FINAL

Office of River Protection

Tri-Party Agreement Monthly Summary Report April 2014

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Tri-Party Agreement

Office of River Protection
Tri-Party Agreement Milestone Review
April 2014 (Monthly Summary Report/Project Earned Value Management System reflects February 2014 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	Double-Shell Tank System Update	Jeremy Johnson/Jeff Lyon
6	Single-Shell Tank Integrity Assurance; M-045-91	Jeremy Johnson/ Jim Alzheimer
8	In Tank Characterization and Summary	Billie Mauss/Michael Barnes
10	Tank Operations Contract Overview	Kathy Higgins/Jeff Lyon
15	Single-Shell Tank Corrective Action; M-045-22, M-045-50 series, M-045-60 series, and M-045-92	Chris Kemp/Jeff Lyon
16	Single-Shell Retrieval and Closure Program Tri-Party Agreement (TPA) Milestones Status; M-045-00 series	Chris Kemp/Jeff Lyon
18	Tank Waste Retrieval Work Plan Status	Chris Kemp/Jeff Lyon
19	Tank in TPA Appendix H, Status Tank Retrievals with Individual Milestones	Chris Kemp/Jeff Lyon
CD	Waste Treatment and Immobilization Plant (WTP) Overall TPA Summary and Milestone Status; see the U.S. Department of Energy, Office of River Protection Consent Decree 08-5085-FVS Monthly Summary Report for WTP Facility-specific information	Delmar Noyes/Dan McDonald

CD = Consent Decree 08-5085-FVS

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2014				
M-062-40C	Select a Minimum of Three Scenario's for the System Plan	12/15/2013	12/12/2013	Completed
M-062-01AB	Submit Semi-Annual TPA Project Compliance Report	01/31/2014	01/31/2014	Completed
M-045-86C	Submit Retrieval Data Report to Ecology for C-104	03/21/2014	02/18/2014	Completed
M-045-22-T02	Submit Results of Vadose Zone Characterization of 241-U to Ecology	04/30/2014	02/20/2014	Completed
M-045-86F	Submit Retrieval Data Report to Ecology for C-108	05/01/2014	11/27/2013	Completed
M-045-86G	Submit Retrieval Data Report to Ecology for C-109	06/04/2014	03/13/2014	Completed
M-045-22-T03	Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology	07/31/2014		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-045-86H	Submit Retrieval Data Report to Ecology for C-110	01/29/2015		On Schedule
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

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2015 Continued				
M-045-92O	Barrier 3 Design/Monitoring Approval From Ecology	06/30/2015		On Schedule
M-045-91G	Provide Summary Conclusions Report of AOR for SSTs	07/28/2015		On Schedule
M-045-56K	Ecology and DOE Agree, at a Minimum, to Meet Yearly (By July)	07/31/2015		On Schedule
M-045-91H	Submit Change Pkg (if necessary) to est. Additional Milestones	07/31/2015		On Schedule
M-045-82	Submit Comp. Permit Modification Request for Tiers 1,2,3	09/30/2015		To Be Missed

AOR = Analyses of Record.
CD-1/-2 = critical decision-1/-2
CR = change request.
DOE = U.S. Department of Energy.
Ecology = Washington State Department of Ecology.
RCRA = Resource Conservation and Recovery Act.
SST = single-shell tank.
TPA = Tri-Party Agreement.
WMA-C = Waste Management Area C.

System Plan

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

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

Current: Ecology, DOE-ORP and WRPS reviewed and provided comments for section 3 of the System Plan 7 during the week of March 21, 2014.

Significant Planned Actions in the Next 6 Months:
Ecology will continue to further define the five selected scenarios distinguishing assumptions.

- Complete HTWOS modeling of Ecology defined Cases 1 – 5.
- Complete DRAFT writing of non-technical sections for System Plan 7 document

Issues:

None.

