

**Office of River Protection
Tri-Party Agreement Milestone Review
Meeting Minutes
February 20, 2014**

Approval: PHILIP GENT
Philip GENT FOR Date: 3/27/14
J.A. Hedges
Ecology IAMIT Representative

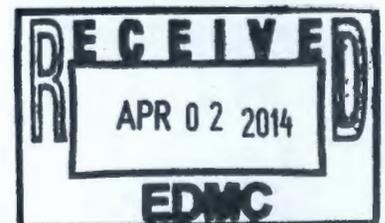
Approval: Edlin Mattia for Date: 3/21/14
T.W. Fletcher
DOE IAMIT Representative

Approval: [Signature] Date: 3/31/14
D.A. Faulk ← Rod Lobos For
EPA IAMIT Representative

Minutes Prepared by: [Signature] Date: 3-21-14
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Beam, T. G.*	WRPS	Hendrickson, M.L.	Ecology	Nazarali, A.	CTUIR
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Dahl, S.L.	Ecology	Kemp, C.J.*	ORP	Skinnarland, E.R.	Ecology
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Donnelly J.W.	WRPS	Koll, R.J.*	ORP	Stubblebine, S.D.	ORP
Dowell, J.A.	ORP	Knight, D.P.	ORP	Trenchard, G.D.	ORP
Eberlein, S.J.	WRPS	Knox, K.E.*	KCR	Uziemblo, N.H.*	Ecology
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Fletcher, T.W.	ORP	Lynch, J.J.*	ORP	Wilson, M. B.	MSA
Gadbois, L.E.	EPA	Lyon, J.J.*	Ecology	Administrative Record	
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Harrington, C.C.*	ORP	Mauss, B.M.*	ORP		

*Attendees



**Office of River Protection
Tri-Party Agreement Quarterly Milestone Review
Meeting Minutes
February 20, 2014**

Administrative Items/Milestone Status

ORP provided an updated TPA and Consent Decree (CD) list of agreements, issues and actions (see agenda). ORP referred to agreement No. 1, and stated that a meeting is scheduled February 26, 2014, to give Ecology a briefing on the budget and work priorities. ORP stated that the action items were addressed during the dry run meeting that was held with Ecology two days ago (2/18/14), and that a few new actions were opened and some of the actions were closed. ORP noted that there is a list of recent items that have been entered into the TPA Administrative Record (AR), which is included on the agreements, issues and action list.

ORP referred to action item No. 7 (TF-13-12-02) in which Ecology had requested additional information on the operation and maintenance plans for the 242-A Evaporator. ORP handed Ecology information on the systems structures and components status report, noting that the report is issued quarterly and the information being provided today is slightly behind schedule. ORP reported that the Operational Acceptance Test (OAT) for the 242-A Evaporator started at 4:00 a.m. today, which is about five months later than originally anticipated. ORP stated that an up-to-date systems structures and components status report is being updated as the OAT is being completed, and the new report will be provided to Ecology in about 30 days. ORP added that the new report will address, as requested by Ecology, the maintenance status and the operations mission of the 242-A Evaporator facility.

ORP stated that there is no change in status regarding the CD milestones. ORP reported that there are two TPA milestones that have been placed at risk, M-047-07 and M-090-13 (see discussion under Acquisition of New Facilities). ORP noted that there are three TPA milestones that are to be missed, M-045-61, M-045-62 and M-045-82 (see discussion under Single Shell Tank Corrective Action).

System Plan; M-62-40

ORP stated that the System Plan was discussed briefly during the dry run meeting held Tuesday, February 18, 2014, and that Ecology sent an information request via email to ORP regarding a retrieval efficiencies document. ORP stated that it is in the process of responding to Ecology's request. Ecology asked ORP to include its request for information on the action item list. *ORP agreed to make Ecology's request for information on the retrieval efficiencies document an action.*

Acquisition of New Facilities; M-90-00, M-47-00

ORP noted the two milestones that are at risk (M-090-13 and M-047-07). ORP stated that a meeting is scheduled next week to discuss work scope priorities. ORP added that the two at risk milestones are related to the facilities that support the Waste Treatment Plant (WTP), and the two milestones may get rolled into a larger discussion in the future.

Supplemental Treatment/Part B Permit Applications; M-62-00, -20, -30, -45

ORP stated that there have been discussions with Ecology regarding milestone M-062-40ZZ to submit a one-time tank waste supplemental treatment technologies report. ORP is preparing a letter clarifying the discussions and the resulting decision from the discussions. ORP stated that it will not be pursuing the report at this time, and that Ecology is in agreement. ORP added that the decision for supplemental treatment may get included in future discussions, but ORP is not planning to make a decision or choice regarding supplemental treatment in the near future.

242-A Evaporator Status

ORP noted that as reported above (see discussion under Administrative Items/Milestone Status), the OAT started at 4:00 a.m. this morning. ORP stated that the evaporator has approximately 24,500 gallons of water in it, and the cold run that supports the evaporator consists of water, with no introduction of waste, that will flow through the systems to ensure the facility is running as expected. When the cold run has been completed, the facility will be shut down for about two weeks to allow verification that all the systems are working as expected. At that point, WRPS will begin its readiness assessment (RA), which is anticipated to take approximately three weeks. When the RA is completed, there will be a week of discussions between ORP and WRPS, and WRPS will write a report. ORP stated that when the report is accepted, a determination will be made whether or not corrective actions are needed, and at that point, ORP will conduct its RA. ORP noted that there will be personnel from other sites that will be part of the RA team. ORP stated that while the OAT is under way, an independent verification review of WRPS's implementation of the documented safety analysis (DSA) upgrades will be conducted.

ORP stated that it is holding to the estimated start date for the first volume reduction (14-01) in late May 2014 for the next two weeks while discussions with Ecology take place. Ecology asked how long ORP's review of WRPS's RA report will be. ORP responded that the review will take one week, and there will be weekly meetings during the RA. Ecology asked how long ORP will take to do its RA. ORP stated that its RA will take two to three weeks. Ecology noted that the April 2014 start date for the first volume reduction has slipped to May, which impacts the schedule for the following volume reductions. ORP concurred with Ecology's statement.

SST Integrity Assurance; M-45-91

ORP stated that all of the SST integrity milestones are currently on schedule. ORP noted that the leak cause and location report for the SX Tank Farm was recently released (M-045-91F-T04). ORP reported that the sidewall coring in tank A-106 is planned for this spring, and the purpose is

to determine whether the high temperatures in the tank have any effect on its concrete properties.

ORP provided highlights from the last month in the double-shell tank (DST) system that are not in today's TPA monthly summary report. Two transfers were done from AN-106 and AN-101 to AP-104. The transfer from AN-106 to AP-104 was about 80,000 gallons, and the transfer from AN-101 to AP-104 was about 45,000 gallons. ORP noted that the transfers support ongoing retrieval activities from C Farms that go into the AN tanks.

ORP stated that a supernate recirculation was completed in AY-101. The pump in the tank is operated to recirculate the supernate fluid because the condensate that is collected from the ventilation system is put back into AY-101. ORP noted that the condensate creates a layer on top of the waste that is susceptible to corrosion, so the waste is mixed up periodically. ORP reported that a project was completed during the last month that will allow the condensate that is collected in the AY/AZ tank farms' ventilation system to be placed in a tanker truck for transport to the Effluent Treatment Facility (ETF) instead of going back into AY-101. ORP noted that removal of the condensate will eliminate the need for periodic recirculation as well as freeing up about 40,000 to 50,000 gallons a year of space that will no longer have to be used for the condensate.

Ecology asked if there was a schedule for pumping the condensate and the transfer to ETF. ORP stated that there is no set schedule, and the tanker truck will take the condensate to ETF when the tanker gets full. ORP added that the first shipment to ETF is planned for next week. It was noted that in the proposed plan for taking the condensate to ETF, when the collection tank gets filled the condensate is then pumped into the tanker truck until it reaches an action level to stop. The tanker truck is then disconnected from the collection tank and goes to ETF to empty the tanker, and when the tanker returns, it is reconnected to the system. During the time that the tanker truck is not at ETF, the collection tank will continue to receive the condensate. Ecology requested notification when the tanker truck is scheduled to be disconnected next week. ORP agreed to notify Ecology.

ORP stated that the ultrasonic testing (UT) in AP-104 is continuing, and the UT will soon be moving to AP-106. ORP reported that the construction history reviews have been completed. The reviews were one of the results from the ongoing extent of condition work associated with AY-102. ORP stated that all of the construction records for the DSTs were reviewed, and all of the farms have been reviewed except for AP Farm. ORP added that all of the documents are available. ORP noted that the intent is to provide a monthly status on the DST farms.

Regarding milestone M-045-91I, Ecology asked when the contract will be released for the Independent Qualified Registered Professional Engineer (IQRPE) to certify the SSTs structural integrity (due 9/30/18). ORP responded that there are no near-term plans to bring on the IQRPE for the SSTs. ORP noted that the IQRPE will be brought in to certify the DSTs in FY14 for completion by 2016. Ecology stated that there had been discussion about earlier hiring the IQRPE for the SSTs due to the nature of the data in the evaluation. ORP stated that once the near-term series of milestones are completed and M-045-91H is being addressed, that would be the appropriate time to initiate the IQRPE for SSTs.

In Tank Characterization and Summary

ORP stated that tank characterization and sampling is continuing in support of retrievals in C Farm, and also to maintain tank chemistry in the receiving tanks and to support sampling for the tank integrity program. ORP noted that an action was established during the dry run meeting held February 18, 2014, to provide Ecology with a briefing on the use of the core sampling platform for SY-102. ORP provided color photos and a diagram of the core sampling platform to Ecology today. ORP stated that the core sampler is scheduled to take a sample from SY-102 by late May, early June 2014, although that schedule may slip. ORP stated that in addition to the core sampling in AY-102 for tank chemistry, strategic planning is under way regarding the solids in the tank (i.e. solid size and constituents in the solids). The operator training for the core sampling platform is set up, and issues with the equipment tolerances are being worked. ORP noted that the core sampling platform is different from the old core system that was mounted on a truck, and the core sampling platform will sit over the tank. Ecology asked if the retrieval data report (RDR) sampling for SY-102 will be reported in the TPA monthly summary report. ORP responded that the RDR sampling should be included in the TPA monthly report, and noted that the C-107 sampling (first bullet on page eight) is the RDR sampling. ORP stated that it will ensure the RDR nomenclature is included in the monthly report.

Ecology noted that the last bullet on page eight of the TPA monthly summary report for tank AW-106 lists the evaporator campaign 14-03 is planned for July 2014. Ecology pointed out that the evaporator campaign (page five of the TPA monthly report) does not list a campaign 14-03, and asked for clarification. ORP responded that the schedules are done well in advance, and at the time the schedule was done there were plans for a third campaign. ORP indicated that the 14-03 campaign should probably have been dropped from the schedule. WRPS stated that a verification of the 14-03 campaign on the last bullet on page eight will be done today.

Tank Operations Contract (TOC) Overview

ORP provided the TOC overview for the month of December 2013. ORP noted that under base operations, the deep sludge gas release efforts are going well, and the Justification for Continued Operation (JCO) will be completed April 1, 2014. Under retrieve and close, ORP reported that the failed slurry pump in tank C-107 has been replaced and retrieval continues in C-107. It was noted that for C-112 retrieval, the XYZ shift is three shifts consisting of days, swing and graveyard, Monday through Friday. PQ shift is days and swing, Monday through Friday. Ecology inquired about the strategic management initiatives under waste feed delivery reporting. ORP responded that the initiatives are studies done for future planning, and noted that there is an action item for ORP to provide a briefing to Ecology (Action No. 4, TF-14-01-02).

Single-Shell Tank Corrective Action; Milestone M-45, -50, -60

M-045-22-T01/T02/T03 - ORP noted that these three target milestones are on schedule to be completed in FY14.

M-045-56J - ORP stated that the annual interim measures work is on schedule, which is to ensure that the water run-on doesn't go onto the tank farms surfaces and that snow melt doesn't go off the

tank farms, and that the inactive water lines are shut off throughout the tank farms.

