sampling is currently scheduled for December 2013.
- Tank 241-C-112 grab sampling during hard heel dissolution is currently scheduled to start December 2013.
- 241-AY-102A leak detection pit grab sampling is currently scheduled for January 2014 and approximately monthly thereafter.
- Tank 241-AN-106 grab sampling for chemistry control is currently scheduled for January 2014.
- Tank 241-AZ-102 grab sampling for evaporator campaign is currently scheduled for March 2014
- Tank 241-C-107 Off-Riser Sampling System/Drag Sampler sampling is currently scheduled for March 2014
- Tank 241-SY-102 core sampling for chemistry control and strategic planning is currently scheduled for April 2014
- Tank 241-C-111 grab sampling during hard heel dissolution is currently scheduled to start in May 2014.

Best-basis inventory updates:

The following tanks have been identified for updates in FY 2014, Quarter 1:

- 241-AN-101
- 241-AN-102
- 241-AN-106
- 241-AP-104
- 241-AP-107
- 241-AY-101
- 241-AW-102
- 241-C-109
- 241-C-101
- 241-C-107
- 241-C-110.

The best-basis inventory updates will be released in January 2014.

Data quality objectives:

- A revision to the tank farms Chemistry Control Program Data Quality Objective is due to be released in January 2014.
- A data quality objective on process sampling during caustic dissolution of tank 241-C-111 is due to be released in December 2013.

Issues:

None.

TANK OPERATIONS CONTRACT OVERVIEW

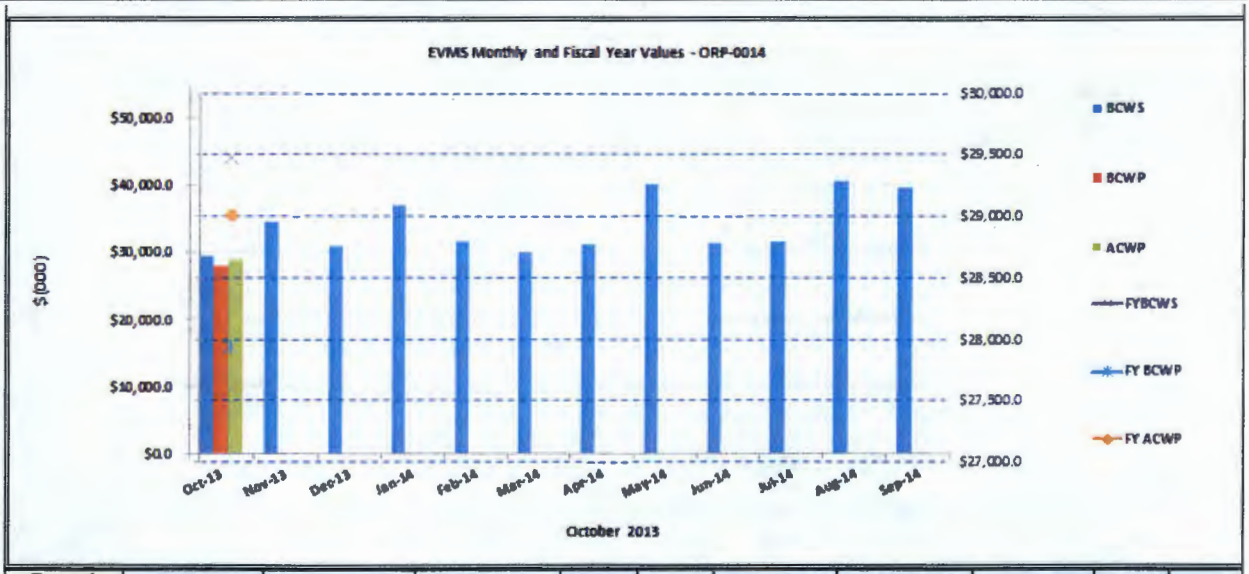
Project Performance

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.