Acquisition of New Facilities

M-090-13, Submit Critical Decision-1 for Interim Hanford Storage Project and TPA Change Request for CD-2 to Ecology, Due: 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 Change Request (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 LAW 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 June 2014. Requires two passes to achieve waste volume reduction.
FY 2014	14-01	AW-106	AP-107	Estimated start late July 2014.
FY 2015	14-02	AZ-102	AP-103	Estimated start October 2014.
FY 2015	15-01	AW-106	AP-103	Estimated start November 2014.
FY 2015	15-02	AZ-102	AP-103	Estimated start March 2015.

FY = fiscal year.
NA = not applicable.

Double-Shell Tank System Update

- AZ-01A Gear Actuator Replacement completed March 3, 2014, four months ahead of schedule, in support of upcoming AZ-102 recirculation
- Encasement pressure checks and National Association of Corrosion Engineers (NACE) inspections have been completed and successfully passed the acceptance criteria at AP-01A pit for waste transfer lines SN-611 and SL-511, AP-03A for waste transfer lines SN-613 and SL-613, and at AP-04A pit for waste transfer lines SN-614 and SL-514. All NACE inspections and encasement pressure checks of active waste transfer lines for FY14 have been completed.

Ultrasonic Testing Activities

AP-104:

- On 4/1/14, 78.5 inches of the Secondary Knuckle 45's were scanned
- We are approximately 93% complete with tank inspection.

AP-106:

- The Secondary Floor was brushed
- This completes all wall cleaning in Riser-030
- Vertical Weld Plates 2 and 5, 60's were scanned
- Vertical Weld Plate 4, 60's and Vertical Wall Plate 2, 0's were scanned
- Vertical Weld Plate 3, 60's and 120 inches of the Horizontal Weld 0's were scanned
- Vertical Wall Plate 5, 2nd pass 0's and 120 inches of Horizontal Weld 60's were scanned
- Started the UT Engineering Report (RPP-RPT-57127).

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, Rev. 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:

RPP-RPT-54910, Hanford SST Leak Causes and Locations – 241-SX Tank Farm, was released January 7, 2014. This is the sixth report for SST leak cause and location in support of M-045-91F-T04.

Significant Planned Actions in the Next 6 Months:

None.

Issues:

None.

In Tank Characterization and Summary

For the period from March 1 through March 31, 2014:

Accomplishments:

- Completed RPP-RPT-45147, *Derivation of Best-Basis Inventory for Tank 241-C-108 as of January 1, 2013*, Rev 3.
- Completed RPP-RPT-48639, *Derivation of Best-Basis Inventory for Tank 241-AP-104 as of January 1, 2014*, Rev 8
- Completed RPP-RPT-56803, *Derivation of Best Basis Inventory for Tank 241-BX-103 as of January 1, 2014*, Rev 0.
- Completed RPP-RPT-46686, *Derivation of Best Basis Inventory for Tank 241-AW-106 as of April 1, 2013*, Rev 5.
- Completed RPP-PLAN-52471, *Sampling and Analysis for Residual Waste Solids in Tank 241-C-108*, Rev 0A.
- Completed RPP-PLAN-56851, *Field Sampling Plan for Fluorescein Tracer Testing of 242-A E-A-1 Re-boiler*, Rev 0.
- RPP-RPT-52841, Rev 1, *Hanford Waste Particle Size Reference Report*, was released March 31, 2014.

Planned Action within the next 6 Months:

Tank sampling:

- 241-AY-101A LDP, sample 1, grab sampling is currently scheduled for April 2014
- Tank 241-AN-106 post C-110/C-107 retrieval grab sampling for chemistry control is currently scheduled for April 2014.
- Tank 241-C-107 Drag Sampler sampling is currently scheduled for April 2014.
- Tank 241-AZ-102 grab sampling for evaporator campaign (14-02) is currently scheduled for April 2014.
- Tank 241-C-112 clamshell or fingertrap sampling is currently scheduled for May 2014.
- Tank 241-AN-106 at 50% C-105 retrieval planned for May 2014.
- Tank 241-SY-102, 1st core sample is currently scheduled for July 2014.
- Tank 241-C-111 process control grab sampling during hard heel dissolution is currently scheduled to start in July 2014.
- Tank 241-AW-106 (Evaporator campaign 14-03) planned for July 2014.
- Tank 241-AN-101 after C-111 and C-112 retrieval planned for August 2014.
- Tank 241-SY-102, 2nd core sample is currently scheduled for August 2014.
- Tank 241-AZ-102 (Evaporator campaign 15-01) planned for September 2014.