M-045-61/62 and M-045-82 - ORP noted that these milestones are to be missed, and there have been productive discussions with Ecology regarding the milestones. ORP stated that a continuation of the discussions is scheduled this afternoon with the permitting experts from ORP, Ecology and WRPS.

M-45-00 Series:

SST Retrieval and Closure Program TPA:

M-045-86 - ORP noted the four upcoming RDRs that are due, and stated that the RDR for tank C-104 was sent to Ecology on February 18, 2014, ahead of the March 21, 2014 due date.

Tank Waste Retrieval Work Plan (TWRWP) Status - ORP stated that the TWRWPs are the approvals from Ecology to do retrievals, and the TWRWPs show the first and second retrieval technology, and in some cases the third retrieval technology.

Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria - ORP stated that tank C-106 was the first tank retrieved in C Farm in 2003, and was above the TPA M-045 criteria of 360 cubic feet. The tank was included under an Appendix H exemption request, which is on hold until the C Farm Performance Assessment (PA) is completed.

Tank Retrievals with Individual Milestones - ORP noted that tank A-103 was swapped a couple years ago for the completion of tank S-102, and the milestone for A-103 is out in the future (2022). ORP stated that tank S-112 has been retrieved to less than 360 cubic feet.

SST Retrieval and Closure CD Milestones and TWRWP Status; D-00B Series:

D-00B-01A through J - ORP provided an explanation, at the request of EPA, for a retrieval completion report and a retrieval data report (RDR). ORP stated that when retrieval is completed in a tank, the CD requires ORP to do a retrieval completion certification. The retrieval completion certification kicks off a time clock to do a retrieval data sampling report and an RDR, which summarizes the retrieval activities, the sampling results of the residuals in the tank, and a qualitative risk assessment. ORP noted that retrieval at tank C-101 has reached the limits of technology for the first and second retrieval technologies, and a request to forego the third retrieval technology was sent to Ecology on February 18, 2014.

Significant Planned Activities in the Next 6 Months - ORP stated that installation of the Mobile Arm Retrieval System Vacuum (MARS-V) in tank C-105 is nearing completion, and the MARS-V will be started up on March 18, 2014 on XYZ shift. ORP stated that construction activities in C-111 will be completed, and then the readiness activities will be initiated. ORP added that startup of retrieval in tank C-111 is scheduled for April 21, 2014, on PQ shift. Ecology asked about the planned duration of the retrievals. ORP responded that C-111 will be a two-month duration. ORP will confirm the planned duration for C-105 and send the information in an email to Ecology.

Ecology referred to ORP's notification of the serious risk to meeting D-00B-01 in regard to retrieval of C-102 and C-105, and noted that there are no planned activities in the next six months

associated with C-102. ORP responded that in the next six months, with the resolution of the deep sludge gas release event documented safety analysis (DSA) amendment at the end of June 2014, retrieval could be restarted in C-102. Ecology asked if the equipment is already installed in C-102. ORP responded that the equipment is installed, and two enhanced reach sluicer systems (ERSSs) will be used. ORP noted that tank C-102 has about 330,000 gallons of waste. ORP stated that a partial retrieval will be done in C-102, and since one of the ERSSs is short and because the Teflon hoses are not conductive to electrostatic discharge, the two ERSSs will be pulled out and the two longer ERSSs will be put in C-102 to complete the retrieval. ORP noted that the longer ERSSs will have carbon impregnation in the Teflon hoses, which will not allow the static discharge to build up. ORP stated that it has been proven by past retrievals that if there is a static discharge in the Teflon hose, then pitting is created in the hoses. Ecology requested the schedule for C-102. ORP will email Ecology the schedule.

TWRWP Status - ORP noted that the TWRWP status is the same table that is in the TPA monthly summary report.

WTP Overall TPA and CD Summary and Milestone Status; M-62-01; M-62-49; D-00A-01, -06, -17Waste Treatment and Immobilization Plant (WTP) Project

ORP updated the following WTP actions:

Action No. 1, WTP-13-04-03 – ORP stated that activities with the thermal catalytic oxidizer are ongoing. See discussion under LAW.

Action No. 2, WTP-13-04-01 - ORP reported that chapter 13 is being completed, which is the last chapter for the Reliability Verification Process (RVP) Wave II. Chapter 13 provides a summary of the results of the RVP. ORP stated that the extent of condition (EOC) is due for submittal by the contractor on February 26, 2014. ORP noted that the EOC relates to the action plan for evaluating systems going forwards and backwards. ORP estimated that the EOC should be accepted within a month, and will be shared with Ecology at that time.

Action No. 3, WTP-14-02-01 – ORP stated that a kick-off meeting with Ecology is scheduled February 24, 2014 to discuss planning for the LAW design study.

ORP reported that efforts are under way to ramp up engineering resources to resolve technical issues. ORP stated that the two-year interim work plan that was implemented for PT and HLW in October 2012 will be extended another year. ORP noted that the negative schedule performance for LAW, BOF and LAB (LBL) will continue until the decisions regarding direct feed LAW (DFLAW) and rebaselining are made. ORP added that construction activities in LBL continue to move forward.

Significant Past Accomplishments - ORP stated that the pulse jet control testing was completed in the eight-foot platform, which was done to inform the control testing in the RLD-8T vessel for PT. ORP stated that the full scale testing is scheduled in the August 2014 time frame, although efforts are under way to push the testing back to the June 2014 time frame. ORP noted that the HLW report for design changes for in-service inspection and redundancy was provided to Ecology

today.

Significant Planned Activities in the Next Six Months – ORP noted that a detailed update was given to Ecology earlier this week regarding the limited authorization to proceed in HLW. ORP indicated that an initial decision for limited authorization is expected by the end of this month, and will likely allow some engineering activities to resolve technical issues and some of the safety design strategy (SDS) issues. ORP added that no procurement or additional construction scope will be allowed under the initial decision for limited authorization.

ORP stated that the April 2014 schedule to complete the repairs, retest and recertify the RLD vessels in LAB may or may not be impacted by the issue regarding repairs to the final vessel (164). ORP stated that during the weld repairs, some of the base metal in the nozzles was grinded out and the nozzles will either be repaired or have to be replaced. Ecology noted that one of the issues is that the nozzles have no seams. ORP added that repairs to the other two vessels have been completed.

WTP Pretreatment (PT) Facility; D-00A-13, -14, -15, -16, -19

ORP stated that the PT facility is being maintained in structure, working under the two-year interim work plan. The primary focus continues to be technical issue resolution, and there are no ongoing engineering, procurement or construction activities.

Significant Planned Actions in the Next Six Months – ORP stated that the sensitivity tests for erosion can be related to the slurry pot testing by taking a sample, running the slurry pot testing with metal in the simulant, and measuring the wear caused by the metal. The results could then be related back to the test data and erosion characteristics of the material as a whole and ensure that it's within the design parameters of the plant. ORP noted that if the test results are not positive, it would be mitigated with composition changes or direct feed to the melter as well as obtaining additional data that would confirm the erosion assumptions and calculations that would be in place.

ORP reported that the Defense Nuclear Facilities Safety Board (DNFSB) rescinded its 2010-2 recommendations, although the four base technical issues that haven't been closed and are associated with criticality and hydrogen still need to be resolved. ORP stated that the DNFSB believes the path forward for issue resolution has changed so much that the detailed recommendations are no longer relevant.

WTP High-Level Waste (HLW) Facility; D-00A-02, -03, -04, -21

ORP stated that civil construction activities are continuing and performing fairly efficiently. ORP noted that civil construction is within the scope that has been authorized, and it doesn't affect the areas that are impacted by the technical issues. ORP stated that the Nuclear Safety group is working on the safety design strategy (SDS), which will be a strategic document in terms of moving forward with HLW design strategies to ensure the appropriate safety control sets are incorporated. ORP stated that the SDS draft document was to be issued March 7, 2014, but will

probably slip to the end of March 2014.

Significant Past Accomplishments - ORP stated that it received the draft decision transition plan, and when the plan is issued it will be shared with Ecology. ORP noted that the transition plan will describe the period between decision one and decision two in HLW. ORP indicated that the plan for decision one will probably be issued and available to Ecology in the June 2014 time frame.

Significant Planned Actions in the Next 6 Months – ORP stated that at this point, the approval for limited authorization to proceed in HLW will be for design only. ORP noted that the plan was received for the HLW erosion/corrosion risk assessment, which is one of the five technical studies that are still ongoing, but the plan was rejected. ORP is working with the contractor in going through the risk assessment. ORP stated that when efforts are ramped down for HLW authorization to proceed, the focus will turn to PT and more fully develop the plans and schedules to get the technical issues closed.

Ecology noted that the design review for LAW will take about the same amount of time as the design review for HLW. ORP responded that the LAW design review will take at least the same amount of time since there are a number of systems to review. Ecology asked if the schedule for the LAW design review would be available in late fall 2014. ORP agreed with that time frame. Ecology noted that it participated in the HLW design review planning meetings, and requested the same involvement with the LAW design review meetings. Ecology added that it was very helpful to be included in the meetings, and when the final draft was issued there were no surprises. ORP stated that the HLW design review is still being drafted, and should be completed by the end of March 2014, or possibly slip to the middle of April 2014.

WTP Low-Activity Waste (LAW) Facility; D-00A-07, -08, -09

ORP stated that the construction substantially complete milestone has been identified as at risk, and construction activities continue to move forward as diligently as possible.

Significant Past Accomplishments - ORP noted that it has been confirmed that the thermal catalytic oxidizer (TCO) will fit through the scrubber hatch. Ecology acknowledged that there have been general discussions regarding the TCO being brought in through the scrubber hatch, and requested a quick briefing to be able to understand the routing, etc. ORP agreed to set up a briefing. ORP noted that the TCO vendor went bankrupt, causing a delay with the manufacture and delivery of the TCO and impacts to the LAW schedule. ORP stated that the alternate plan for bringing the TCO in through the scrubber hatch allows a larger amount of piping and other commodity installations and helps to minimize the impact to the schedule. ORP stated that the critical path currently in LAW is the melter calculation confirmation and the TCO.

Significant Planned Actions in the Next 6 Months – ORP noted that completion of the hazard analyses for the melter and melter off-gas are critical since they are activities that will feed into development of the nuclear safety and health and the safety license by which ORP authorizes operations of the facility.

WTP Balance of Facilities (BOF); D-00A-12

ORP stated that as BOF looks toward its startup time, activities will be moved out to ensure that nothing in the scope becomes critical path. ORP noted that the schedules will be adjusted to whatever the final startup time period is if a decision is made for direct feed LAW. Ecology inquired about the status of the emergency turbine generator (ETG). ORP responded that efforts are focused on commercial grade dedication (CGD) activities for the ETG. ORP stated that an external team of experts will be brought in to advise the CGD process. A clarification was made between the ETG and the standby diesel generator (SDG). The ETG will support safety class, safety significant loads that are designed to be operable during a design basis accident, and the SDG will provide emergency power to be able to have power for convenience. It was noted that the ETG has a focused, limited set of activities that continue to run in order to maintain safety, mainly associated with the ventilation systems for hydrogen control. ORP noted that both of the generators will automatically be started if there is a loss of power.

Ecology noted that there were three generators in the permit, and a permit modification was done to keep one generator and pull two of the generators and replace them with diesel turbines. Ecology asked if the plan has changed since the permit mod or if it remains the same. There was a brief discussion, and it was determined that there had been no changes since the last permit mod was issued about a year ago for the ETGs.

WTP Analytical Laboratory (LAB); D-00A-05

ORP reported that the main focus continues to be completing repairs to the RLD vessels. ORP stated that welds to two of the three RLD vessels have been completed, with the remaining vessel 164 to be completed. ORP indicated that April 2014 is still the target date for completing the repairs and recertifying the vessels. ORP noted that due to excessive grinding on the base material of the nozzles on 164, efforts are under way to determine whether the nozzles will need to be replaced or if they can be reconfigured. It was noted that vessel 164 is constructed with ALX6N, which is a very expensive, highly corrosive-resistant material, and it is more challenging to work with from a welding and grinding perspective.