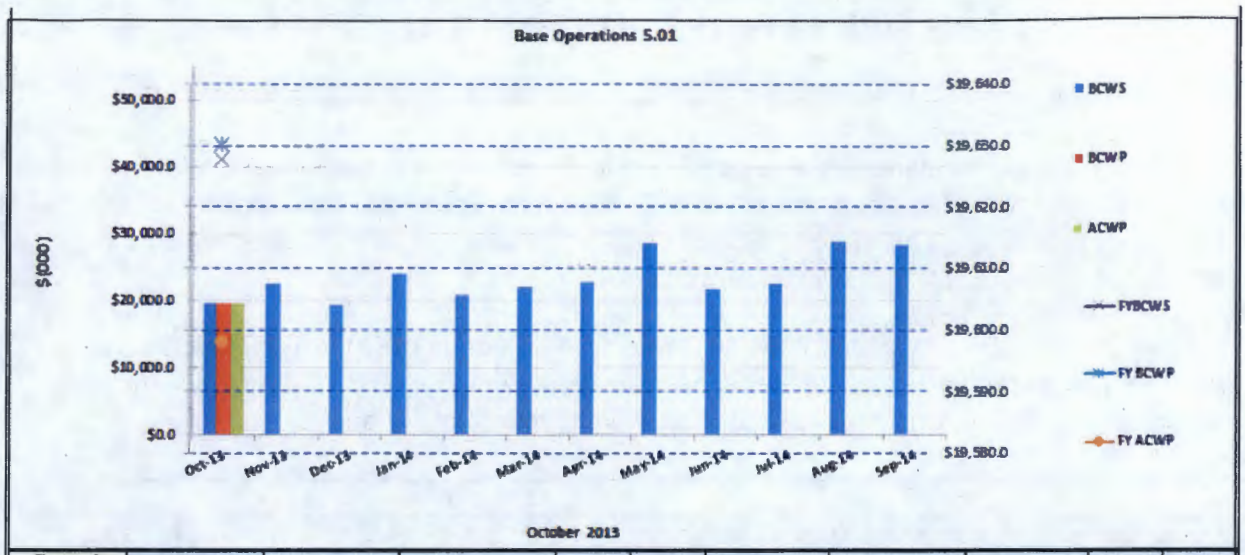
As of October 31, 2013, Washington River Protection Solutions LLC the Tank Operations Contractor has worked 69 days without a lost time workday injury and 29 days since the last recordable case. There was one recordable case in the month of October.

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	29,474.1	27,945.9	29,014.5	(1,528.2)	(1,068.6)	0.95	0.96			
FYTD	29,474.1	27,945.9	29,014.5	(1,528.2)	(1,068.6)	0.95	0.96	398,645.7	400,905.6	(2,259.9)
CTD	1,921,217.9	1,919,689.7	1,920,758.5	(1,528.2)	(1,068.8)	1.00	1.00	3,109,760.0	3,111,425.8	(1,665.8)

Red shaded cells indicates a SPI/CPI less than .90;
Green shaded cells indicate a SPI/CPI between .90 and .99; and
Blue shaded indicates a SPI/CPI greater than or equal to 1.0



Earned Value	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-13	$29,474.1	$27,945.9	$29,014.6	0.95	0.96	$29,474.1	$27,945.9	$29,014.6	0.95	0.96
Nov-13	$34,534.6									
Dec-13	$30,833.4									
Jan-14	$37,014.8									
Feb-14	$31,514.2									
Mar-14	$29,811.3									
Apr-14	$31,014.5									
May-14	$40,098.5									
Jun-14	$31,363.1									
Jul-14	$31,603.0									
Aug-14	$40,615.9									
Sep-14	$39,535.8									
CTD	$1,921,217.9	$1,919,689.7	$1,920,758.5	1.00	1.00					



Earned Value	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-13	$19,627.7	$19,630.3	$19,598.4	1.00	1.00	$19,627.7	$19,630.3	$19,598.4	1.00	1.00
Nov-13	$22,524.8									
Dec-13	$19,401.8									
Jan-14	$23,897.5									
Feb-14	$20,784.0									
Mar-14	$21,930.2									
Apr-14	$22,658.1									
May-14	$28,531.3									
Jun-14	$21,832.5									
Jul-14	$22,404.2									
Aug-14	$28,944.7									
Sep-14	$28,344.1									
CTD	$1,250,694.4	$1,250,696.9	$1,250,665.0	1.00	1.00					

