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Office of River Protection Project Managers' Meeting Minutes

2440 Stevens Center
Richland, Washington

October 15, 2015



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CONCURRENCE SIGNATURES

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Project Managers' Meeting.

Paul Hernandez
Paul Hernandez, DOE-ORP
Date: 12/10/15

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Date: 12/10/15

CS14
Chris Kemp, DOE-ORP
Date: 12-10-2015

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Steve Pfaff, DOE-ORP
Date: 12/9/2015

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Joni Grindstaff, DOE-ORP
Date: 12/16/15

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Dan Knight, DOE-ORP
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Date: 12/15/15

Jeff Lyon for
Jeff Lyon, Project Manager,
Washington State Department of Ecology
Date: 12/21/15

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Dan McDonald, Project Manager,
Washington State Department of Ecology
Date: 12.21.15

Stephanie Schmitt
Stephanie Schmitt, Ecology PM
Date: 12/21/15

TPA Monthly PMM
October 2015

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Jeremy Johnson	ORP
Dawn MacDoneld	DOE-ORP
Richard Jaué	DOE-ORP
Billie Mauss	ORP
Kym Z Bead	ORP
Paul Hernandez	ORP
Maria Skorska	ECY
Steven Lowe	Ecology
Stacey Cimon	ODOE
Dan McDonald	ECY
Stephanie Schlitt	ECY
Rana Evans	ORP
Sharon Braswell	North Wind/ORP Comm.
Steve Pfaff	ORP
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TRI-PARTY AGREEMENT MILESTONE REVIEW AND MONTHLY SUMMARY REPORT

1.0 ADMINSTRATIVE ITEMS/MILESTONE STATUS

Upcoming Meetings

The next ORP quarterly milestone review meeting is scheduled for November 19, 2015, from 8:30 a.m. to 10:15 a.m. at the Washington State Department of Ecology (Ecology) office in Richland, Washington. ORP stated that a proposed schedule for project manager meetings and quarterly milestone meetings in 2016 will be sent to the program managers, and it will follow the same schedule as 2015. ORP noted that any proposed changes to the schedule should be submitted soon.

Recent Items Entered/To Be Entered into the Administrative Record

The U.S. Department of Energy (DOE), Office of River Protection (ORP) provided the monthly Tri-Party Agreement (TPA) and Consent Decree (CD) reports, which will be submitted to the Administrative Record.

Tri-Party Agreement Milestone Status

ORP stated that the fiscal year 2014 milestones were removed from the milestone table, and that the fiscal year 2017 milestones have been added. ORP noted that the items highlighted in blue are the changes that have been made since the last monthly summary report. Ecology noted that there were several milestones in dispute or to be missed.

ORP/Ecology TPA and CD Agreements, Issues and Action items – October 2015

The action items were discussed and updated as follows (see agreements, issues and action items table):

Action No. 1 (TF-14-06-02)

ORP stated that a monthly meeting is scheduled next week to discuss the C Farm Performance Assessment (PA) and review the inventory. ORP stated that an oversight opportunity with Ecology, per the action, is being planned during the November 2015 time frame. This action remains open.

Action No. 2 (TF-14-02-02)

ORP reported that the contractor has a commitment to provide ORP the project management schedule for the closure of WMA-C by the end of December 2015, and the schedule will be provided to Ecology. ORP stated that the schedule will take the work scope on closure of the C Farm PA beyond the current contract extension period, which is 2018. Ecology asked what it means to both the regulatory agency and ORP as the project manager regarding the scope going past the contract period. ORP responded that currently the scope of work with tank farms is with the contractor WRPS, and the contract period ends in 2018. ORP added that the scope of work for closure of C Farm goes beyond 2018, and a draft rough order of magnitude schedule and

logic for closure of C Farm will be created. Ecology clarified that the draft schedule will go beyond 2018. ORP agreed with Ecology's clarification. Ecology referred to ORP's proposed draft change package (M-45-15-03) associated with the closure of WMA-C, and clarified that the date is 12/30/15 and not 12/30/16. ORP responded that the correct date is 12/30/15. Ecology asked if there is a tentative date for starting closure of WMA-C. ORP responded that planning efforts are under way towards closure of WMA-C, and offered to discuss with Ecology in more detail following this meeting. This action remains open.

Action No. 3 (TF-13-12-01)

This action is ongoing and remains open.

Action No. 4 (TF-13-02-03)

This action remains open.

Action No. 5 (TF-15-03-02)

This action remains open.

Action No. 6 (TF-15-03-05)

See discussion under action No. 7. This action remains open.

Action No. 7 (TF-15-06-01)

ORP reported that efforts continue with the local legal staff and the U.S. Department of Justice to remove the Official Use Only (OUO) designation from the Low Activity Waste Pretreatment System (LAWPS) documents so they can be shared with Ecology. ORP stated that a 30 percent design review for LAWPS is scheduled during the third week of November 2015, and that efforts are under way with legal to allow Ecology to participate in the 30 percent design review. ORP stated that the design review will involve a number of drawings, and some of the design improvements made since the conceptual design phase will be discussed. Ecology stated that it would be helpful to be able to attend the 30 percent design review. Ecology noted that in cases where OUO isn't applied to a document, Ecology would not be precluded from reviewing the document. ORP agreed, adding that one of the options that was presented to the lawyers, in terms of not being able to send documents to Ecology's office, was to set up a reading room at ORP for Ecology to use. Ecology requested notification of any LAWPS meetings that plan to have discussions regarding double-shell tank or single-shell tank systems. The Department of Health (DOH) asked if it could be included in the 30 percent design review meeting. ORP responded that DOH should be able to attend. This action remains open.

Action No. 8 (TF-15-06-02)

ORP reported that a meeting was held with Ecology on October 13, 2015, and that the parties agreed on a path forward. ORP stated that a change form will be drafted to document the agreement. Ecology requested that ORP cover the requirements that trigger the deflection surveys. Ecology added that if the decision is made to not carry the milestone anymore, that

there should be another requirement to ensure the surveys are being continued. ORP responded that the basics of the requirements would be provided to Ecology. This action was closed.