- Tank 241-AN-106 at 100% C-105 retrieval planned for September 2014.

Best-Basis Inventory (BBI) updates:

The following tanks have been identified for BBI updates in FY 2014 Quarter 2:

- 241-A-103
- 241-A-106
- 241-AW-105
- 241-AN-101
- 241-BX-101
- 241-BX-110
- 241-BY-101
- 241-U-111
- 241-BY-102
- 241-C-110
- 241-C-112
- 241-S-111
- 241-SX-106

Data quality objectives:

- A revision to the tank farms Chemistry Control Program Data Quality Objective will be released in April 2014.

Issues:

None.

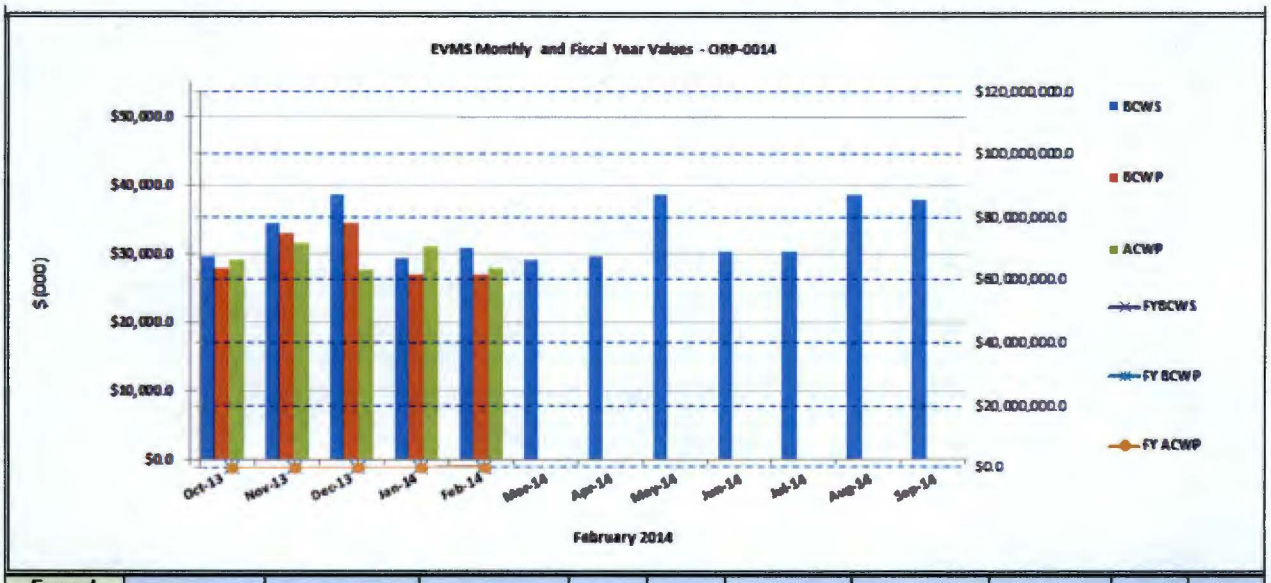
TANK OPERATIONS CONTRACT OVERVIEW

Project Performance

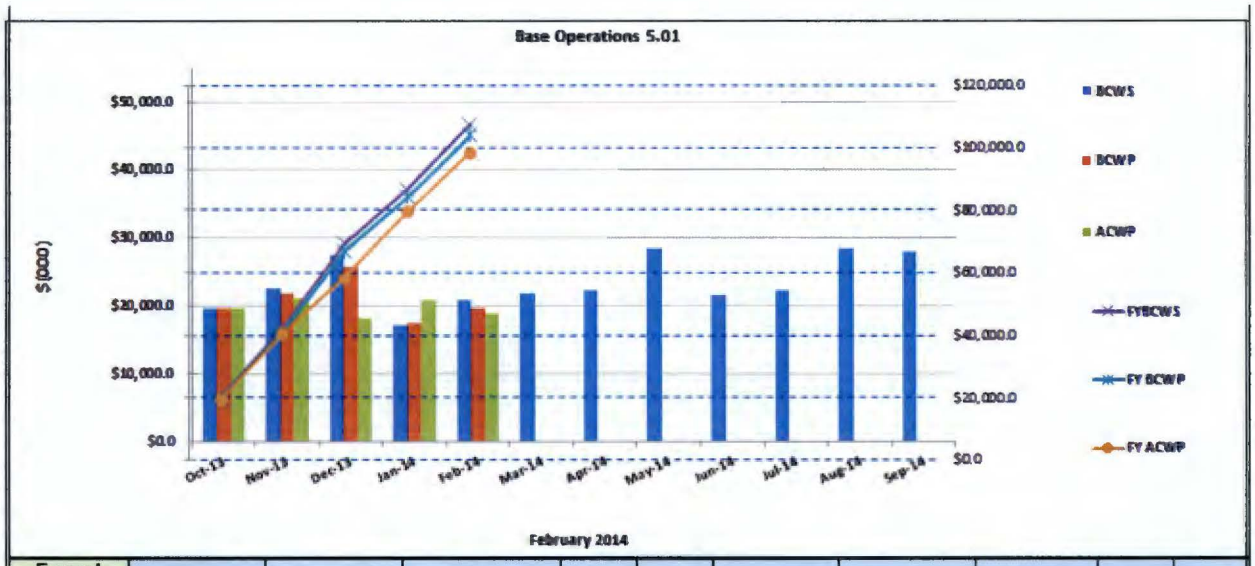
The earned value performance reporting reflects the format, work breakdown structure reporting levels, and variance thresholds as agreed to with the tank operations contractor for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing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

As of February 28, 2014, Washington River Protection Solutions LLC, the Tank Operations Contractor, has worked 67 days without a lost time workday injury and 46 days since the last recordable case. There was no Days Away, Restricted, Dart cases and no recordable cases in the month of February.

February-14										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	30,875.1	26,773.8	27,781.6	(4,101.3)	(1,007.8)	0.87	0.96			