Tri-Party Agreement Office of River Protection Milestone Review
 February 20, 2014

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(ALSO DELEGATE FOR J. HEDGES)

FINAL

Office of River Protection

Tri-Party Agreement

Monthly Summary Report

February 2014



**Office of River Protection
Tri-Party Agreement Milestone Review**

**February 2014 (Monthly Summary Report/Project Earned Value Management System reflects
December 2013 information)**

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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
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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

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		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	11/27/2013	Completed
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-045-86H	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 U.S. Department of Energy (DOE), Office of River Protection (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 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. Detailed assumption review was completed, and has been approved by Ecology.

Significant Planned Actions in the Next 6 Months:

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

- Complete Hanford Tank Waste Operations Simulator modeling of Ecology defined Cases 1-5
- Complete draft writing of nontechnical 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 <i>American Recovery and Reinvestment Act</i> 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, 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:

Sidewall coring field work on Tank 241-A-106 was suspended for the winter, with caisson installation completed. Preparations for coring will resume in the spring.

Issues: None.

In Tank Characterization and Summary

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

Accomplishments:

- Completed RPP-PLAN-56555, *Tank Sampling and Analysis Plan for Tank 241-C-111 Hard Heel Retrieval*, Rev. 0.
- Completed RPP-RPT-26878, *Best Basis Inventory Templates for Polychlorinated Biphenyls*, Rev 0.
- Completed RPP-PLAN-55317, *Sampling and Analysis Plan for Tank AZ-301*, Rev 0-A.
- Completed RPP-PLAN-54895, *Quality Assurance Project Plan for the Multi-Media Sampling Program*, Rev 0.
- Completed RPP-RPT-56607, *Tank 241-C-111 Hard Heel Retrieval Data Quality Objectives*, Rev 0.
- RPP-RPT-56598, *Final Report for the Solid Sample from the 241-AY-102A Leak-Detector Pit Robotic Pipe Crawler, Attached Cabling, and Sleeve*, Rev 0, was released on January 6, 2014.
- Completed sampling on January 7, 2014, and 20, 2014 for 241-C-112 hard heel dissolution. Two samples were collected each day (six total) and delivered to the lab.

Planned Action within the next 6 Months:***Tank sampling:***

- Tank 241-AN-106 post C-110/C-107 hard-heel retrieval grab sampling for chemistry control is currently scheduled for February 2014.
- 241-AY-102A leak detection pit grab sampling is currently scheduled for March 2014 and approximately monthly thereafter. Actual sampling date will depend on the rate of the level rise in the pit.
- Tank 241-AZ-102 grab sampling for evaporator campaign (14-02) is currently scheduled for March 2014.
- Tank 241-C-101 Off-Riser Sampling System closure sampling is currently scheduled for April 2014.
- Tank AN-106 at 50 percent C-105 retrieval planned for May 2014.

- Tank 241-C-107 Off-Riser Sampling System/Drag Sampler sampling is currently scheduled for May 2014.
- Tank 241-SY-102 core sampling for chemistry control and strategic planning to characterize plutonium oxide particle size which may be a criticality concern for WTP is currently scheduled for May/June 2014.
- Tank AY-101 (chemistry control) grab sampling scheduled for June 2014.
- Tank 241-C-111 grab sampling during hard heel dissolution is currently scheduled to start in June 2014.
- Tank 241-AN-101 after C-111 and C-112 retrieval planned for July 2014.
- Tank AW-106 (evaporator campaign 14-03) planned for July 2014.

Best-Basis Inventory (BBI) updates:

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

- | | | |
|--------------|--------------|--------------|
| • 241-A-103 | • 241-AY-102 | • 241-BY-102 |
| • 241-A-106 | • 241-AZ-101 | • 241-C-110 |
| • 241-AW-105 | • 241-BX-101 | • 241-C-112 |
| • 241-AN-101 | • 241-BX-103 | • 241-S-111 |
| • 241-AY-101 | • 241-BX-110 | • 241-SX-106 |
| • 241-AP-104 | • 241-BY-101 | • 241-U-111 |

Data quality objectives:

- A revision to the tank farms Chemistry Control Program Data Quality Objective is expected to be released in February 2014.

Issues: None.

TANK OPERATIONS CONTRACT OVERVIEW

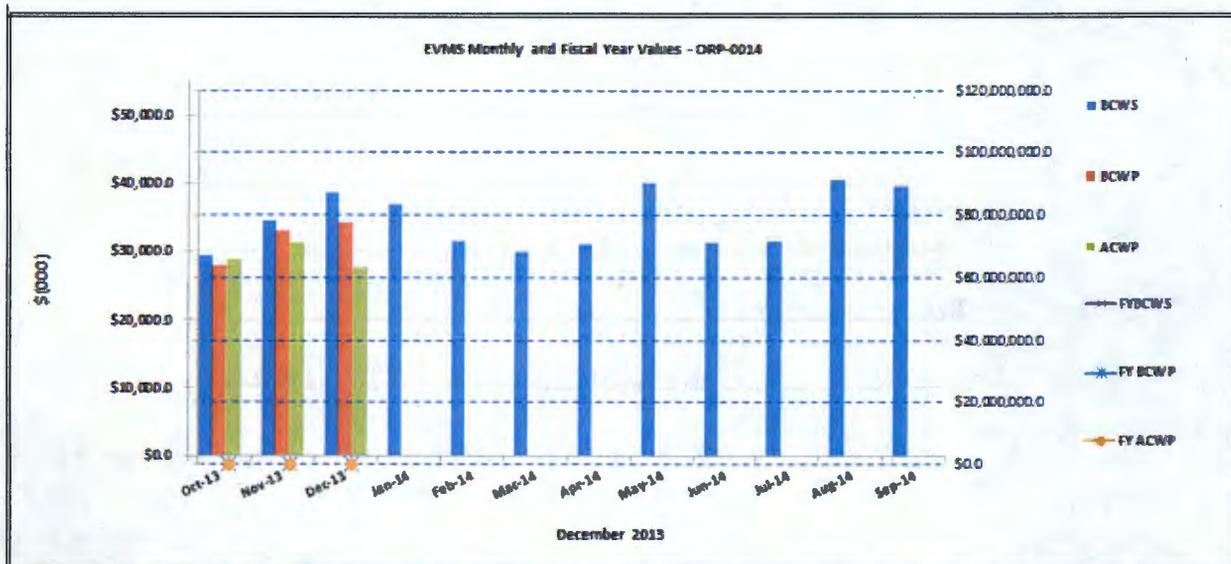
Project Performance

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.

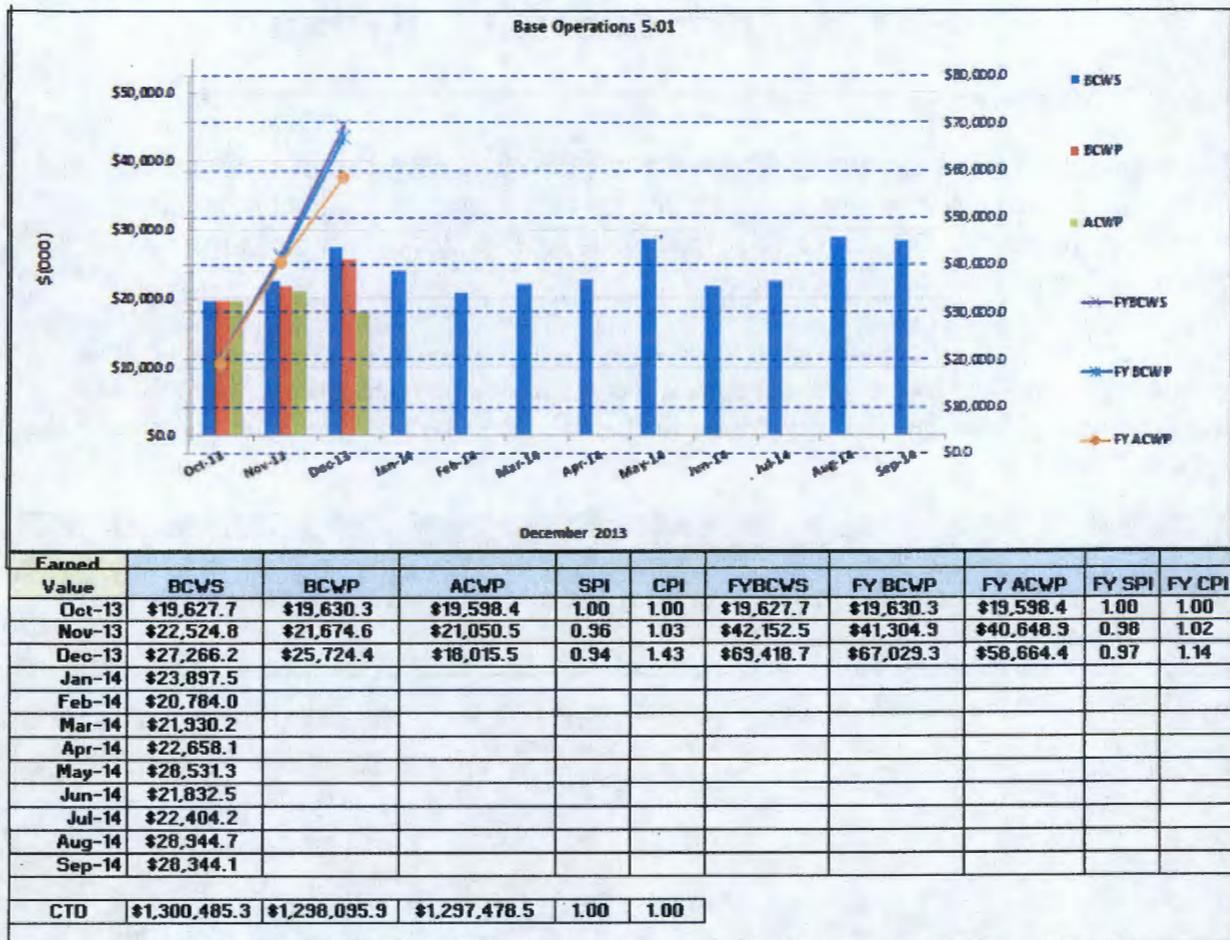
As of December 31, 2013, Washington River Protection Solutions LLC, the Tank Operations Contractor, has worked 8 days without a lost time workday injury and 8 days since the last recordable case. There was one Day Away, Restricted, Dart case and one recordable case in the month of December.

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	38,697.7	34,362.0	35,381.0	(4,335.7)	(1,019.0)	0.89	0.97			
FYTD	102,706.4	95,388.9	95,843.8	(7,317.5)	(454.7)	0.93	1.00	416,594.5	388,616.3	32,978.2
CTD	1,994,450.3	1,987,132.7	1,987,587.4	(7,317.6)	(454.7)	1.00	1.00	3,127,708.8	3,113,217.5	14,491.3

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	\$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	\$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	\$1,994,450.3	\$1,987,132.7	\$1,987,587.4	1.00	1.00					