Action No. 9 (TF-15-07-01)

ORP stated that documentation was provided to Ecology regarding TPA paragraphs 148/149 and how ORP is meeting the intent of those paragraphs. Ecology acknowledged receipt of the information and agreed to close this action. This action was closed.

Action No. 10 (TF-15-07-01)

This action remains open.

Key Documents List

ORP provided an updated key documents list.

2.0 SYSTEM PLAN

ORP stated that there were no changes since the last summary report.

3.0 ACQUISITION OF NEW FACILITIES

ORP stated that there have been no changes since the last summary report.

4.0 SUPPLEMENTAL TREATMENT AND PART B PERMIT APPLICATIONS

ORP noted that the only changes to today's summary report were the last three sentences under issues. ORP stated that it has been working with Ecology to resolve the dispute, which has been extended a couple of times. ORP added that the overall outcome of the dispute is somewhat tied to the Consent Decree negotiations.

5.0 242-A EVAPORATOR STATUS

ORP reported that the EC-03 evaporator campaign was just completed, and the next campaign (EC-04) is scheduled for the first week of March 2016. ORP noted that EC-04 is dependent on getting the contents of AW-106 transferred to feed tank AW-102, and that transfer is scheduled during the last part of February 2016. Ecology noted that campaigns EC-05 and EC-06 are scheduled for next year, and asked if they could be added to the 242-A Evaporator table. ORP responded that the table is predicated on system plan 6, and if information is added to the table it would be continuing with old information. ORP handed Ecology a copy of the current table, and noted that it is not predicated on the next system plan revision. The table provides information regarding waste feed volumes and waste volume reduction. ORP offered to discuss with Ecology at any time regarding upcoming activities at the evaporator. Ecology noted that there are sampling plans for at least three upcoming campaigns. ORP responded that the sampling and analysis will lead to the process control memo, which will provide the recipe for the upcoming campaign.

Ecology asked when ORP plans to pump AY-102. ORP responded that the settlement agreement commitment is to start pumping on March 4, 2016, and that ORP is on track to meet that date. Ecology asked if there will be enough space to receive the 600,000 gallons of supernate during the EC-04 campaign. ORP responded that the upcoming EC-04 campaign is independent of AY-102. Ecology referred to a previous discussion regarding schedule issues with a transfer or a campaign. ORP referred Ecology to the integrated schedule that is sent out on a weekly basis via email, which has the transfers and campaigns. Ecology acknowledged that it has access to the integrated schedule. ORP noted that a lot of the construction work leading up the transfer in March 2016 has required integration with the transfer team on all of the evaporator campaigns. Ecology stated that the transfer team was the schedule issue it was referring to.

Ecology asked for clarification regarding the addition of campaigns to the table. ORP stated that it was waiting for production operations to update their campaign forecast before adding additional campaigns to the table. ORP indicated that it would be predicated on less formal information than system plan 7, since the next system plan will not be issued until 2017. Ecology agreed that the evaporator campaigns through 2014 could be deleted from the table.

6.0 LERF/200 Area ETF

ORP stated that the Liquid Effluent Retention Facility (LERF) and 200 Area Effluent Treatment Facility (ETF) are being added to the monthly summary report. ORP provided a one-page handout entitled Effluent Treatment Facility Complex Status. ORP noted that the handout has a table with August 2015 values for everything except volumes, and the volumes are as of yesterday (10/14/15). ORP stated that the 242-A Evaporator produced about 400,000 gallons of process condensate that went into LERF basin 42. ORP noted that ETF is currently shut down, and startup is anticipated next spring 2016. In the meantime, staff training, system and component testing, and readiness activities are under way. The heat exchanger unit has been replaced, and replacement of some pressure safety valves is needed to close out the heat exchanger project. The pressure safety valves are scheduled to be installed in November 2015, with a project closeout in December 2015.

ORP stated that the contractor is gearing up to complete berm coating of specific areas at ETF and LERF, and the special protective coating (SPC) will be applied in a phased approach. ORP stated that the bulk of the SPC will be applied to the verification tank area during November 2015, and the project will be completed next spring 2016.

ORP stated that Class 1 modifications are being developed for the quarter ending December 31, 2015, and a meeting will be scheduled with Ecology and WRPS to present the mod package.

Action TF-15 (TF-15-10-01): Ecology requested an action for ORP to schedule the Class 1 modification meeting in November 2015, and to ensure that the entire Ecology team can attend. Ecology also requested a discussion at the meeting regarding the presentation that was given in early spring on the two tanks.

Ecology asked what planning and concepts that are either in place, or will be in place soon, relative to how LERF/ETF will gear up to support the Direct Feed LAW (DFLAW) protocols. Ecology stated that its question is framed in the longer term regarding what upgrades or changes, including waste acceptance criteria, will be needed so that LERF/ETF will be ready to

accommodate DFLAW. ORP stated that LERF/ETF is critical for operation of DFLAW. Ecology acknowledged ORP's statement, and stated that Ecology has received little, if any, information to provide assurance that LERF/ETF is being looked at in concert with all of the other activities associated with DFLAW. Ecology stated that it would be helpful to have more information regarding LERF/ETF.

Action TF-16 (TF-15-10-02): ORP will provide Ecology information regarding plans and concepts for LERF/ETF to be ready to accommodate DFLAW.

Ecology requested a list of major repairs planned for LERF/ETF. Ecology cited an example that one of the LERF basin covers that needs repair. Ecology asked if the plan was to wait until ETF started up again, empty the basin and then replace the cover. ORP acknowledged that consideration is being given to pumping down LERF basin 44 before replacing the cover. ORP added that options are being considered to accelerate the replacement of the cover, and it will follow up with Ecology regarding the LERF basin covers.

Action TF-17 (TF-15-10-03): ORP will provide Ecology information regarding the LERF basin covers, including the target and plan to reduce inventory in the basins.