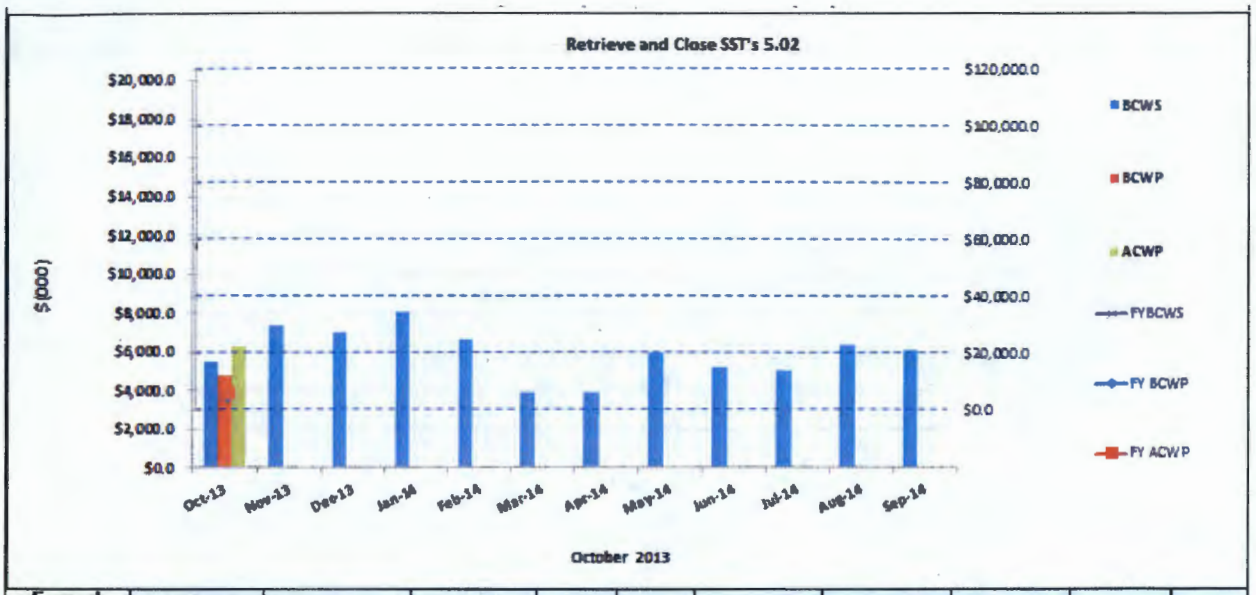
Base Operations and Tank Farm Projects

The current month favorable schedule variance of $2.5K is primarily due to:

- Resources allocated to accelerate critical path activities that include gas release models to double-shell tanks AN-101 and AN-107.
- Accelerated completion of the transportation and storage container for the core sampling platform that is essential for transportation

The current month favorable cost variance of $31.9K is primarily due to:

- Less than planned cost for the electronic time verification system
- Less 222-S support for maintenance services than planned.



Earned Value	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-13	$5,483.1	$4,822.5	$6,336.0	0.88	0.76	$5,483.1	$4,822.5	$6,336.0	0.88	0.76
Nov-13	$7,366.3									
Dec-13	$6,970.4									
Jan-14	$8,105.3									
Feb-14	$6,645.7									
Mar-14	$3,883.1									
Apr-14	$3,935.6									
May-14	$5,908.3									
Jun-14	$5,200.1									
Jul-14	$5,011.0									
Aug-14	$6,421.3									
Sep-14	$6,084.9									
CTD	$432,322.5	$431,661.9	$433,175.5	1.00	1.00					

Retrieval and Close Single-Shell Tanks

Schedule Variance of ($441K):
The unfavorable schedule variance is primarily due to:

- Reallocation of construction resources from C-111 to SST C-112 in order to meet retrieval readiness by mid-November 2013
- Delays to the Mobile Arm Retrieval System-Vacuum (MARS-V) installation and startup activities caused by high winds and late completion of route maps for crane placement.