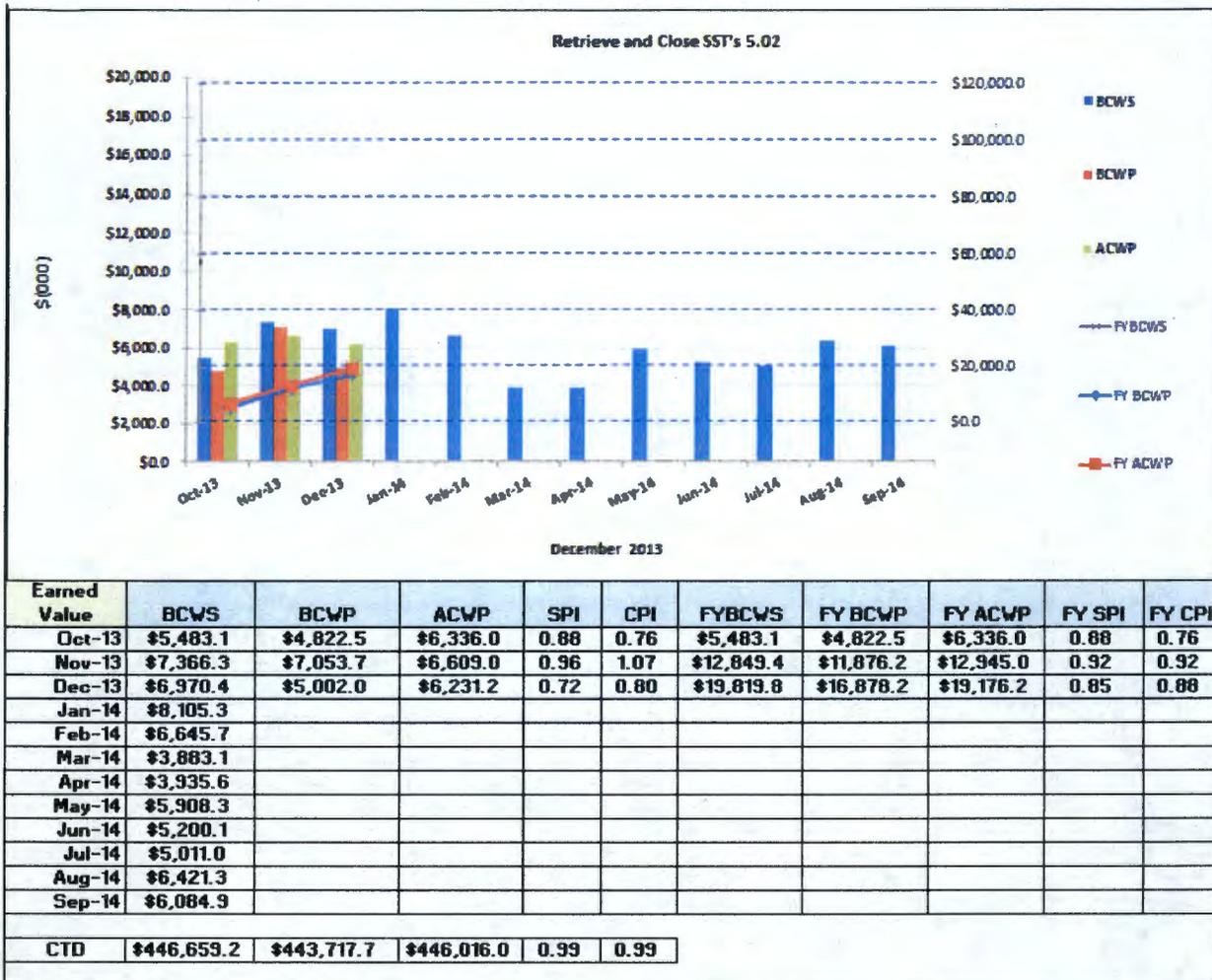


Base Operations and Tank Farm Projects

The current month unfavorable schedule variance of negative (\$1,542K) is primarily due to:

- Delay of tall column testing in the deep sludge gas release events work package delayed rampup efforts and a joint review group analysis that lasted longer than originally planned
- Design changes to the camera system needed for double-shell tank (DST) integrity
- Delay on the AP-104 ultrasonic testing due to cold weather
- DST transfers resulting from retrieval activities.

The current month unfavorable cost variance of (\$38K) is not reportable.



Retrieval and Close Single-Shell Tanks

Schedule Variance of (\$1,968K):

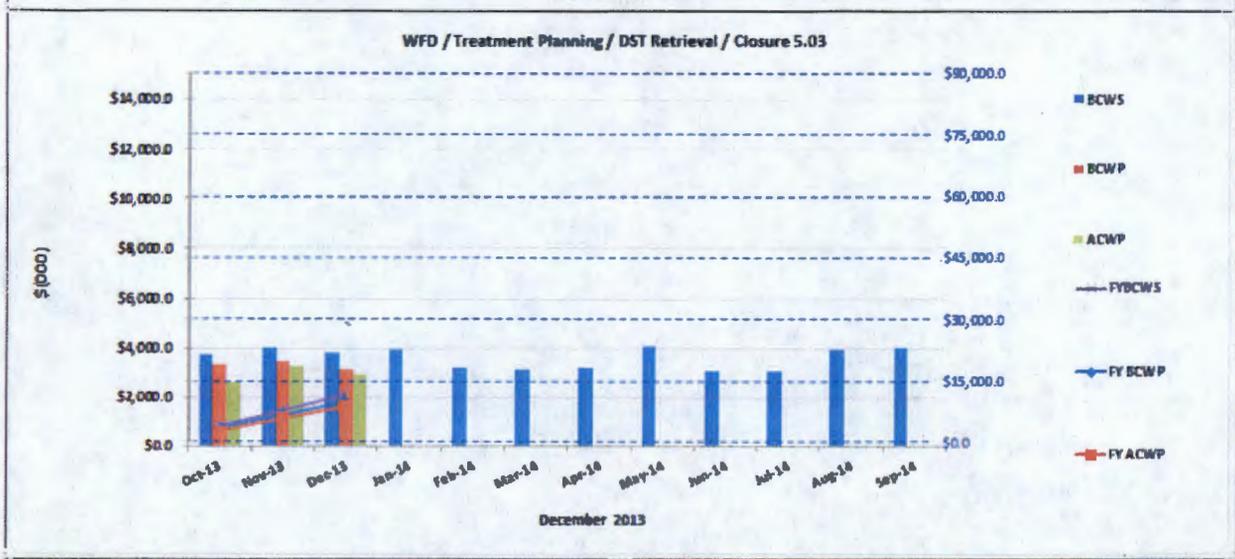
The unfavorable schedule variance is primarily due to:

- Delays at C-112 retrieval due to low pit temperatures during the cold weather, replacement of cameras, lights, and tent installations
- Delays at C-107 retrieval due to the failed slurry pump removal.

Cost Variance of (\$1,229K):

The unfavorable cost variance is primarily due to:

- Increased costs at C-112 retrieval due to low pit temperatures during the cold weather requiring replacement of cameras, lights, and tent installations. Also retrieval activities were performed on an XYZ shift versus the planned PQ shift
- Increased costs at C-107 retrieval due to additional time needed to replace the failed slurry pump and additional equipment and support needed to restart retrieval activities.



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	\$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	\$227,864.6	\$226,217.1	\$225,119.5	0.99	1.00					

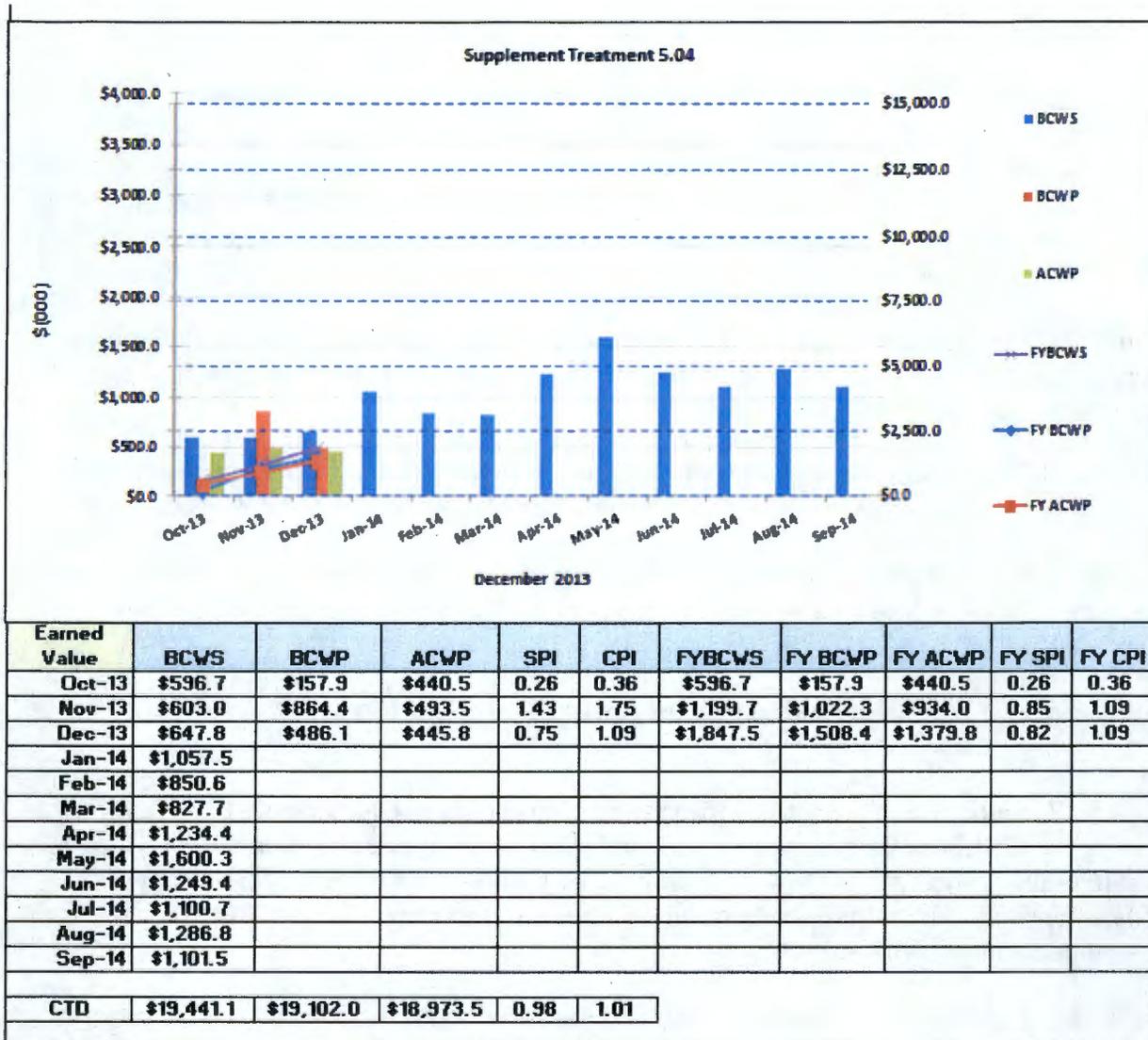
Waste Feed Delivery/Treatment/Double-Shell Tank Retrieval Closure

The current month unfavorable schedule variance of **(\$664K)** is primarily due to:

- Lower priority work forecast for December was pushed to January due to higher priority work taking precedence
- Delays with the Isolok Reference Sampler testing activities.

The current month favorable cost variance of **\$208K** is primarily due to:

- Work being delayed by other priorities and resources having been redirected to work on strategic management initiatives.



Supplemental Treatment

The current month unfavorable schedule variance of **(\$161K)** is primarily due to:

- Work scope on hold due to continuing resolution.

The current month favorable cost variance of \$40K is not reportable.

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 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, 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-045-920, 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 is continues.
- Data collection in U Farm for electrical resistivity characterization was completed. Data analysis and reporting continues.
- 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 has begun.

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.
- Continue 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 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
- M-045-86F: Retrieval Data Report for C-108 is due May 1, 2014. Completed on November 27, 2013.
- M-045-86G: Retrieval Data Report for C-109 is due June 4, 2014
- M-045-86H: Retrieval Data Report for C-110 is due January 29, 2015.

Significant Past Accomplishments:

- The Retrieval Data Report for Tank C-108 was finalized and transmitted to Ecology under ORP 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 and 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. Numeric modeling for the performance assessment has begun.
- A retrieval data report for tank C-109 has been drafted.
- Retrieval completion certification for C-110 was transmitted to Ecology on January 29, 2014.

Significant Planned Activities in the Next 6 Months:

- Issue a retrieval data report for Tank C-104
- Issue a retrieval data report for Tank C-109
- 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. 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:

None.

Significant Planned Activities in the Next 6 Months:

Modify Tank Waste Retrieval Work Plan 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 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.