Ecology expressed concern that there are several facets and focuses regarding LERF/ETF, and asked if there was one location that contains all the information on activities that are needed for LERF/ETF to be ready for DFLAW. ORP responded that it would follow up on Ecology's inquiry, and noted that there is an integrated schedule that identifies activities to support processing effluent coming out of DFLAW.

Action TF-18 (TF-15-10-04): ORP will provide Ecology information regarding a single-point location for information regarding LERF/ETF activities needed in support of DFLAW.

Ecology referred to a reliability, availability and maintainability study that was done for LERF/ETF, and the study noted that the LERF basins would reach the end of their design life in 2015, and they could represent a single point of failure. Ecology asked if there could be a meeting to discuss the upgrade plans for the LERF basins in support of the Waste Treatment Plant (WTP). Ecology noted that the 242-A Evaporator can't run if the LERF basins aren't available. ORP responded that there is a goal to complete an analysis by early 2016 that will indicate what activities are needed in tank farms to support DFLAW, and suggested holding a discussion in the spring of 2016. ORP noted that Ecology referred to the design life of the basins, and stated that the liners in the basins have been tested and should go well beyond what was anticipated. Ecology stated that the study was done by WTP a couple years ago, and the reliability of LERF/ETF to receive the effluent from WTP was discussed. Ecology stated that the study noted the LERF basins were built in 1995, with a 20-year design life, and there wasn't much experience to know how the basins would hold up beyond 20 years. ORP reiterated that the liners were tested and are not an issue. Ecology acknowledged that the leakage rate is monitored between the liners, but pointed out that the current planning is that WTP won't be starting up for seven or eight years. ORP stated that there are plans to replace all three LERF basin covers, which are the necessary first steps to extend the design life of the LERF basins.

Ecology asked if the action items from today's meeting for LERF/ETF will be added to the action items table. ORP responded that they will be added to the table. Ecology asked about the open actions from the August 2015 project managers meeting. ORP stated that those actions could be added to the table also.

*NOTE: The August action items mentioned in the section above will be added to the Action Tracking Table as Actions 11, 12, 13 and 14.

7.0 DOUBLE-SHELL TANK SYSTEM UPDATE

ORP stated that there were no changes on DST updates to report. ORP noted that preparations are under way to start retrieving AY-102 in March 2016, and the legacy pump is being removed from the AP-102 central pump pit. ORP stated that the legacy pump is a giant mixer pump, and its removal represents the highest risk activity for the entire project. ORP indicated that removal has gone well so far, and once the pump has been removed, the confidence level will increase regarding the ability to meet the March 4, 2016 date to start retrieval. ORP added that it is still tracking to March 4 2016. ORP acknowledged that there were a couple of outstanding permit actions with Ecology and DOH, and expressed appreciation to those agencies for their assistance in support of the March 4 2016 date.

Ecology asked if in future meetings, ORP could provide planned work in terms of DST integrity. Ecology cited enhanced visual inspections that are planned for the upcoming year, and requested updates as those are being completed. ORP agreed that planned work for the year could be provided in the monthly summary report as high-level bullets.

8.0 SINGLE-SHELL TANK INTEGRITY ASSURANCE

ORP noted that there was discussion under action No. 8 regarding M-045-91-E1, and that a meeting was held with Ecology. ORP stated that during the meeting there was discussion with Ecology regarding the potential for discontinuing M-045-91-E1 and including significant reports or work as it's completed in the monthly TPA summary for tracking purposes. ORP stated that the only milestone that will remain in future reports is M-045-91I for the Independent, Qualified Registered Professional Engineer (IQRPE) assessment due in 2018.

9.0 IN-TANK CHARACTERIZATION SUMMARY

ORP noted that there were 12 Best Basis Inventories (BBIs) updates completed on tanks, which are scheduled on a rotating basis, and there are four BBIs scheduled for October 2016. ORP stated that the next six months' tank sampling schedule is in support of the 242-A Evaporator campaign, some tank chemistry issues, and retrieval and closure. Ecology asked if the compatibility assessment for transfers drives the BBI updates. ORP responded that the BBI updates are scheduled and rotated through. ORP added that the BBI update is not done for compatibility, and that compatibility is done separately from BBI updates. Ecology asked what specifically drove the BBI update for AW-102. ORP responded that AW-102 is a feed tank to the evaporator, and any time an evaporator campaign is done or a feed tank is swapped out, a BBI update will be done. ORP noted that AW-102 is frequently updated. Ecology asked why a tank would be scheduled for a BBI update if it is not going to receive waste or hasn't received any waste. ORP responded that the BBI updates are done to check decays.

10.0 TANK OPERATIONS CONTRACT OVERVIEW

ORP call 12-21-15

Ecology reported that the current month performance for the tank operations contract overview is ahead of schedule and over cost, due to the vapor issue. The contract-to-date schedule and cost performance are at a .99 and 1.00 respectively. ORP stated that base operations current month performance is ahead of schedule and over cost, and the contract-to-date is on track with a schedule and cost performance of 1.00.

ORP pointed out that for retrieval and closure, the fiscal year schedule and cost performance index are the most relevant data points, and they are slightly under schedule and definitely under cost. ORP explained that credit is taken when waste is removed from tanks, but when retrieval is down due to maintenance, earned value management system (EVMS) credit is not taken and the EVMS credit is somewhat misleading.

Ecology referred to Waste Feed Delivery (pg. 16 of today's report), and asked if it was also responsible for tank retrieval. ORP responded that it is not, and in the planning for waste feed delivery, some of the technology development work for WTP is included. Ecology noted that the last slash on the title is Double Shell Tank Retrieval Closure. ORP explained that that is in reference to a future mission, and it is used for strategic planning and technology development for both tank farms and WTP. ORP referred to Treat Waste 5.5 (pg. 18), and stated that this contract line item is associated with the LAWPS, and the schedule and cost variances are due to the engineered scaled integrated testing. ORP stated that as the design is matured, scaled testing of components is being done to ensure the entire system works with all of the pieces hooked together, and not just individual components being tested in separate labs. ORP added that full scale testing is planned for the ion exchange vessel using the resin that will be used in the full facility, and it will be the same resin that WTP is scheduled to use as well (Spherical Resorcinol-Formaldehyde or SRF resin). ORP noted that some schedule has been recovered in testing with the SRF resin, and looking ahead to the engineering scaled testing, subcontract costs are coming in lower as well. ORP noted that it can't guarantee the schedule recovery and lower cost will continue, but progress is being made on the planning for the integrated testing, which is scheduled for fiscal year 2016 and 2017.