FYTD	162,906.7	149,161.7	146,868.8	(13,745.0)	2,292.9	0.92	1.02	396,986.9	383,703.0	13,283.9
CTD	2,054,650.0	2,040,906.0	2,038,613.0	(13,744.0)	2,293.0	0.99	1.00	3,106,818.4	3,099,985.4	6,833.0



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	$33,081.0	$31,448.0	0.96	1.05	$64,008.7	$61,026.9	$60,462.6	0.95	1.01
Dec-13	$38,697.7	$34,362.0	$27,633.6	0.89	1.24	$102,706.4	$95,388.9	$88,096.2	0.93	1.08
Jan-14	$29,325.1	$26,999.1	$30,991.1	0.92	0.87	$132,031.5	$122,388.0	$119,087.3	0.93	1.03
Feb-14	$30,875.1	$26,773.8	$27,781.6	0.87	0.96	$162,906.6	$149,161.8	$146,868.9	0.92	1.02
Mar-14	$28,983.5									
Apr-14	$29,452.1									
May-14	$38,599.2									
Jun-14	$30,214.0									
Jul-14	$30,308.9									
Aug-14	$38,682.2									
Sep-14	$37,840.4									
CTD	$2,054,650.5	$2,040,905.6	$2,038,612.7	0.99	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	$21,674.6	$21,050.5	0.96	1.03	$42,152.5	$41,304.9	$40,648.9	0.98	1.02
Dec-13	$27,266.2	$25,724.4	$18,015.5	0.94	1.43	$69,418.7	$67,029.3	$58,664.4	0.97	1.14
Jan-14	$17,245.6	$17,268.6	$20,778.3	1.00	0.83	$86,664.3	$84,297.9	$79,442.7	0.97	1.06
Feb-14	$20,731.5	$19,631.4	$18,893.9	0.95	1.04	$107,395.8	$103,929.3	$98,336.6	0.97	1.06
Mar-14	$21,824.1									
Apr-14	$22,258.4									
May-14	$28,260.8									
Jun-14	$21,635.4									
Jul-14	$22,169.6									
Aug-14	$28,347.0									
Sep-14	$27,827.3									
CTD	$1,338,462.4	$1,334,996.0	$1,329,403.2	1.00	1.00					