FINAL

**Office of River Protection
Consent Decree 08-5085-FVS
Monthly Summary Report
February 2014**

Office of River Protection

Consent Decree 08-5085-FVS
Monthly Summary Report

February 2014 (Monthly Summary Report/Project Earned Value Management System reflects December 2013 information)

Page	Topic	Leads
1	Statistics/Status	James Lynch/Dan McDonald/Jeff Lyon
2	Single-Shell Tank (SST) Retrieval and Closure – D-00B-01, D-00B-02, D-00B-03, D-00B-04	Chris Kemp/Jeff Lyon
3	Tank Waste Retrieval Work Plan Status – Consent Decree Appendix C	Chris Kemp/Jeff Lyon
4	SST Retrieval Monthly and Fiscal Year Earned Value Management System Data	Kathy Higgins/Jeff Lyon
5	Waste Treatment and Immobilization Plant (WTP) Project – D-00A-06, D-00A-17, D-00A-01	Delmar Noyes/Dan McDonald
8	WTP Pretreatment Facility – D-00A-18, D-00A-19, D-00A-13, D-00A-14, D-00A-15, D-00A-16	Wahed Abdul/Dan McDonald
10	High-Level Waste Facility – D-00A-20, D-00A-21, D-00A-02, D-00A-03	Wahed Abdul/Dan McDonald
13	Low-Activity Waste Facility – D-00A-07, D-00A-08, D-00A-09	Jeff Bruggeman/Dan McDonald
15	Balance of Facilities – D-00A-12	Jason Young/Dan McDonald
17	Analytical Laboratory – D-00A-005	

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2013				
D-00A-05	LAB Construction Substantially Complete	12/31/2012	12/31/2012	Completed
D-00A-12	Steam Plant Construction Complete	12/31/2012	12/31/2012	Completed
D-00A-21	Complete Construction of Structural Steel to elevation of 37 feet in HLW Fac.	12/31/2012	10/24/2012	Completed
Fiscal Year 2014				
D-00B-01	Complete Retrieval of Tank Waste from 10 SSTs in WMA-C	09/30/2014		Ongoing*
D-00B-02	Advise Ecology of the 9 SSTs Waste Will be Retrieved by 2022	09/30/2014	08/24/2011	Completed
Fiscal Year 2015				
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014		Ongoing*
D-00A-19	Complete elevation 98 feet Concrete Floor Slab Placements in PT Facility	12/31/2014		Ongoing*

DOE = U.S. Department of Energy.
 Ecology = Washington State Department of Ecology.
 Fac. = facility.
 HLW = high-level waste.
 LAB = Analytical Laboratory.
 LAW = low-activity waste.
 PT = pretreatment.
 SST = single-shell tank.
 WMA-C = C-Farm Waste Management Area.

*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone.

Consent Decree Reports/Reviews

D-00C-01 series, Submit to State of Washington and State of Oregon Semi-Annual Report,
 Due: Semi-annually – January 31 and July 31 of each year, Status: On-going.

D-00C-02 series, Submit to State of Washington and State of Oregon Monthly Summary Reports,
 Due: End of each month, Status: On-going.

D-006-00-A, Meet Approximately Every Three Years after Entry of Decree to review requirements of the Consent Decree, Held: December 10, 2013, Status: Completed.

D-006-00-A1, Provide State of Oregon notice of meetings in D-006-00-A, etc. no less than 30 days before they are scheduled, Sent: November 8, 2013, Status: Completed.

Single-Shell Tank Retrieval Program

D-00B-01, Complete Retrieval of Tank Wastes from 10 Remaining Single-Shell Tanks (SST) in C-Farm Waste Management Area (WMA-C), Due: September 30, 2014, Status: Ongoing.* Please see issues.

D-00B-01A thru J, Submit Tank Retrieval Complete Certification, Due: To be determined, pursuant to Section IV-B-5 of the Consent Decree, U.S. Department of Energy (DOE) must submit to the Washington State Department of Ecology (Ecology) a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix C, Part 1, of the Consent Decree. Completed for SST C-104 on March 21, 2013, via DOE Office of River Protection (ORP) letter 13-TF-0018. Completed for SST C-108 on May 1, 2013, via ORP letter 13-TF-0025. Completed for SST C-109 on June 4, 2013, via ORP letter 13-TF-0037. Completed for SST C-110 on January 29, 2014 via ORP letter 14-TF-0007.

D-00B-02, Advise Ecology of the Nine SSTs from which Waste Will Be Retrieved by 2022, Due: September 30, 2014, Status: Completed on August 24, 2011.

D-00B-03, Initiate Startup of Retrieval in At Least five of nine SSTs in D-00B-02, Due: December 31, 2017, Status: On-going.

D-00B-04, Complete Retrieval of Tank Wastes from the nine SSTs in D-00B-02, Due: September 30, 2022, Status: On-going.

D-00B-04A thru D-00B-04I, Submit Tank Retrieval Complete Certification, Due: To be determined.

Significant Past Accomplishments:

- Continued installation and testing of equipment for the Mobile Arm Retrieval System-Vacuum (MARS-V) at C-105. All major equipment has been installed, continued Construction Acceptance Testing of the installed system.
- Restarted the C-107 Mobile Arm Retrieval System.
- Completed retrieval of C-112 through the second technology; remaining waste volume estimates are being calculated.
- Continued construction activities for installation of equipment for hard heel removal system at C-111.

Significant Planned Activities in the Next 6 Months:

- Complete installation of the MARS-V in C-105, startup of the MARS-V for C-105
- Begin startup of hard heel retrieval in C-111 using high pressure water, with caustic/water dissolution available.

Issues:

*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone.

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:

None.

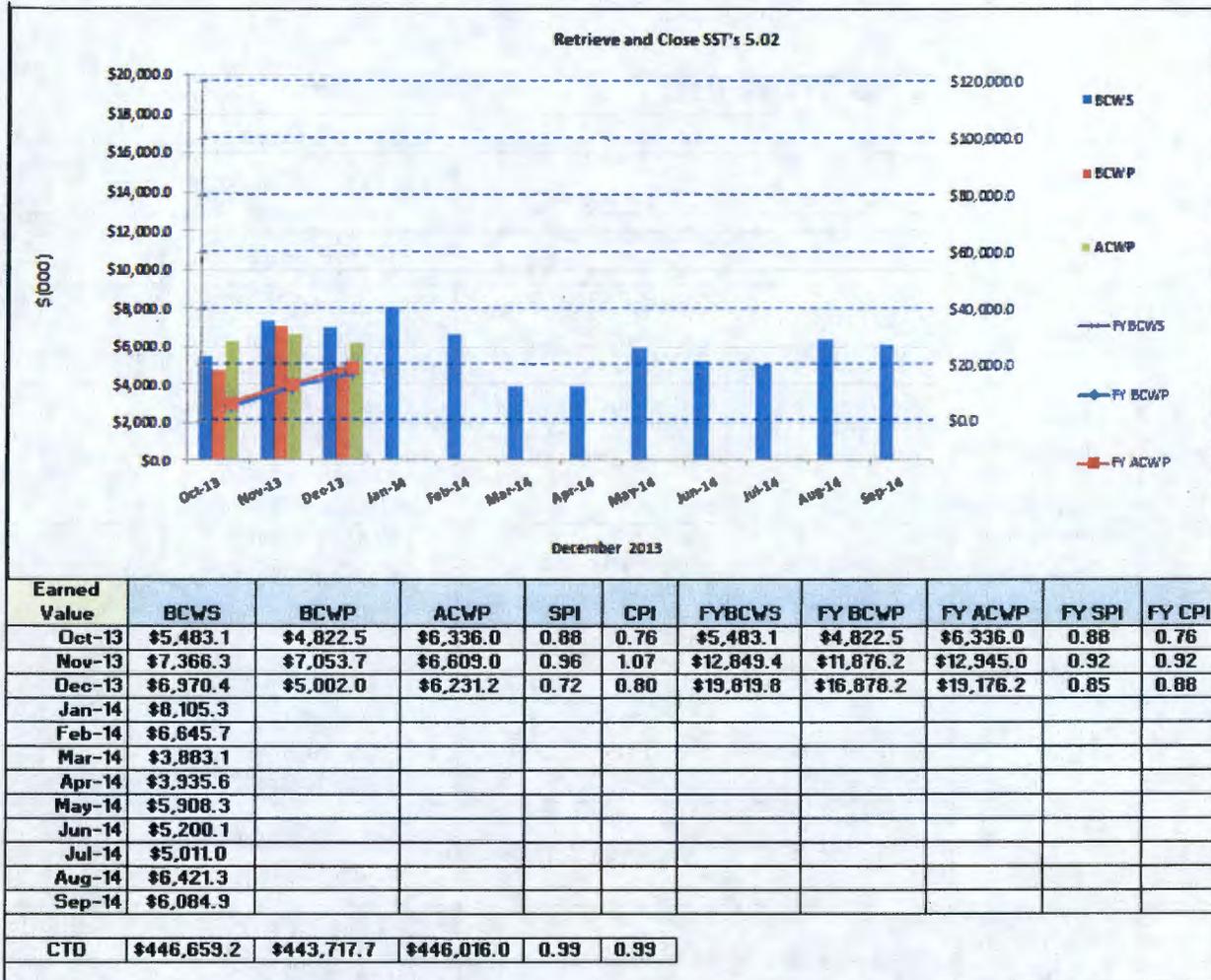
Significant Planned Activities in the Next 6 Months:

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

Issues:

None.

Single-Shell Tank Retrieval Monthly and Fiscal Year Earned Value Management System Data



Retrieval and Close Single-Shell Tanks

Schedule Variance of (\$1,968K):

The unfavorable schedule variance is primarily due to:

- Delays at C-112 retrieval due to low pit temperatures during the cold weather, replacement of cameras, lights, and tent installations
- Delays at C-107 retrieval due to the failed slurry pump removal.

Cost Variance of (\$1,229K):

The unfavorable cost variance is primarily due to:

- Increased costs at C-112 retrieval due to low pit temperatures during the cold weather requiring replacement of cameras, lights, and tent installations. Also retrieval activities were performed on an XYZ shift versus the planned PQ shift
- Increased costs at C-107 retrieval due to additional time needed to replace the failed slurry pump and additional equipment and support needed to restart retrieval activities.

Waste Treatment and Immobilization Plant Project

Number	Title	Due Date	Status
D-00A-06	Complete Methods Validations	12/31/2017	Ongoing*
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2019	Ongoing*
D-00A-01	Achieve Initial Plant Operations for WTP	12/31/2022	Ongoing*

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 2,358 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 557 craft, 424 nonmanual, and 186 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

As of December 2013, the combined Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) (collectively LBL) were 66-percent complete, design and engineering was 80-percent complete, procurement was 84-percent complete, construction was 75-percent complete, and startup and commissioning was 12-percent complete.

In September 2012, the baseline change proposal that implemented the LAW, LAB, and BOF replan was incorporated into the project over-target baseline, resulting in increases/decreases to the LBL Facility budgets, which correspondingly increased/decreased the facility/function to-date, percent-complete values. In October 2012, the Pretreatment (PT) and High-Level Waste (HLW) Facilities 2-Year Interim Work Plan was incorporated into the project over-target baseline and the percent-complete values for PT and HLW Facilities were frozen at the September 2012 rate. The WTP Project continues to progress in accordance with the LBL replan and PT/HLW 2-Year Interim Work Plan.

In December 2013, the cumulative to-date WTP Project schedule variance was a negative \$59.1 million, and the cumulative to-date WTP Project cost variance was a negative \$15.9 million. The major contribution to the cumulative to-date cost and schedule variance is based on the progress of the LBL replan and PT/HLW 2-Year Interim Work Plan.

The following is the status of project matters through the end of December.

Significant Past Accomplishments:

- Completed pulse jet mixer (PJM) controls testing at 8 foot single PJM platform (PT)
- Completed report for design changes for in-service inspection and redundancy (HLW)
- Completed WTP HEPA filter risk assessment report (HLW)
- Completed cementitious fireproofing on structural steel in the export bay (LAW)
- Set the melter dam and pour spout assemblies in the four discharge chambers (LAW)

Significant Planned Actions in the Next 6 Months:

- Approve limited authorization to proceed for design, procurement, and construction of HLW (HLW)
- Develop HLW-specific safety design strategy (HLW)
- Complete installation of autosampling system (LAW)
- Complete construction of the Glass Former Storage Facility (BOF)
- Complete repairs, retest, and recertify RLD vessels (LAB).