11.0 SINGLE-SHELL TANK RETRIEVAL AND CLOSURE PROGRAM

ORP pointed out that in the previous monthly summary reports, there was a section following the TOC update that was titled Work Breakdown Structure 5.2 Retrieve and Close Single-Shell Tanks. ORP stated that the section has been merged into the Single-Shell Tanks Retrieval and Closure Program section.

ORP noted that the M-045-56 interim measures annual meeting was held, and the control surface water infiltration pathways (M-045-59) are discussed during the annual meeting. ORP stated that the draft RFI report was submitted under M-045-61A, and the CMS under M-045-62 will be submitted in 2016, after the final RFI is done. Ecology inquired about the submittal date for the CMS under M-045-62. ORP responded that submittal of the CMS is contingent on completion of the RFI, and the CMS should to be submitted three months after completion of the RFI. ORP stated that the current planning is to submit the CMS in March 2017, and noted that it ties into M-045-82. ORP stated that M-045-82 is currently in dispute on the proposal for tiers 1, 2 and 3 that was submitted to Ecology, and a meeting was held with Ecology earlier this week. ORP

noted that the current dispute period ends October 15, 2015, and it has proposed a dispute extension to December 15, 2015. ORP indicated that there have been productive discussion with Ecology, and a draft change package was sent to Ecology that incorporated Ecology's comments on the initial draft change package.

ORP clarified that M-045-61 is not on today's monthly summary, which is submittal of the draft RFI, and that submittal of the final RFI/CMS is under M-045-61A. ORP noted that M-045-61A was modified by change control form M-45-14-03, and that implementation of the CMS is under M-045-62, which is planned for March 2017. Ecology noted that the implementation plan is due after approval of the CMS, and that Ecology likely won't be approving the CMS right away. ORP agreed with Ecology's statement that it could take longer than planned, which is why the note under M-045-62 states six months after approval.

ORP noted that M-045-83 is to be missed, and stated that a change package has not yet been noted that after the closure schedule for WMA-C is submitted to Ecology, ORP and Ecology will meet to discuss the closure schedule and associated milestone. After a path forward has been developed with Ecology, ORP will then submit a change control form to Ecology. Ecology inquired about the closure schedule. ORP stated that the draft closure schedule will be submitted at the end of December 2015, and then discussions with Ecology will be initiated. Ecology asked if the discussion could result in one or more additional milestones. ORP responded that milestones could be established, and it was anticipated that Ecology would be requesting some milestones. Ecology agreed with ORP's comments, and requested that the next monthly report include a bullet under the issues to identify ORP's intent regarding the to-be-missed milestones.

Ecology Request 1: Add a bullet to the issues identifying the to-be-missed milestone M-045-83 and what ORP's plans are to address the milestone.

Ecology Request 2: ORP to provide a schedule regarding negotiations under M-045-84.

ORP indicated that the retrieval data report (RDR) for C-102 should be completed sometime in FY16. The RDRs fall under M-045-86. ORP noted that M-045-92 is in dispute. ORP stated that barriers 1 and 2 at SX farm were not constructed this fiscal year, and a change package was submitted on March 31, 2015, which Ecology disputed. ORP stated that Ecology has proposed a settlement, which is in DOE-Headquarters review. ORP indicated that the intent of ORP tank farms is to settle the dispute, and the current dispute period ends today. ORP presented a dispute extension form, extending the dispute to November 6, 2015, which Ecology signed.

ORP pointed out that the first bullet under issues on page 22 contains a statement that will be revised before today's summary report is submitted to the Administrative Record. The second-to-last sentence states that ORP and Ecology had a third and final meeting, and the words "and final" will be deleted.

12.0 TANK WASTE RETRIEVAL WORK PLAN STATUS

ORP stated that there were no changes from the previous summary report. ORP noted that a TWRWP change package will be submitted to Ecology to include sluicing and a chemical dissolution in tank C-105. ORP reported that C-105 is down, due to a failed adductor hose on the end effector, and the systems engineering evaluation option for sluicing and a chemical

dissolution has been selected (see discussion below under CD SST Tank Retrieval). ORP stated that AX-101 through AX-104 draft TWRWPs will be submitted to Ecology at the end of October 2015, and the table will be updated next month to reflect the TWRWPs. Ecology asked if the AX TWRWP submittals will be formal submittals that require a response from Ecology per the Consent Decree. ORP concurred that it will be a formal submittal, noting that there will need to be discussions with Ecology regarding the TWRWPs through the next six months, per the Consent Decree. ORP added that it believes most of the issues could be resolved sooner than six months. Ecology stated that the intent would be to reach agreement before six months.

13.0 TANK TRI-PARTY AGREEMENT APPENDIX H STATUS

There was no change in status.

14.0 TANK RETRIEVALS WITH INDIVIDUAL MILESTONES

There was no change in status.

CONSENT DECREE MONTHLY SUMMARY REPORT REVIEW

1.0 CONSENT DECREE MILESTONE STATISTICS/STATUS

ORP noted that the fiscal year 2016 and 2017 milestones have been added to the milestone table on page three of the monthly summary report, and FY14 will remain on the table until the past due items are closed. The reports, agreements, issues, and actions were discussed and updated as follows:

Action No. 1 (WTP-14-10-01)

ORP stated that it is not planning to include the replacement melter assembly building as part of the WTP scope. Ecology asked if the building will be a separate initiative, when needed. ORP responded that it would be a separate initiative when needed, and that there will be a plan before operational maintenance is done. ORP stated that it is looking at identifying what will be needed operationally and when the plan will be completed for the facility to be able to put it into the integrated schedule. ORP noted that there was an engineering study that was done in 2008, which could be shared with Ecology. Ecology expressed interest in the plan to secure all the parts necessary to swap out the melter. Ecology noted the amount of time it has taken to get the melters in place and ready to go, and the potential for the same issue with a reserve melter. Ecology requested information about the replacement plans and where the reserve melter will be built, stored and maintained. Ecology noted that there is not very much space in the area to store a reserve melter, and it is unknown how contaminated the melter will be that needs to be replaced. Ecology also pointed out that there is a lot of delicate work on the melter, particularly the lid. ORP acknowledged all of Ecology's concerns and requests for information, and stated that more information on the replacement plans will be provided to Ecology.