Cost Variance of ($1,513.5K):
The unfavorable cost variance is primarily due to:

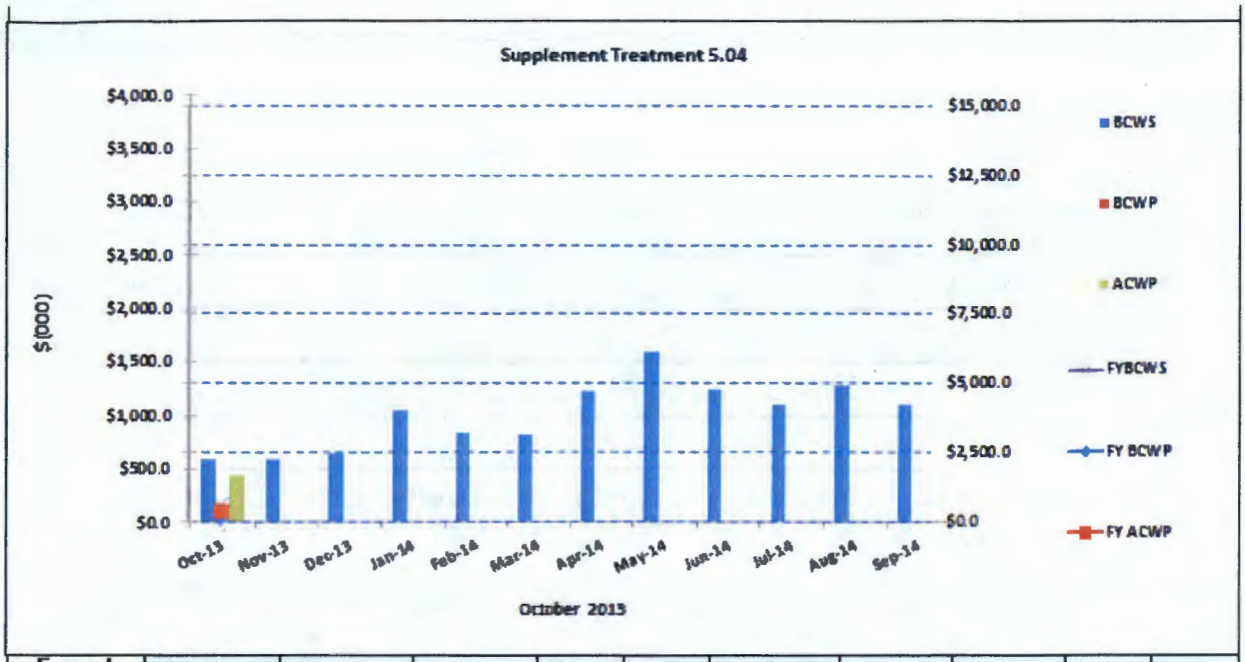
- Several unsuccessful attempts to remove the C-107 slurry pump
- Increased labor required to respond to equipment problems, perform winterization activities, and training on the new water skid.

Earned Value	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-13	$3,766.3	$3,335.3	$2,639.7	0.89	1.26	$3,766.3	$3,335.3	$2,639.7	0.89	1.26
Nov-13	$4,040.5									
Dec-13	$3,813.4									
Jan-14	$3,954.5									
Feb-14	$3,233.8									
Mar-14	$3,170.4									
Apr-14	$3,186.5									
May-14	$4,058.6									
Jun-14	$3,081.2									
Jul-14	$3,087.0									
Aug-14	$3,963.1									
Sep-14	$4,005.3									
CTD	$220,010.7	$219,579.4	$218,883.8	1.00	1.00					

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

The current month unfavorable schedule variance of ($431.3K) is due to waste compatibility program experienced delays in shipping and receiving the cone penetrometer equipment from the vendor due to a last minute requirement by safety.

The current month favorable cost variance of $695.6K is due to WTP tank operations contract integrated readiness support required fewer resources in the development of the integrated operations readiness schedule due to the estimate assuming higher complexity that experienced.