Issues:

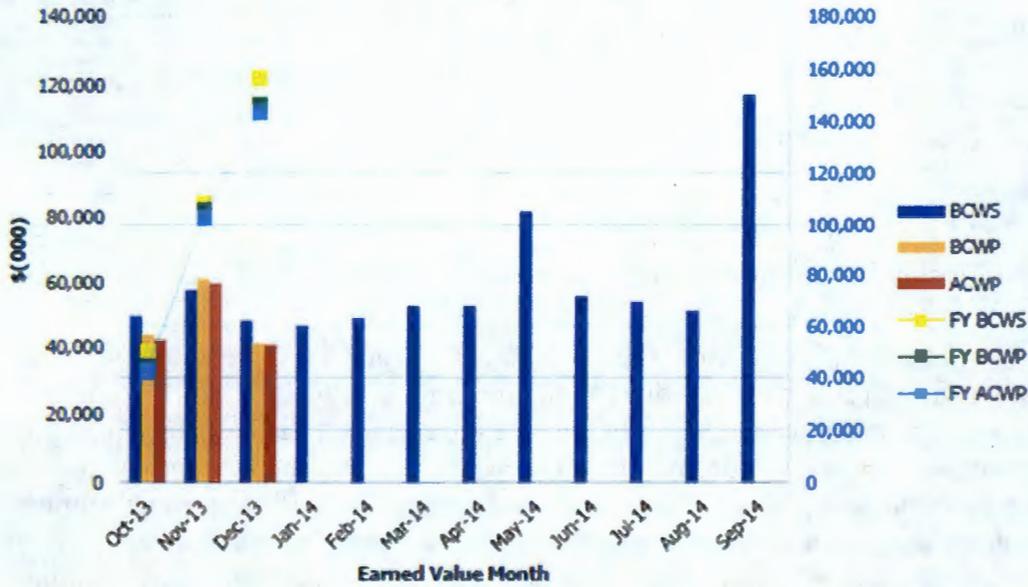
*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues relevant to the PT and HLW Facilities include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues.

Data Set: FY 2014 Earned Value Data

Data as of: December 2013

**River Protection Project
Waste Treatment Plant (WTP) Project**

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 2013	\$49,959	\$43,981	\$42,448	0.88	1.04	\$49,959	\$43,981	\$42,448	0.88	1.04
Nov 2013	\$58,047	\$61,276	\$59,935	1.06	1.02	\$108,006	\$105,257	\$102,383	0.97	1.03
Dec 2013	\$48,739	\$41,149	\$40,881	0.84	1.01	\$156,745	\$146,406	\$143,264	0.93	1.02
Jan 2014	\$47,290									
Feb 2014	\$49,428									
Mar 2014	\$53,046									
Apr 2014	\$52,930									
May 2014	\$81,726									
Jun 2014	\$56,083									
Jul 2014	\$54,292									
Aug 2014	\$51,488									
Sep 2014	\$116,961									

PTD	\$7,946,957	\$7,887,881	\$7,903,873	0.99	1.00
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Pretreatment Facility

Number	Title	Due Date	Status
D-00A-19	Complete Elevation 98' Concrete Floor Slab in PT Facility	12/31/2014	Ongoing *
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2015	Ongoing *
D-00A-14	PT Facility Construction Substantially Complete	12/31/2017	Ongoing *
D-00A-15	Start PT Facility Cold Commissioning	12/31/2018	Ongoing *
D-00A-16	PT Facility Hot Commissioning Complete	12/31/2019	Ongoing *

The PT Facility will separate radioactive tank waste into HLW and LAW fractions and transfer each waste type to the respective vitrification facility for immobilization. As of September 2012, the PT Facility was 56-percent complete overall, with engineering design 85-percent complete, procurement 56-percent complete, construction 43-percent complete, and startup and commissioning 3-percent complete. Construction, procurement, and production engineering activities remain on hold, resulting in no change to the percent-complete status since September 2012. BNI and DOE continue to focus on resolving technical issues, performing hazard analyses, and completing safety evaluations for process systems in accordance with the PT/HLW 2-Year Interim Work Plan.

Technical review teams continue to evaluate open technical issues. Construction of the mixing test platform continues in preparation for full-scale testing. Engineering specifications for full-scale testing have been prepared and are undergoing a multidiscipline review. National laboratories are developing a test plan, simulant, and instrumentation requirements. BNI has developed a probabilistic risk assessment plan and project execution plan to resolve technical issues regarding criticality, hydrogen in vessels, and HPAV. The plans are undergoing comment resolution. Resources are being moved to perform technical issues resolution in PT.

Significant Past Accomplishments:

- Completed PJM controls testing at 8-foot single PJM platform and started layup
- Continued construction at Full-Scale Test Facility with receipt of simulant handling equipment
- Approximately 25 percent complete with jet impingement testing for erosion.

Significant Planned Actions in the Next 6 Months:

- Issue sampling action plan to determine sampling accuracy
- Award sensitivity tests for erosion and start slurry pot testing for erosion
- Update basis of design for safety classification regarding seismic analysis of vessels
- Receive final test plan, simulant composition, and instrument list from Pacific Northwest National Laboratory for full scale vessel mixing tests
- Define PJM control strategy
- Receive BNI plan for resolution of criticality and hydrogen generation in vessels.

Issues:

*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues relevant to the PT and HLW Facilities include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed specification.

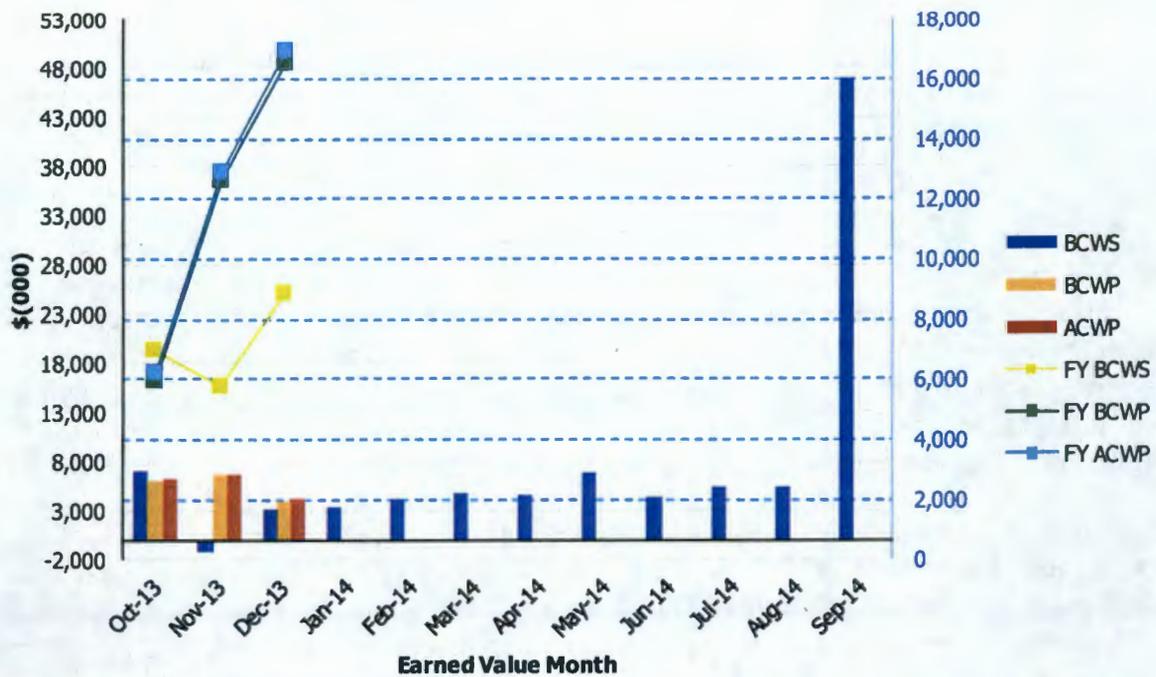
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: December 2013

**River Protection Project
Pretreatment Facility**

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 2013	\$6,954	\$5,927	\$6,224	0.85	0.95	\$6,954	\$5,927	\$6,224	0.85	0.95
Nov 2013	(\$1,213)	\$6,673	\$6,646	-5.50	1.00	\$5,741	\$12,600	\$12,870	2.19	0.98
Dec 2013	\$3,109	\$3,957	\$4,053	1.27	0.98	\$8,850	\$16,557	\$16,923	1.87	0.98
Jan 2014	\$3,399									
Feb 2014	\$4,113									
Mar 2014	\$4,695									
Apr 2014	\$4,526									
May 2014	\$6,845									
Jun 2014	\$4,421									
Jul 2014	\$5,437									
Aug 2014	\$5,459									
Sep 2014	\$46,949									
PTD	\$1,536,140	\$1,526,566	\$1,524,668	0.99	1.00					

High-Level Waste Facility

Number	Title	Due Date	Status
D-00A-21	Complete Construction of Structural Steel to 37' in HLW Facility	12/31/2012	Complete
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2016	Ongoing *
D-00A-03	Start HLW Facility Cold Commissioning	6/30/2018	Ongoing *
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2019	Ongoing *

The HLW Facility will receive the separated HLW concentrate from the PT Facility. This concentrate will be blended with glass formers and converted into molten glass in one of the two HLW melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated before shipment to interim storage.

As of September 2012, the HLW Facility was 62-percent complete overall, with engineering design 89-percent complete, procurement 81-percent complete, construction 43-percent complete, and startup and commissioning 4-percent complete. Construction, procurement, and production engineering activities have significantly slowed down, resulting in minimal change to the percent completion status since September. BNI and DOE continue to focus on resolving technical issues, performing hazard analyses, and completing safety evaluations for process systems in accordance with the PT/HLW 2-Year Interim Work Plan.

Construction activities include the placement of walls at the 37-ft elevation, installation of structural steel at the 58-ft and 77-ft elevation, and installation of cable tray supports and ventilation ducts at the 14-ft elevation. Engineering efforts are focused on resolution of Priority Level 1 findings. The Environmental and Nuclear Safety Group is in the process of developing the safety design strategy as part of the initiative to resume design, procurement, and construction.

Technical review teams continue to evaluate open technical issues with priority placed on the resumption of HLW construction. The path forward to ramp up HLW production engineering and construction is ongoing and includes three actions: Conduct engineering studies to resolve technical safety issues; perform risk assessment for the issues noted in Priority Level 1 findings, reliability validation process, project issues evaluation reporting, etc.; and perform assessment of BNI process improvement for the readiness to proceed.

Significant Past Accomplishments:

- Completed risk assessments for HLW PJM vessel mixing
- Completed final report for design changes for in-service inspection and redundancy
- Completed WTP HEPA Filter Risk Assessment Report
- Received draft HLW Transition Plan for review.

Significant Planned Actions in the Next 6 Months:

- Approve limited authorization to proceed for design, procurement, and construction for HLW
- Develop HLW-specific safety design strategy
- Develop plan to close technical issues and other issues (e.g., safety basis compliance, quality assurance issues, and design defensibility) of HLW
- Complete draft analysis of single-point failures in support of failure mode analysis
- Complete plan for erosion/corrosion risk evaluation for HLW
- Perform HEPA filter qualification testing at Mississippi State University.

Issues:

*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues relevant to the PT and HLW Facilities include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed specification.