Ecology added that during an onsite visit a couple months ago, there was some discussion regarding a concept or plan for a fabrication melter assembly building between LAW and HLW that will support LAW and HLW, and asked if that information could be shared as well. ORP responded that it would follow up with Ecology's request. This action remains open.

Action No. 2 (WTP-14-10-02)

ORP stated that there have been several briefings regarding DFLAW and many discussions on the operations of BOF and DFLAW. ORP noted that a meeting was scheduled yesterday to discuss BOF and DFLAW, and the meeting was canceled. ORP asked Ecology what was needed to close this action. Ecology responded that more specifics are needed regarding where the isolations will be within the existing BOF facilities to support a reduced capacity. ORP stated that some of the specifics regarding isolations will be laid out in the design, but the operation won't be included. ORP stated that there will be some changes to the steam supply and the chiller compressor plant, but there are not any details beyond that, other than having a discussion of the specific valve isolations. ORP noted that this action has been carried for a long time, and it is not what the initial discussion was that established the action. ORP added that the Consent Decree negotiations was initially a holdup in moving forward with the action, but at this point it is not holding up the action. Ecology suggested holding an internal discussion to develop an outline that would meet its needs on the action, and then schedule a meeting with ORP. ORP agreed with Ecology's suggestion for moving forward on this action. This action remains open.

Action No. 3 (WTP-14-10-03)

ORP stated that this action is specific to the CD negotiations. ORP noted that Ecology had requested documentation regarding the repairs to the RLD vessels, which was provided about two weeks ago. ORP also noted that the documentation request was driven by the permitting group. ORP stated that DOE has declared the CD milestone for LAB construction substantially complete, and that the decision to close the milestone is outside the scope of the project managers for this group. Ecology agreed with ORP's statement, adding that it will discuss internally what is needed to close the action. This action remains open.

Action No. 4 (WTP-14-10-04)

ORP stated that additional information cannot be provided due to the ongoing CD judicial process. Ecology stated that there is a difference between providing schedule information and what is occurring technically, and asked for clarification on what ORP could not provide. ORP responded that a schedule on the eight technical team issues for HLW and PT cannot be provided at this time, and that information on the progress with the PT facility will be provided during the specific PT facility discussion. Ecology stated that it would continue to press for whatever technical information could be provided. Ecology added that if receipt of information on the technical issues continues to lapse, by the time the technical issues are somewhat resolved, there would be a fair amount of catching up to do. ORP responded that Ecology is provided a status update on a monthly basis, and the package that is delivered each month for HLW and PT documents what is being accomplished for the eight technical issues and what is planned in the next six months. This action remains open.

Action No. 5 (WTP-14-10-05)

ORP stated that due to the ongoing CD judicial process, an update could not be provided. This action remains open.

Action No. 6 (WTP-14-06-02)

ORP stated that an update on this action was not available today, and it would follow up to provide an update to Ecology. This action remains open.

Action No. 7 (WTP-14-06-03)

ORP stated that the LAW Facility design and operability (D&O) review report is still with the contractor for factual accuracy review and has not been issued. Ecology asked if there is a time frame for a briefing on the D&O review. ORP responded that a management review will be conducted after it receives the D&O review report from the contractor, and the review is tentatively scheduled for the week of October 26, 2015. ORP stated that three independent reviewers, who are not federal employees, have been selected to review not only the LAW D&O report, but the process used to conduct the D&O report to determine whether it was exercised properly. ORP noted that a legal review will be needed, once the D&O report is issued, as to whether the information could be shared with Ecology and that the commitment in this action is uncertain at this point. This action remains open.

Action No. 8 (WTP-14-04-01)

ORP stated that a comprehensive update is provided on PT in the monthly summary report, and asked Ecology for more detail on its request. Ecology referred to the black cell vessel structural analysis that was conducted in May 2015, and asked if the report could be provided. Ecology added that there are other efforts going on in PT that it would like to get updates on and what direction the facility will be taking. ORP responded that it would follow up with Ecology to get more specifics and modify this action. This action remains open.

Action No. 9 (WTP-15-01-01)

ORP stated that Bechtel hasn't completed its study on the standardized high-solids vessel design (SHSVD). This action remains open.

Action No. 10 (WTP-15-01-03)

ORP stated that early this year the final certification paperwork was provided to Ecology, and there have been multiple discussions regarding technical updates on the vessels in the 2014 time frame as the repairs were being done. ORP asked Ecology what information it needed to close this action. Ecology responded that the action has been open because of the permitting effort, and referred to the letter that ORP sent to Ecology regarding the RLD vessels. Ecology expressed uncertainty as to whether the action takes on some of the milestone discussions and needs to stay open, or if the action could be separated from the permitting efforts and closed. ORP suggested that the letter that was provided on the permitting issues could be the vehicle to close out this action, and any additional discussion on the RLD vessels could be moved to action No. 3. Ecology stated that it would have an internal discussion regarding ORP's suggestion and provide an update at the next meeting. This action remains open.

Action No. 11 (WTP-15-06-01)

ORP stated that the corrosion simulant basis document has not been completed, and an email will be sent to Ecology if there is an update. This action remains open.

Action No. 12 (WTP-15-06-02)

ORP reported that the analysis for the HLW HEPA filter bounding conditions will be initiated very soon, and the results are expected in the December 2015/January 2016 time frame. ORP indicated that the details will be provided to Ecology in January 2016. This action remains open.