Earned Value	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-13	$596.7	$157.9	$440.5	0.26	0.36	$596.7	$157.9	$440.5	0.26	0.36
Nov-13	$603.0									
Dec-13	$647.8									
Jan-14	$1,057.5									
Feb-14	$850.6									
Mar-14	$827.7									
Apr-14	$1,234.4									
May-14	$1,600.3									
Jun-14	$1,249.4									
Jul-14	$1,100.7									
Aug-14	$1,286.8									
Sep-14	$1,101.5									
CTD	$19,190.3	$17,751.5	$18,034.2	0.93	0.98					

Supplemental Treatment

The current month unfavorable schedule variance of ($439K) is due to:

- Delays in releasing contracts for technetium removal to the Savanah River National Laboratory
- Direction from ORP to stop work on contact handled-transuranic retrieval testing and infrastructure installation.

The current month unfavorable cost variance of ($283K) is due to increased expenditures for immobilization maturation on subcontract administration required to develop, submit, and apply new contracts for FY 2014 in order to mobilize the program on this level of effort account.

Work Breakdown Structure 5.2 Retrieve and Close Single-Shell Tanks

M-045-22, Review M-045-22-T03 Report and Determine Path Forward, Due: September 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: On schedule. This ORP/Ecology decision point will determine whether to continue with soil desiccation/contaminant removal testing and other interim measures, and if the remaining work in milestone M-045-92 should be modified. See ORP letter 13-TF-0014, dated March 18, 2013 and TPA change package M-45-12-05 (approved on April 1, 2013) for more information.

M-045-22-T01, Submit Results of Vadose Zone Characterization of 241-TX to Ecology, Due: September 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: On schedule.

M-045-22-T02, Submit Results of Vadose Zone Characterization of 241-U to Ecology, Due: April 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: On schedule.

M-045-22-T03, Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology, Due: July 31, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: On schedule.

M-045-56J, Complete Implementation of Agreed to Interim Measures, Due: July 31, 2014, Status: On schedule.

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 CMS report, milestone M-45-58, and implementation of other interim corrective measures), Due: To be determined, Status: On schedule.

M-045-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RFI/CMS Report for WMA Area C (WMA-C), Due: December 31, 2014, Status: To be missed. Please see issues.

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

M-045-92, DOE and Ecology will establish selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due: September 30, 2017, Status: On schedule. This milestone date has been modified according to M-45-12-04 and the decision to move forward with construction/design of additional barriers dependent on discussions per M-045-22.

M-045-92N, Construct Barriers 1 and 2 in 241-SX Farm, Due: October 31, 2015, Status: On schedule. The decision to move forward with construction/design of additional barriers is dependent on discussions per M-045-22.

M-045-92O, Submit a Final Design and Monitoring Plan for Interim Barrier 3, Due: June 30, 2015, Status: On schedule. The decision to move forward with construction/design of additional barriers is dependent on discussions per M-045-22.

Significant Past Accomplishments:

- Automated data collection systems for T-Farm and TY-Farm interim barrier monitoring continue gathering data.
- The pore water extraction test south of SX-Farm under the M-045-20 work plan continues.
- Collection of resistivity data near the C-200 tanks has been completed. Analysis of the data is continues.
- Data collection in U-Farm for electrical resistivity characterization was completed. Data analysis and reporting will be completed in FY 2014.
- Direct-push field work in TX-Farm continues under the M-045-20 work plan and M-045-21 sampling and analysis plan.

Significant Planned Actions in the Next 6 Months:

- Complete direct-push field work in TX-Farm under the M-045-20 work plan.
- Complete analysis and reporting of the electrical resistivity data collected in U-Farm under the M-045-20 work plan.
- Complete analysis and reporting of electrical resistivity data collected near the C-200 tanks per the WMA-C Phase 2 Resource Conservation and Recovery Act Field Investigation/Corrective Measures Study Work Plan.
- Begin documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act Field Investigation Report.
- Complete the SX-Farm pore water extraction proof of principle test under the M-045-20 work plan.

SST Retrieval and Closure Program

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

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

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

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

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

M-045-00, Complete Closure of all Single-Shell Tank Farms, Due: January 31, 2043, Status: On schedule.

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

- M-045-86C: The Retrieval Data Report for C-104 is due March 21, 2014
- M-045-86F: The Retrieval Data Report for C-108 is due May 1, 2014
- M-045-86G: The Retrieval Data Report for C-109 is due June 4, 2014.