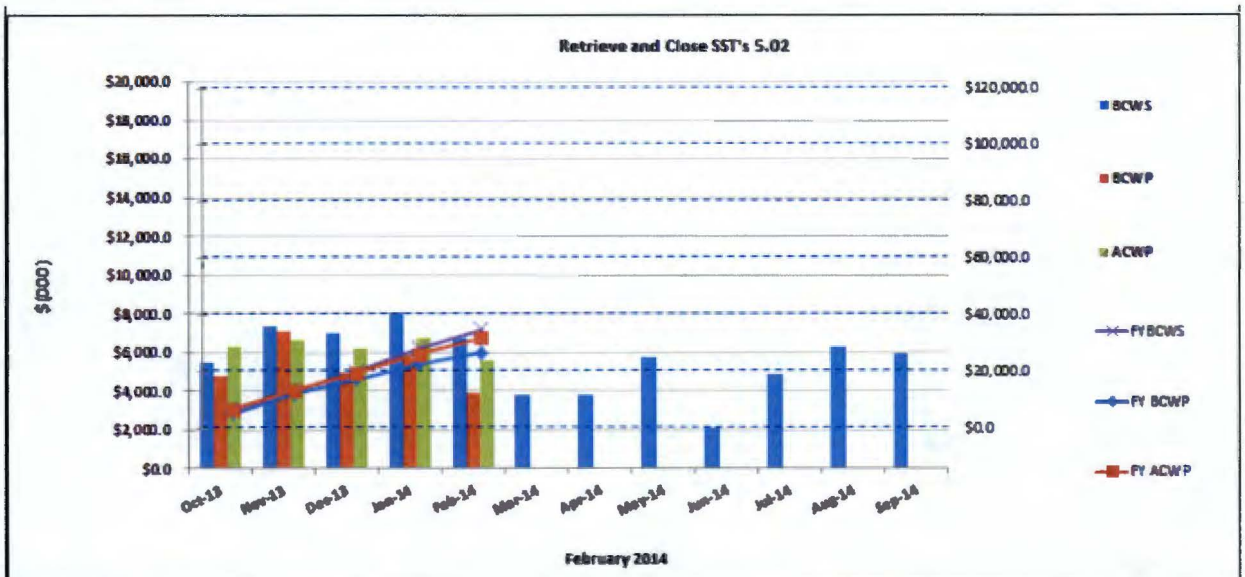
Base Operations and Tank Farm Projects

The current month unfavorable schedule variance (SV) of ($1,100K) is due to:

- Delays to grab samples of Double Shell Tank AN-106 and Double Shell Tank AZ-102 due to retrievals delays and recirculation of AZ-102 in support of the 242-A Evaporator Campaign.
- Slower than anticipated ramp-up of tank chemistry testing and analysis work scope
- Delay to the core sample at DST SY-102 due to the core sampling platform not being ready

The current month favorable cost variance (CV) of $737.5K is due to:

- Unfilled vacancies and reduced overtime due to continuing resolution in Maintenance Services and Radiation Protection.



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	$7,053.7	$6,609.0	0.96	1.07	$12,849.4	$11,876.2	$12,945.0	0.92	0.92
Dec-13	$6,970.4	$5,002.0	$6,231.2	0.72	0.80	$19,819.8	$16,878.2	$19,176.2	0.85	0.88
Jan-14	$8,101.9	$5,661.1	$6,765.0	0.70	0.84	$27,921.7	$22,539.3	$25,941.2	0.81	0.87
Feb-14	$6,725.6	$3,913.8	$5,602.1	0.58	0.70	$34,647.3	$26,453.1	$31,543.3	0.76	0.84
Mar-14	$3,777.7									
Apr-14	$3,780.6									
May-14	$5,801.6									
Jun-14	$2,092.2									
Jul-14	$4,895.4									
Aug-14	$6,305.6									
Sep-14	$5,964.2									
CTD	$461,486.7	$453,292.6	$458,383.1	0.98	0.99					