2.0 SINGLE-SHELL TANK RETRIEVAL

ORP reported that the C-105 Mobile Arm Retrieval System vacuum (MARS V) failed on September 28, 2015, and the whole end effector could be replaced or the C-105 systems engineering evaluation done a year ago could be re-evaluated. ORP stated that during the time the evaluation was done an option was considered, with input from Ecology, to sluice C-105. ORP noted that in the past, in an abundance of caution, DOE thought that a tank should be vacuumed at the start to gain experience for future vacuum retrieval in A-104 and A-105. ORP stated that it is at the point now where it believes a TWRWP modification is needed for C-105 to do sluicing and a chemical dissolution as the second and third technology. Ecology asked if

there is an estimated completion for C-105. ORP responded that a date could not be provided. ORP added that a sample is being taken from C-105, and dissolution with hot water and caustic will be done in the lab to provide more data.

Ecology referred to the discussion under in-tank characterization for tank farms, and asked if the BBI update that is planned to be completed for C-105 in October 2015 is for the sampling that was mentioned. ORP indicated that the BBI would be to update the volume that has already been retrieved in C-105. Ecology agreed that could be the purpose, and noted that ORP stated the sampling would be done to evaluate retrieval. ORP stated that the sampling is for retrieval purposes and not to get a BBI update. ORP noted that C-102 is also included in the BBI update for October 2015, and as retrievals are done, updates to BBIs are done. Ecology clarified that the sample taken for retrieval information will not influence the BBI update. ORP responded that Ecology's statement was correct, that it would not influence the October BBI update, although in the future it could influence future BBI updates. ORP added that the C-105 sample that will be taken next week will not have any data relevant to a BBI update. Ecology stated that the monthly summary report provides information about what activities are occurring, and C-105 sampling should have been included in the summary report. ORP responded that it may have been a timing issue between generating the report and when the decision was made to do the sampling, and it may be in the report next month. Ecology expressed appreciation with the inclusion of any information in the list of the sampling efforts, and that it is helpful in terms of providing support to ORP.

ORP stated that retrieval has started up in C-111, and the crew is breaking through the hard crust at the surface. ORP estimated that just under 30,000 gallons have been retrieved from C-111, and the limits of technology will be completed by December 30, 2015.

3.0 TANK WASTE RETRIEVAL WORK PLAN STATUS

The CD TWRWP table is identical to TPA TWRWP table. The draft AX TWRWPs will be added to the table in next month's summary report.

4.0 SINGLE-SHELL TANK RETRIEVAL MONTHLY FISCAL YEAR EARNED VALUE MANAGEMENT SYSTEM DATA

See page 7 of CD Monthly Summary Report.

5.0 WASTE TREATMENT AND IMMOBILIZATION PLANT PROJECTS

ORP noted the cumulative-to-date cost and schedule variance is based on the progress of the LAW, BOF and LAB (LBL) internal forecast, which means that ORP is still negotiating contract changes related to Direct Feed LAW (DFLAW) and to Bechtel's contract. Ecology asked if the percent completions will be affected once the Effluent Management Facility (EMF) becomes part of BOF. ORP responded that the contract change negotiations relate to the cost and price for EMF, but the LBL internal forecast already accounts for the design and construction of EMF. Ecology requested follow up from ORP if EMF is not included as part of the LBL internal forecast. ORP responded that it would provide the information to Ecology if it is not included.

Ecology Request 1: ORP to follow up on whether the EMF will affect the LBL percent completions.

ORP stated that Bechtel submitted a proposal in August 2015 for contract line item number (CLIN) 2.2 and 2.3, which represent construction and procurement for the DFLAW activities. ORP is performing a technical evaluation of the proposal, and no negotiations have been initiated. ORP stated that negotiations are under way for CLIN 1.0, and once the negotiations are completed, CLIN 1.0 will become part of the contract and the costs will be adjusted. ORP added that it would then move on to CLIN 2.2 and 2.3, and that will provide a full picture of what DFLAW will cost in the contract.

Ecology requested a list of what is included in the DFLAW activities. ORP responded that for the Bechtel contract, it is mainly EMF and the changes that need to be made at BOF. ORP added that the major components of DFLAW are the construction of the EMF, the isolation of BOF systems to within the operating island, and some modifications to the chiller compressor plant and the steam plant. ORP noted that Ecology's question goes back to action No. 2, and the LBL internal forecast already reflects what Ecology is requesting in action No. 2. ORP added that the proposal for CLIN 2.2 and 2.3 also includes the information requested in action No. 2. ORP stated that once the negotiations are completed for all of the CLIN proposals, Bechtel will submit a baseline change proposal that will be formalized, and then the baseline will accurately reflect DFLAW.

Ecology asked if the Effluent Management Facility (EMF) is an authorized project with funding and critical decision approval. ORP responded that DFLAW does not require any additional decision from the overall capital asset project. ORP added that the mission for tank space and an evaporator was approved for PT, and an additional critical decision process is not needed for the same activities at DFLAW.

6.0 PRETREATMENT FACILITY

ORP noted that the technical work plan for hydrogen gas release (T1) is planned to be completed in the next six months, and that work plans are being developed for each of the technical issues. ORP stated that there is a substantial amount of focus on what it takes to close out the technical issues through the work plans. Ecology inquired about the second bullet under significant planned actions to conduct the H2 control gap analysis for T1. ORP explained that there are the controls planned now and what the controls are after the T1 analysis, and the control suggested from the analysis will be used for the gap analysis.

7.0 HIGH-LEVEL WASTE FACILITY

ORP reported that all of the systems design descriptions (SDD) planned for this year have been completed, with a few SDDs remaining to be completed next year. One of the remaining SDDs is for the emergency turbine generator system (ETX), which was in the BOF scope and has been moved to the HLW scope since LBL won't need the ETX.