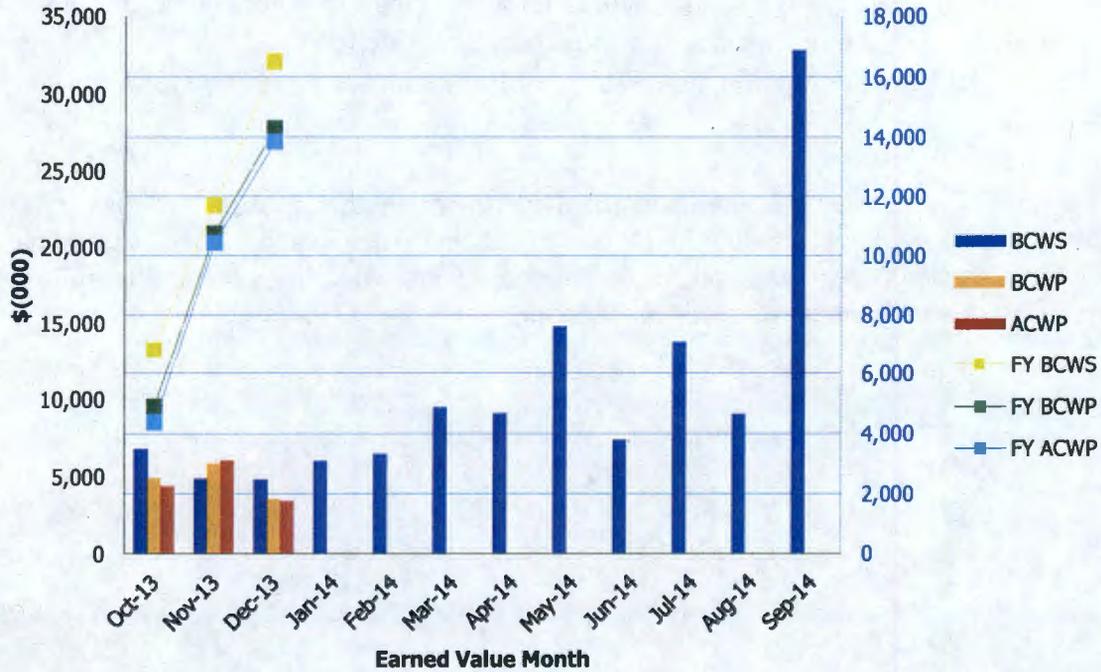
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: December 2013

**River Protection Project
High-Level Waste Facility**

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 2013	\$6,818	\$4,914	\$4,390	0.72	1.12	\$6,818	\$4,914	\$4,390	0.72	1.12
Nov 2013	\$4,892	\$5,842	\$6,055	1.19	0.96	\$11,710	\$10,756	\$10,445	0.92	1.03
Dec 2013	\$4,811	\$3,559	\$3,420	0.74	1.04	\$16,521	\$14,315	\$13,865	0.87	1.03
Jan 2014	\$6,010									
Feb 2014	\$6,472									
Mar 2014	\$9,502									
Apr 2014	\$9,106									
May 2014	\$14,818									
Jun 2014	\$7,379									
Jul 2014	\$13,796									
Aug 2014	\$9,052									
Sep 2014	\$32,827									
PTD	\$1,003,323	\$1,003,495	\$996,735	1.00	1.01					

Low-Activity Waste Facility

Number	Title	Due Date	Status
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014	Ongoing*
D-00A-08	Start LAW Facility Cold Commissioning	12/31/2018	Ongoing*
D-00A-09	LAW Facility Hot Commissioning Complete	12/31/2019	Ongoing*

The LAW Facility will process LAW that will be mixed with glass formers, vitrified into glass at a design capacity of 30 metric tons per day, and placed in stainless steel containers that are anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of December 2013, the LAW Facility was 67-percent complete overall, with engineering design 80-percent complete, procurement 87-percent complete, construction 70-percent complete, and startup and commissioning 6-percent complete.

Significant Past Accomplishments:

- Commenced installation of penetration seals for piping and electrical conduit
- Completed cementitious fireproofing on structural steel in the Export Bay
- Set the melter dam and pour spout assemblies in the four discharge chambers
- Confirmed the Thermal Catalytic Oxidizer (TCO) could be brought through the caustic scrubber hatch
- Hydro-tested 4,400 linear feet of piping
- Installed over 950 linear feet of instrument tubing and 1,280 linear feet of electrical conduit and pulled over 10,000 linear feet of cable.

Significant Planned Actions in the Next 6 Months:

- Complete installation of autosampling system
- Continue refractory brick installation in the melters
- Complete hazard analysis for the melter and melter off-gas.

Issues:

*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone.

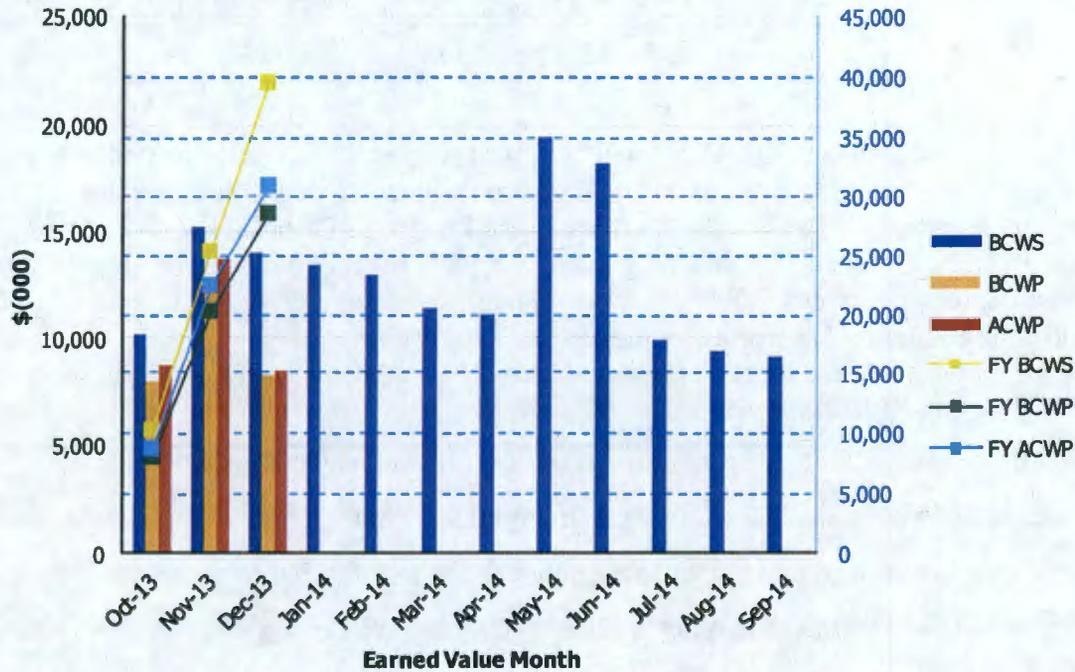
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: December 2013

**River Protection Project
Low-Activity Waste Facility**

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 2013	\$10,160	\$7,952	\$8,677	0.78	0.92	\$10,160	\$7,952	\$8,677	0.78	0.92
Nov 2013	\$15,237	\$12,339	\$13,732	0.81	0.90	\$25,397	\$20,291	\$22,409	0.80	0.91
Dec 2013	\$14,003	\$8,214	\$8,389	0.59	0.98	\$39,400	\$28,505	\$30,798	0.72	0.93
Jan 2014	\$13,444									
Feb 2014	\$12,976									
Mar 2014	\$11,388									
Apr 2014	\$11,129									
May 2014	\$19,428									
Jun 2014	\$18,226									
Jul 2014	\$9,943									
Aug 2014	\$9,406									
Sep 2014	\$9,120									
PTD	\$843,897	\$817,995	\$874,078	0.97	0.94					

Balance of Facilities

Number	Title	Due Date	Status
D-00A-12	Steam Plant Construction Complete	12/31/2012	Complete

The BOF will provide services and utilities to support operation of the main production facilities: PT, HLW, LAW, and LAB. As of December 2013, BOF was 60-percent complete overall, with engineering design 81-percent complete, procurement 71-percent complete, construction 79-percent complete, and startup and commissioning 13-percent complete.

Commercial grade dedication activities in support of the emergency turbine generator procurement are the primary focus for the quality, design engineering, and procurement organizations. Construction and startup efforts are focused on completion of the Glass Former Facility, construction of the Standby Diesel Generator (SDG) Facility, and turnover of the nonradioactive liquid waste disposal system from construction to startup. Excavation activities for the SDG Building are complete, and the foundation for the facility has been placed.

Significant Past Accomplishments:

- Pulled 190 linear feet of cable and completed 36 cable terminations in the Glass Former Facility
- Completed backfill of the SDG Facility foundation
- Completed backfill and compaction for the Liquid Effluent Retention Facility pipe vaults at the northwest corner of the PT Facility.

Significant Planned Actions in the Next 6 Months:

- Complete construction of the Glass Former Storage Facility
- Turnover the nonradioactive liquid waste disposal system from construction to startup
- Complete component testing of the low-voltage, medium-voltage, and fire detection systems for switchgear Buildings 87 and 91.

Issues:

No major issues at this time.

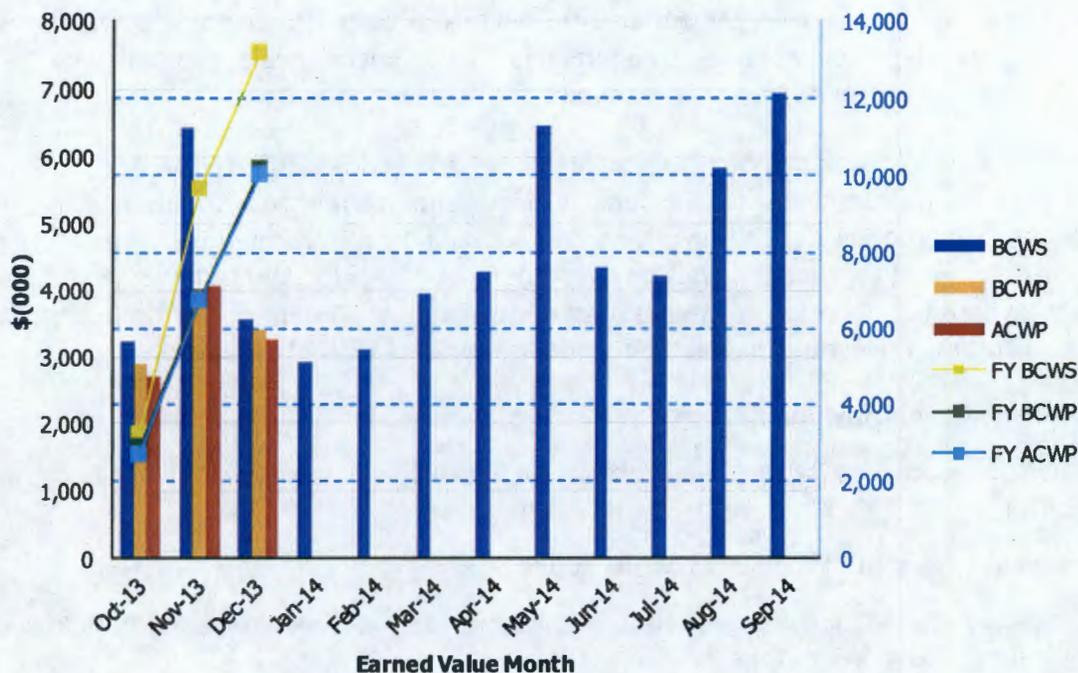
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: December 2013

**River Protection Project
Balance of Facilities**

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 2013	\$3,218	\$2,901	\$2,679	0.90	1.08	\$3,218	\$2,901	\$2,679	0.90	1.08
Nov 2013	\$6,431	\$3,886	\$4,067	0.60	0.96	\$9,649	\$6,787	\$6,746	0.70	1.01
Dec 2013	\$3,547	\$3,395	\$3,267	0.96	1.04	\$13,196	\$10,182	\$10,013	0.77	1.02
Jan 2014	\$2,934									
Feb 2014	\$3,119									
Mar 2014	\$3,957									
Apr 2014	\$4,277									
May 2014	\$6,468									
Jun 2014	\$4,329									
Jul 2014	\$4,212									
Aug 2014	\$5,827									
Sep 2014	\$6,945									
PTD	\$339,910	\$327,832	\$321,384	0.96	1.02					

Analytical Laboratory

Number	Title	Due Date	Status
D-00A-05	LAB Construction Substantially Complete	12/31/2012	Complete

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of December 2013, the LAB was 72-percent complete overall, with engineering design 80-percent complete, procurement 86-percent complete, construction 87-percent complete, and startup and commissioning 23-percent complete.

Engineering efforts are focused on supporting RLD vessel repairs and finalizing the electrical engineering portions of the LAB design. Construction efforts are focused on installation of instrument tubing and electrical commodities to support the completion of LAB construction.

Significant Past Accomplishments:

- Issued cable termination schedules for C5 ventilation, stack discharge monitoring, autosampling, and RLD systems
- Completed 400 penetration seals
- Pulled 4,300 linear feet of cable and completed 780 terminations.