Significant Past Accomplishments:

- The Retrieval Data Report for tank C-108 was finalized and transmitted to Ecology under DOE letter 13-TF-0120 on November 27, 2013.
- See discussions above and related discussions in Consent Decree report.
- Held the kick-off meeting with regulators/stakeholders to discuss the activities underway for the WMA-C performance assessment.
- Completed post-retrieval logging of the drywells near C-104 ad C-109 to support the Retrieval Data Reports
- A Retrieval Data Report for tank C-104 has been drafted.
- Held the kick-off meeting with regulators/stakeholders to discuss the activities underway for the WMA-C performance assessment.
- A Retrieval Data Report for tank C-109 has been drafted.

Significant Planned Activities in the Next 6 Months:

- Issue a retrieval data report for tank C-104
- Issue a retrieval data report for C-109
- Perform numeric modeling for the WMA-C performance assessment
- See discussions above and related discussions in Consent Decree report.

Issues:

The WMA-C performance assessment (PA) was not funded at the beginning of FY 2013. ORP had reported previously that the WMA-C PA would need to be funded by March 31, 2013, in order to maintain the milestone schedule. Funding of the WMA-C PA was provided in FY 2013, TPA milestones M-045-61, M-045-62, and M-045-82 are still to be missed. ORP and Ecology met on October 28, 2013 and November 21, 2013, to develop an integrated path forward that addresses all the deliverables associated with milestones M-045-61, M-045-62, and M-045-82. These discussions will continue.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-102	RPP-22393, Rev. 6A	In Process	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-104	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 7	Complete	MARS-V	MARS-V-High Pressure Water	-
C-107	RPP-22393, Rev. 6A	Complete	MARS-S	MARS-S -High Pressure Water	-
C-108	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 2	In process	Modified Sluicing	Mechanical Waste Conditioning	High Pressure Water
C-111	RPP-37739, Rev. 1	Complete	Modified Sluicing	High pressure water with ERSS	Chemical Dissolution with ERSS
C-112	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution	-

ERSS = Extended Reach Sluicing System.
MARS = Mobile Arm Retrieval System.
S = sluicing.
TWRWP = Tank Waste Retrieval Work Plan.
V = vacuum.

Significant Accomplishments:

Revised Tank Waste Retrieval Work Plan (TWRWP) RPP-22393 from Rev. 6A to Rev. 7.

Modification notice 2013-10 for RPP-33116, Rev. 2 was approved. The notice updates the TWRWP with necessary changes for groundwater monitoring.

Significant Planned Activities in the Next 6 Months:

Modify TWRWP RPP-22520 with revised supernate concentrations for groundwater risk estimates associated with C-105 retrieval.

Issues:

None.

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

Tank 241-C-106

Significant Past Accomplishments:
None.

Significant Planned Activities in the Next 6 Months:
Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A request for additional information was received from the NRC in February 2009.

Issues:
It has been discussed with the NRC that much of the additional information requested is dependent upon development of C-Farm residual waste PA and, therefore, cannot be provided until the PA is published.

Tank Retrievals with Individual Milestones

Tank 241-A-103

M-045-15, Completion of Tank A-103 SST Waste Retrieval, Due: September 30, 2022, Status: On schedule. Change package M-45-11-04 replaced tank S-102 with tank A-103 and changed to milestone completion date for M-045-15 to September 30, 2022.

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

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

Significant Past Accomplishments:
Change package M-45-11-04 was signed by ORP and Ecology on April 19, 2011.

No Significant Planned Activities in the Next 6 Months and No Issues for Tank 241-A-103.

Tank 241-S-112

M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project, Due: To be determined (in accordance with M-045-84 or M-045-85), Status: On schedule.

M-045-13E, Complete Negotiations for Interim Milestones for Closure of S-112, Due: To be determined, Status: On schedule as part of M-045-84 or M-045-85.

Significant Past Accomplishments:
Ecology letter of January 7, 2008, concurred with ORP that retrieval of tank S-112 is complete.

No Significant Planned Activities in the Next 6 Months and No Issues for Tank 241-S-112.