ORP stated that there are four new, different designs with different media for the HEPA filters, and the filters have been fabricated. Mississippi State University (MSU) is finalizing testing preparations, and testing of the new filters should start in late November 2015. Ecology referred to the failure of the original HEPA filters, and asked if the failures were analyzed to determine what the issues were and if there is confidence that the new filter media will solve the issues. ORP responded that preliminary testing of the new filter media has been done. ORP explained

that the main reason the filters failed was due to overly conservative bounding conditions to include all of the facility systems. ORP stated that Bechtel has changed the bounding condition to reflect the different systems and the parameters for those systems. ORP stated that there are four different designs that will be tested, and a high probability of success is anticipated. ORP stated that the vendor conducted a minimal quadrant test with the new pleat design and new fabric, and the efficiency met the requirement for the filter. ORP noted that the main failure with the original filter was the efficiency.

Ecology commented that when the HEPA filters were first being designed, the option was considered to use one filter throughout the process. ORP acknowledged that the option had been considered to use one filter. Ecology asked if it was likely that there will be different filter media in different places throughout the process. ORP responded that it is possible there will be different filter media, and noted that the original filter may pass for the C2/C3 ventilation system because that has a very low requirement for humidity and temperature, and the C5 filter may be a separate filter since it has a higher flow requirement. ORP stated that the offgas has the highest requirement for temperature and humidity. Ecology asked if the design remains with the use of filter boxes along the process, where the old filter is pulled out and replaced with a new filter. ORP responded that that aspect remains the same.

ORP noted one of the studies that was done for HLW was to determine whether the filters can support the loading or whether additional filters would be needed, but there is not room in the filter cave for additional filters. Based on the risk assessment that was done, pathways were saved for additional ducting to go out of the building into a new structure. ORP indicated that would be a worst case scenario.

ORP reported that Bechtel has completed the design for the RLD-7/8 vessels, and a contract has been awarded to a vendor. The fabrication will be started after the Preliminary Documented Safety Analysis (PDSA) is approved. ORP noted it had requested Bechtel to review the independent study on vessel structural analysis that was done to determine whether any additional design modifications are needed for the RLD-7/8 vessels. Ecology inquired about the time frame on the independent structural analysis review for HLW. ORP responded that Bechtel completed the review of the RLD-7/8 vessels. Ecology asked if Bechtel had made recommendations. ORP stated that Bechtel did make recommendations, and the major recommendation was associated with the fatigue analysis for the high cycle pulse jet mixer (PJM) activities.

ORP reported that Bechtel completed the HVAC system evaluation. One of the concerns that came out of the design and operability (D&O) review was whether the ventilation system could support the needs when the hatches and access doors are open. Bechtel concluded that with a few minor modifications, the ventilation system could support the need when the doors are open. ORP stated that an independent review of Bechtel's report is being done, and so far that review is in agreement with Bechtel's analysis. ORP stated that it is also conducting a review of Bechtel's report.

ORP stated that Bechtel will be initiating the high-level waste melter offgas treatment process/process vessel vent design study, and the study will be done in two phases. Phase 1 will review the system from the piping and isometric drawing (P&ID) perspective. Elements that will be considered are whether all the equipment and systems meet the requirements; whether

some or all of the equipment is needed; and whether the P&ID meets all the requirements or needs to be changed. ORP will review phase 1, and it will need to be approved before Bechtel can move to the detailed study of all the equipment to determine whether it can support the reliability and maintainability.

8.0 LOW-ACTIVITY WASTE FACILITY

ORP stated that as of August 2015, LAW was 53 percent complete overall. Ecology noted that LAW was about 72 percent complete before May 2015, and asked what had changed. ORP responded that when the internal forecast was rolled into the schedule, along with the DFLAW project, it increased the total cost and total plan and lowered the overall percent complete. ORP noted that the percent completes were lowered for all of the LBL facilities in the July 2015 time frame. ORP stated that there was a significant increase in the costs associated with commissioning of LAW, and it is not new scope. ORP added that when Bechtel made the first estimates for startup and commissioning, it represented the percent complete that was being reported. Bechtel underestimated startup and commissioning, and when the new baseline change was made (internal forecast), it took into account all of the additional accounts, which dropped the percent complete. ORP pointed out that it is a better and more realistic accounting of the percent complete. ORP stated that the full implementation of DFLAW into BOF has not been done yet, and BOF will be adjust when CLINs 2.2 and 2.3 are accounted for in the baseline. ORP added that CLIN 2.4, which is commissioning, is being developed as part of CLIN 1 scope. ORP noted that large dollar values are associated with commissioning, but it will take less time t ORP stated that systems are being completed and turned over in LAW, and that progress is being made with that effort. Ecology agreed that progress is being made, and asked how long it will take to start operations. ORP responded that the public proposal for startup of DFLAW is still the plan for when operations will start.

Ecology asked about regaining the schedule for the thermal catalytic oxidizer (TCO). ORP responded that the melter assembly and the TCO tend to rotate every month in terms of critical path, but at this point there are no concerns to address.

ORP stated that the Nuclear Safety Engineering Hazards Analysis for C3V and C2V was completed, and the analysis for C5V is currently under way. ORP has been working closely with Bechtel to complete the control selections for C5V. ORP added that the control selection includes both the radiological and chemical hazards.

9.0 BALANCE OF FACILITIES

ORP stated that BOF is 53 percent complete overall, but from a construction perspective, BOF is basically complete and there is no significant ongoing construction activity. ORP stated that construction efforts are focused on initiation of BOF system isolations and working off punch list items on systems for turnover to the startup organization for their testing program. ORP noted a major accomplishment in 2015 was turnover of all the major systems within three of the facilities to the startup organization: Building 87, which is the WTP switchgear; Building 91, which is BOF switchgear; and the nonradioactive liquid waste drain system (NLD). ORP stated that the next goal is to start turning over the rest of the initial support facilities, such as the cooling tower and cooling water and the water treatment facility.

ORP stated that from a design and engineering perspective, efforts are focused on the new Effluent Management Facility (EMF), and those efforts are taking place in Reston, VA. ORP noted that there are several meetings held weekly via teleconference with Reston, and the Reston team participates in the regular plan of the week meetings via telecon. ORP added that in parallel with the design activities, the PDSA for the EMF is being developed locally and with some assistance from Reston. ORP stated that there are some initial design inputs needed as well as the PDSA to support the Rev. 0 P&IDs, and that Rev. 0 will help kick off the procurement process.