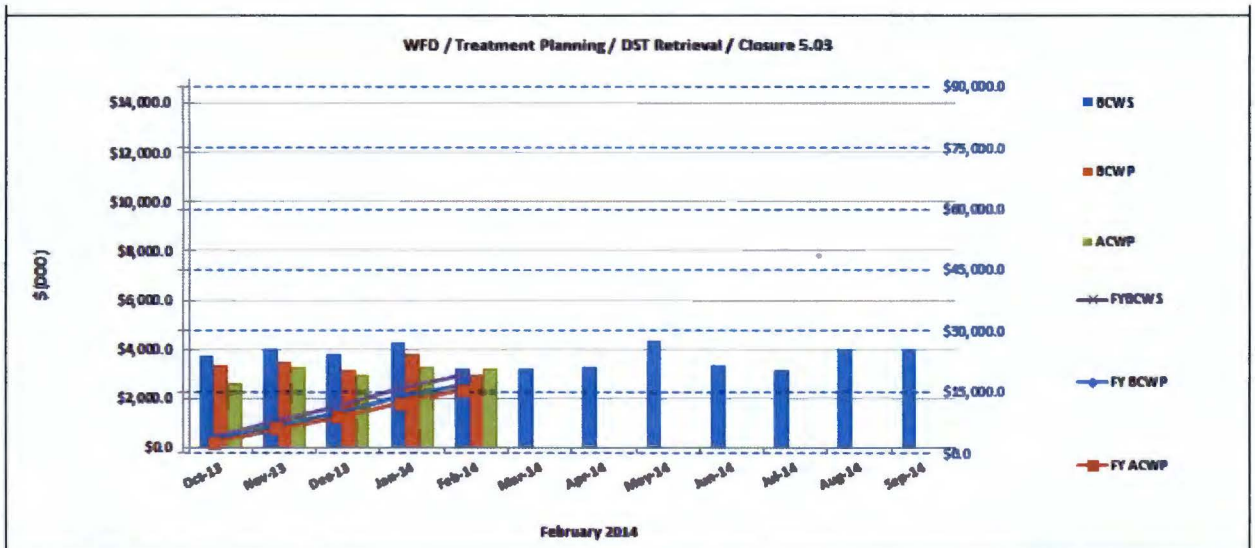
Retrieval and Close Single-Shell Tanks

The current month unfavorable schedule variance (SV) of ($2,811.8K) is due to:

- Delay of retrieval activities at Single-Shell Tank C-105 due to prioritizing Single-Shell Tank C-107 retrieval operations over the MARS-V testing and readiness activities
- Delays at Single-Shell Tank C-111 due to delays in equipment installation and testing of the High Pressure Water Skid.

The current month unfavorable cost variance (SV) of ($1,688.3K) is due to:

- Additional costs need for Single-Shell Tank C-107 for crane, rigging and labor support required for installation and testing of the new slurry pump and disposal of the failed slurry pump
- Additional costs for Single-Shell Tank C-105 materials and engineering support required to complete design of the Automated Temperature Monitoring system
- Completion of shielding on transfer lines for Single-Shell Tank C-105 being performed on overtime.



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	$3,488.2	$3,294.5	0.86	1.06	$7,806.8	$6,823.5	$5,934.2	0.87	1.15
Dec-13	$3,813.4	$3,149.5	$2,941.2	0.83	1.07	$11,620.2	$9,973.0	$8,875.4	0.86	1.12
Jan-14	$4,281.6	$3,802.9	$3,276.7	0.89	1.16	$15,901.8	$13,775.9	$12,152.1	0.87	1.13
Feb-14	$3,224.5	$2,926.4	$3,239.2	0.91	0.90	$19,126.3	$16,702.3	$15,391.3	0.87	1.09
Mar-14	$3,228.9									
Apr-14	$3,260.4									
May-14	$4,345.8									
Jun-14	$3,330.1									
Jul-14	$3,178.3									
Aug-14	$3,987.3									
Sep-14	$4,030.5									
CTD	$235,370.8	$232,946.4	$231,635.4	0.99	1.01					