Significant Planned Actions in the Next 6 Months:

- Complete fabrication of stack discharge monitoring panels
- Complete repairs to RLD vessel 164 and recertify RLD vessels.

Issues:

No major issues at this time.

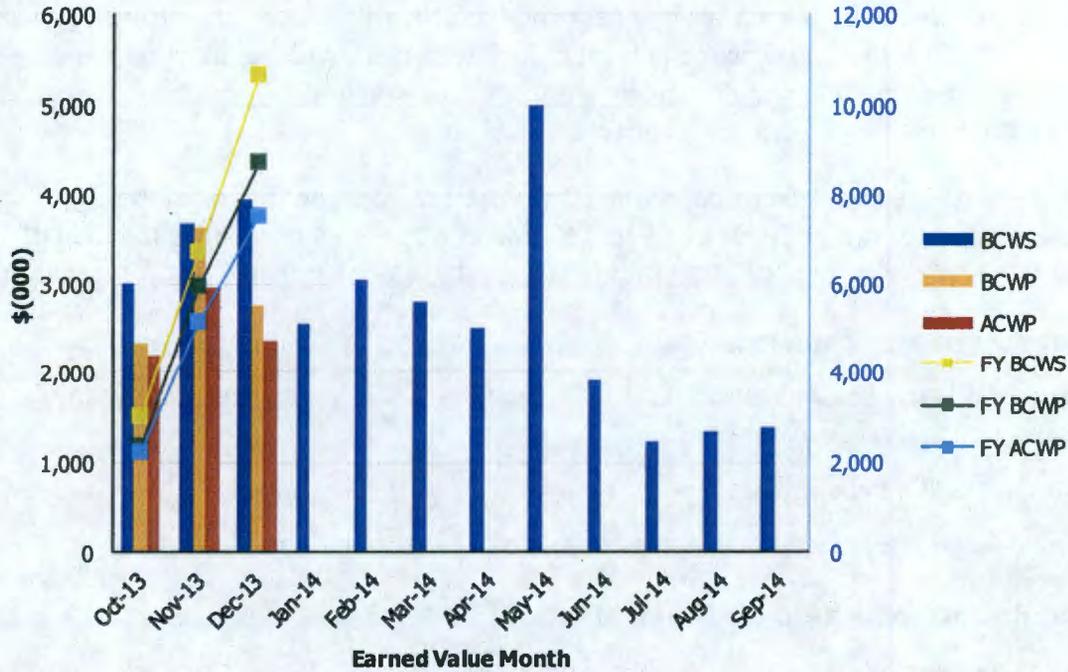
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: December 2013

**River Protection Project
Analytical Laboratory**

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 2013	\$3,008	\$2,328	\$2,196	0.77	1.06	\$3,008	\$2,328	\$2,196	0.77	1.06
Nov 2013	\$3,689	\$3,629	\$2,959	0.98	1.23	\$6,697	\$5,957	\$5,155	0.89	1.16
Dec 2013	\$3,943	\$2,750	\$2,350	0.70	1.17	\$10,640	\$8,707	\$7,505	0.82	1.16
Jan 2014	\$2,553									
Feb 2014	\$3,051									
Mar 2014	\$2,802									
Apr 2014	\$2,501									
May 2014	\$4,999									
Jun 2014	\$1,894									
Jul 2014	\$1,234									
Aug 2014	\$1,351									
Sep 2014	\$1,381									
PTD	\$247,679	\$241,790	\$260,009	0.98	0.93					

Waste Treatment Plant Project - (LBL) Percent Complete Status Through December 2013															
(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars		
	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities															
Low-Activity Waste	1,225.0	818.0	67%	317.3	253.9	80%	263.1	228.2	87%	466.6	325.5	70%	177.9	10.3	6%
Analytical Lab	335.5	241.8	72%	72.6	58.0	80%	55.5	47.8	86%	138.5	120.1	87%	68.9	15.9	23%
Balance of Facilities	548.6	327.8	60%	95.0	77.1	81%	74.5	53.2	71%	224.0	177.2	79%	155.1	20.4	13%
Total LBL	2,109.1	1,387.6	66%	485.0	389.0	80%	393.1	329.2	84%	829.1	622.8	75%	401.9	46.6	12%
PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)															
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%
Pretreatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%
Shared Services	4,726.9	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%
Total HLW/PT/SS	8,722.8	5,965.2	68%	2,173.1	1,948.9	90%	1,565.5	1,124.8	72%	2,887.6	1,764.8	61%	758.5	143.2	19%
Undistributed Budget	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	10,831.9	7,352.8	68%	2,658.1	2,337.9	88%	1,958.6	1,454.0	74%	3,716.7	2,387.6	64%	1,160.4	189.8	16%

Source: Preliminary WTP Contract Performance Report - Format 1, Data for December 2013

Note: In September 2012, the LBL Replan was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB value for the project for PT/HLW/SS is \$2,014M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLW/PT/SS BCWP values.

ORP/Ecology TPA and CD Agreements, Issues, Action Items, and Recent TPA Admin Record Items as of 02/18/2014

Agreements:

1. ORP will continue to meet with ECY to discuss funding and work priorities per TPA Paragraphs 148/149 process.
2. Per an ECY standing request, ORP agrees to include any written directives given by DOE to the contractors for work required by the CD in future Semi-Annual CD Reports (see CD Section IV-C-1-e, page 8).
3. The ORP and ECY PMs have developed, signed, and entered an outline for the CD Tank Completion Certification into the TPA Administrative Record. Senior management will continue to be briefed if any follow-on actions arise.

Issues:

1. Ecology has a concern with WTP data being reported exclusively in the CD Monthly Summary Report as the current CD reporting process does not allot ECY early review time of the CD Monthly Summary Report. ORP and ECY have raised this concern for discussion at the Senior Management levels.
2. AY-102 Primary Tank Leak: Monitoring of the leak into the annulus of AY-102 continues. The tank is ready to be able to transfer liquids out of the primary tank or from the annulus to the primary. ORP and ECY met on 01/15/2014, 01/22/2014, 01/29/2014, and 02/05/2014 to discuss the draft pumping plan (RPP-PLAN-55220) that was submitted to ECY via ORP letter 13-TF-0049 on 06/14/2013.
3. T-111 and Other Single Shell Tank Level Decreases: ORP and WRPS have determined that 19 of the 20 single shell tanks showing decreased liquid levels at the Hanford Site are not actively leaking. Evaluation documents are available online at: <http://www.hanford.gov/page.cfm/SingleShellTankEvaluations>
4. Ecology TPA Project Managers expressed concerns with a line item in the ORP FY2014 budget request for planning for the direct-feed of the WTP Law Facility, and why there has been no discussion with Ecology prior to this being included in the budget request. The ORP and Ecology TPA PMs have agreed to raise this issue to their respective management for discussion/resolution.

Tank Farms Actions							
#	Action ID	Date Initiated	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	TF-14-02-01	02/18/14	ECY would like a briefing from ORP/WRPS on the DQO for SY-102 and how the core sampling platform will be utilized.	Open.		Mauss / Johnson	
2	TF-14-02-02	02/18/14	ECY would like a schedule and project management plan (if available) for the closure of WMA C.	Open.		Kemp	

**ORP/Ecology TPA and CD Agreements, Issues, Action Items, and Recent TPA Admin Record Items
as of 02/18/2014**

Tank Farms Actions							
#	Action ID	Date Initiated	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
3	TF-14-01-01	01/28/14	ORP and ECY will work to complete revisions on the Hose-In-Hose Transfer Line Management Plan (RPP-12711) Revision 7 by March 1, 2014.	Open.	ECY sent its comments to ORP via email on 02/03/14. ORP is setting up a meeting to discuss ECY comments.	Vanderpol / Fox / Alzheimer	
4	TF-14-01-02	01/28/14	ECY would like more information on DFHLW, Strategy Management, & Technology Development work scopes under WFD/Treatment Planning/DST.	Open.		Diediker / Pfaff / Wheeler	
5	TF-14-01-03	01/28/14	ECY has requested that DST status be added to the PMM agenda. ORP has taken this to TF management for consideration.	Closed.	DST status bullet added to TPA monthly agenda. Johnson will continue to brief DST status.	Johnson / Mattlin	02/18/14
6	TF-13-12-01	12/19/13	ECY will provide a list of team members and their roles and responsibilities to ORP so that ORP can provide all applicable invitees to future meetings.	Open.		Lyon / McDonald	
7	TF-13-12-02	12/19/13	ECY has requested additional information on the operational and maintenance plans for the 242-A evaporator.	Open.	Ron Koll will set up a meeting with ECY in February 2014.	Koll	
8	TF-13-05-04	05/16/13	ORP will set up additional meetings with ECY to discuss Direct Feed LAW and TF support (with TF/WTP Integration POCs).	Open.	A meeting was held to brief on DFLAW on 12/17/13. Steve Pfaff will meet with ECY TF staff to brief in February 2014.	Fletcher / Pfaff	
9	TF-13-04-01	04/23/13	ECY would like to gain a better understanding of the tank mixing and sampling for implementation of DNFSB 2010-2.	Closed.	ORP provided a response to ECY via email on 02/13/14.	Wrzesinski	02/18/14
10	TF-13-02-03	02/21/13	ECY would like to continue to meet with ORP to discuss work on the WMA C PA and other options for M-045-61/-62/-82.	Open.	Meetings are ongoing between the ORP and TF Project Managers.	Kemp / Eberlein / Mathey	

**ORP/Ecology TPA and CD Agreements, Issues, Action Items, and Recent TPA Admin Record Items
as of 02/18/2014**

Tank Farms Actions							
#	Action ID	Date Initiated	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
11	TF-12-10-04	10/16/12	ECY would like to discuss C-107 and considerations for Tc-99 concerns with tank residuals and technology selection.	Open.	On hold until after C-107 RDR sampling has occurred.	Kemp	
12	TF-12-09-02	09/25/12	ECY PMs would like to set up a meeting with ORP PMs to define the purpose and scope of the PMM meetings (roles, responsibilities, objectives). This meeting was held on 11/13/12.	Closed.	ECY will review these results for discussion at a follow-up overall ORP/ECY Comms Improvements meeting.	Jeff Lyon	02/18/14

WTP Actions							
#	Action ID	Date Initiated	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	WTP-13-04-03	04/23/13	ORP will update ECY on a monthly basis on the path forward for the TCO vendor concerns.	Open.	On-going, status given monthly.	Jeff Bruggeman	
2	WTP-13-04-01	04/23/13	ORP will meet with ECY to discuss status on the RVP Wave I and path forward for RVP Wave II.	Open.	Wahed took the action to follow-up with Gary and close with ECY.	Gary Olsen / Wahed Abdul	
3	WTP-14-02-01	02/18/14	ORP will provide briefing and details on WTP technical issues and WTP/TF integration activities.	Open.	Wahed and Wendell will work together to organize this discussion in the WTP March 2014 Special Topics meeting.	Wahed Abdul / Wendell Wrzesinski	

**ORP/Ecology TPA and CD Agreements, Issues, Action Items, and Recent TPA Admin Record Items
as of 02/18/2014**

Recent Items Entered/To Be Entered into the TPA Administrative Record (see <http://pdw.hanford.gov/arpir/index.cfm/advancedSearch> - search EDMC File Number)

Item Description	TPA/CD Topic Milestone Tie	TPA Admin Record – EDMC File Number
January 2014 TPA Monthly Summary Report	All	1222908
January 2014 CD Monthly Summary Report	All	1222907
December 2013 ORP TPA PMM Meeting Minutes, held on 12/19/13	All	1222956
January 2014 TPA Semi-Annual Report, via ORP letter 14-ECD-0005	M-062-01AB	1223024
January 2014 CD Semi-Annual Report, via ORP letter 14-ECD-0007	CD Reporting, D-00C-01H	1223026
CD Retrieval Completion Certification and Report for Tank 241-C-110, via ORP letter 14-TF-0007	CD SST Retrievals	1223020
Meeting Notes for Milestones Related to WMA C Closure, dated 01/07/2014	M-045-61, M-045-62, and M-045-82	1223083

Core Sampling System