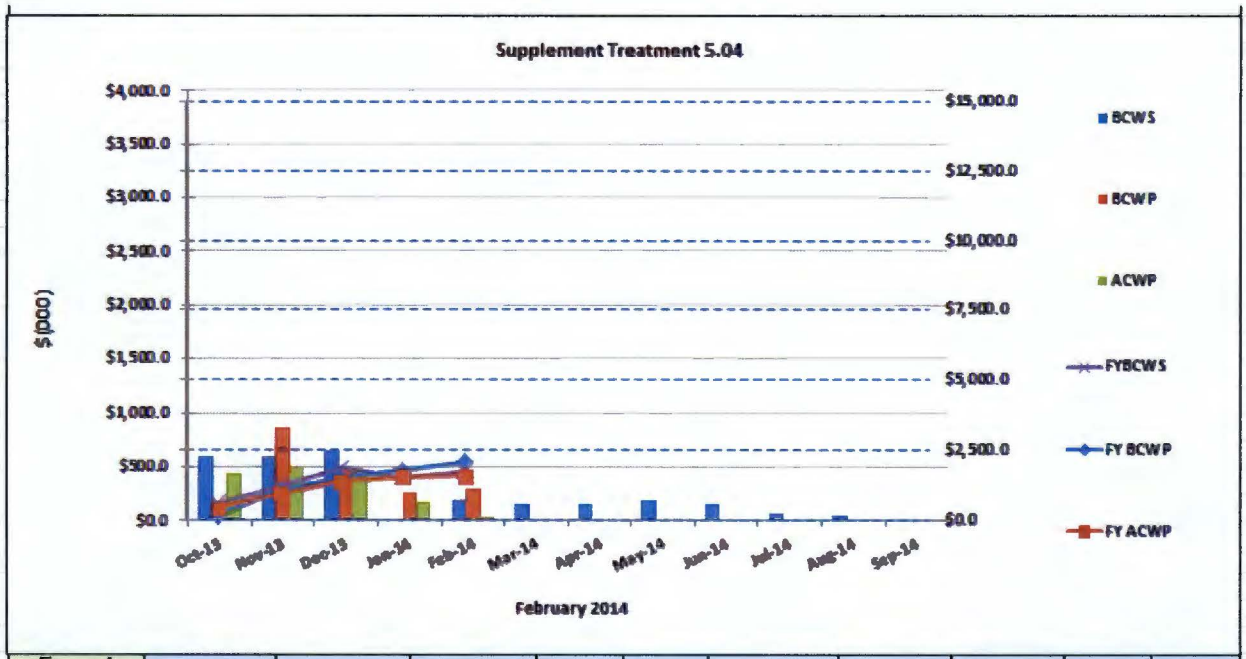
Waste Feed Delivery/Treatment/Double-Shell Tank Retrieval Closure

The current month unfavorable schedule variance (SV) of ($298.1K) is due to:

- The WTP Integrated Operational Readiness activities being placed on hold due to limited resources.

The current month unfavorable cost variance (CV) of ($312.8K) is due to:

- High Level Waste Design Review team, which was planned to be released in December, was retained through February to assist in preparation of the final report.



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	$864.4	$493.5	1.43	1.75	$1,199.7	$1,022.3	$934.0	0.85	1.09
Dec-13	$647.8	$486.1	$445.8	0.75	1.09	$1,847.5	$1,508.4	$1,379.8	0.82	1.09
Jan-14	($304.0)	$266.4	$171.1	(0.88)	1.56	$1,543.5	$1,774.8	$1,550.9	1.15	1.14
Feb-14	$193.5	$302.2	$33.9	1.56	8.91	$1,737.0	$2,077.0	$1,584.8	1.20	1.31
Mar-14	$152.8									
Apr-14	$152.8									
May-14	$191.0									
Jun-14	$156.3									
Jul-14	$65.6									
Aug-14	$42.4									
Sep-14	$18.4									
CTD	$19,330.6	$19,670.6	$19,178.5	1.02	1.03					

Supplemental Treatment

The current month favorable schedule variance (SV) of $108.6K is within the reporting threshold.

The current month favorable cost variance (CV) of $268.2K is due to

- Tc Removal and Low Temperature Waste Form work being performed by Savanah River National Laboratories (SRNL) under an inter-entity work order agreement which has not yet been costed.

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: Complete. ORP submitted this deliverable to ECY on February 20, 2014, via letter 14-TF-0015.

M-045-22-T03, Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology, Due: July 31, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: 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 Corrective Measures Study report, Milestone M-45-58, and implementation of other interim corrective measures), Due: To be determined, Status: On schedule.

M-045-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RCRA Facility Investigation/Corrective Measures Study 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, Complete Installation of Four (4) Additional Interim Barriers (see interim milestones below), Due: October 31, 2017, Status: On schedule. TPA Change Package M-45-12-04 describes these milestones and how the process to move forward with construction/design of additional barriers will depend on discussions and decisions per TPA Milestone 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.
- 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 was completed and a report issued. This work was completed per the WMA-C Phase 2 Resource Conservation and Recovery Act Facility Investigation (RFI)/Corrective Measures Study Work Plan, and will be incorporated into the RFI.
- Data collection in U Farm for electrical resistivity characterization was completed. Data analysis and reporting was completed, and the report provided to ECY to complete M-045-22-T02.
- Direct-push field work in TX Farm continues under the M-045-20 work plan and M-045-21 sampling and analysis plan.
- Documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act Field Investigation Report continues.

Significant Planned Actions in the Next 6 Months:

- Complete direct-push field work in TX Farm under the M-045-20 work plan and prepare the analysis report.
- Continue documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act Facility Investigation Report.
- Complete the SX Farm pore water extraction proof of principle test under the M-045-20 work plan and prepare the test report.

SST Retrieval and Closure Program

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

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

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

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

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

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

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

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

Significant Past Accomplishments:

- Completed post-retrieval logging of the drywells near C-104 and C-109 to support the retrieval data reports.
- Held the kick-off meeting with regulators/stakeholders to discuss the activities underway for the WMA-C performance assessment. Numeric modeling for the performance assessment has begun. A meeting was held with ECY on March 20, 2014 to report progress.
- Retrieval completion certification for C-110 was transmitted to Ecology on January 29, 2014 under ORP letter 14-TF-0007.
- See discussions above and related discussions in Consent Decree report.

Significant Planned Activities in the Next 6 Months:

- Develop the Retrieval Data Report for C-110.
- Continue numeric modeling for the WMA-C performance assessment
- See discussions above and related discussions in Consent Decree report.

Issues:

ORP and Ecology continue to meet to develop an integrated path forward that addresses all the deliverables associated with Milestones M-045-61, M-045-62, and M-045-82.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-102	RPP-22393, Rev. 7	In Process	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Complete	MARS-V	MARS-V-High Pressure Water	-
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S -High Pressure Water	-
C-108	RPP-22393, Rev. 7	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. 3	In process	Modified Sluicing	Mechanical Waste Conditioning	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water with ERSS	Chemical Dissolution with ERSS
C-112	RPP-22393, Rev. 7	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:

RPP-22520 was revised and released 03/18/2014 incorporating all outstanding modification notices.

Significant Planned Activities in the Next 6 Months:

Modify Tank Waste Retrieval Work Plan RPP-22393, Rev. 7 to provide a discussion of a 3rd retrieval technology, hot water dissolution, for tank C-107.

Issues:

None.

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

Tank 241-C-106

Significant Past Accomplishments:

None.

Significant Planned Activities in the Next 6 Months:

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

Issues:

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

Tank Retrievals with Individual Milestones

Tank 241-A-103

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

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

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

Significant Past Accomplishments:

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

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

Tank 241-S-112

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

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

Significant Past Accomplishments:

Ecology letter of January 7, 2008, concurred with ORP that retrieval of Tank S-112 is complete.

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