ORP reported that the excavation and drilling activities for the cathodic protection system upgrades have been initiated. A supplemental system utilizing vertical anodes and a couple additional rectifiers will be installed. The subcontractor is onsite drilling holes for the anode installation, and about 120 dig sites have been identified. A vacuum truck will be used for potholing to identify any lines that are nearby and identify a specific drill location. After that activity is completed, the drilling contractor will come in and bore 35-foot holes where two anodes per hole will be installed. The subcontractor will come back in and backfill the holes with special material. Ecology asked about the function of the anodes. ORP responded that currently there is a horizontal anode bed for cathodic protection, and this installation will act as a supplemental system to boost the overall performance of the cathodic protection system. ORP explained that any electric potential along the surface of the pipe when it's buried can take away from the pipe material itself and is a corrosion mechanism. ORP stated that the anode bed acts as a source for the corrosion mechanism and thereby protects the pipe.

ORP stated that instead of having a more remote horizontal anode bed, site specific vertical anodes are being installed to provide additional protection in key areas along the system where deficiencies have been noted. Ecology asked if the original cathodic protection system didn't have the additional anodes in the plan. ORP responded that it did not, and noted that Ecology was briefed earlier in the year on the cathodic protection system. Ecology acknowledged the briefing, adding that it was not aware that that many anodes were being installed. ORP responded that the initial plan called for about 80 anodes, but areas were identified that could be boosted. ORP noted that initially there was a three-phase plan to install some anodes to see how the system responded, and then install some more anodes. The decision was made to install anodes anywhere there might be a weakness in the system in an effort to avoid installing equipment later on during commissioning and for efficiency purposes.

Oregon Department of Energy (ODOE) asked if there have been any problems with historical piping in the area. ORP responded that WTP is a green field site, and there are no pipes except the pipes that have been installed for the project.

10.0 ANALYTICAL LABORATORY

ORP provided a higher overview for the LAB, and stated that for all intents and purposes to support DFLAW, construction activities on the Analytical LAB are complete. ORP noted that there are a few minor system isolations that are needed that previously served both the hot cell and the individual radiological laboratory. ORP stated that the next step in LAB will be the analytical methods development work, which will take about three to four years. The analytical methods development will provide the additional knowledge needed in support of procurement of the analytical equipment. Following procurement and installation of the equipment, the LAB

validation and certification process will be initiated. ORP stated that when installation of equipment begins, there will be some remaining punch list closure activity of construction items. ORP stated that the reason the last of the punch list items will be completed during equipment installation and isolation installations is to organize the work for efficiency purposes.

ORP stated that in the next six months, system walk-downs within LAB will be conducted to scope out systems and determine what needs to be done from a turnover perspective. There will be some component-level testing initiated, and locations for valve modifications will be identified. Ecology inquired about the LAB being used to support startup of DFLAW. ORP explained that a control room for the WTP will be located in the LAW annex, but it won't be completed when some key turnover activities or testing activities will be started. ORP stated that there are electrical cabinets and some basic equipment that are installed within the LAB, and the equipment can be used for preliminary testing of communication systems. ORP stated that a room in the LAB will be used that is being called a test engineer's work station, and it will not be a control room. The test engineer's work station will support some of the early on systems such as the water treatment and the nonradioactive liquid drain system (NLD). ORP offered to provide Ecology a briefing on the test engineer's work station. Ecology agreed that a brief explanation would be appreciated.

Informal Action: ORP to provide Ecology a briefing on the test engineer's work station in LAB.

ATTENDEES:

W. Abdul	ORP	H6-60
R. E. Beach	ORP	H6-60
S. M. Braswell	Northwind/ORP	H6-60
R. L. Evans	ORP	H6-60
J. F. Grindstaff	ORP	H6-60
P.R. Hernandez	ORP	H6-60
L. A. Huffman	ORP	H6-60
J. M. Johnson	ORP	H6-60
C. J. Kemp	ORP	H6-60
D. P. Knight	ORP	H6-60
D. M. MacDonald	ORP	H6-60
A.C. McCartney	ORP	H6-60
B. M. Mauss	ORP	H6-60
S. H. Pfaff	ORP	H6-60
B. R. Trimberger	ORP	H6-60
R. J. Valle	ORP	H6-60
W. R. Wrzesinski	ORP	H6-60
J. D. Young	ORP	H6-60
J. Alzheimer	Ecology	H0-57
M. Barnes	Ecology	H0-57
R. K. Biyani	Ecology	H0-57
N. Chandron	Ecology	H0-57
T. Z. Gao	Ecology	H0-57
S. Lowe	Ecology	H0-57
J. J. Lyon	Ecology	H0-57
J. D. McDonald	Ecology	H0-57
J. Price	Ecology	H0-57
J. Richardson	Ecology	H0-57
S. Schleif	Ecology	H0-57
M. Skorska	Ecology	H0-57
R. Varljen	Ecology	H0-57
R.S. Wiegman	WRPS	H0-56
R. E. Piippo	MSA	A3-01
M.J. Turner	MSA	A3-01
S. Cimon	ODOE	
J. Martell	WDOH	
C. Sanders	WDOH	

ADMINISTRATIVE RECORD – Heather Childers: H6-08

Effluent Treatment Facility (ETF) Complex Status

Status:

The Liquid Effluent Retention Facility (LERF) liquid levels, inventory, and received waste is shown in the table below for the time period of August 01 – 31, 2015. Note that the volumes in this table are estimated. Tanker shipment volumes are estimated by multiplying the number of shipments by the capacity of the tanker being used.

	242AL-42 (Basin 42)	242AL-43 (Basin 43)	242AL-44 (Basin 44)
Volume (as of 10/13/15)	16.1 feet (~4.66 Mgal)	18.6 feet (~5.83 Mgal)	19.6 feet (~6.33 Mgal)
AZ-301 Tanker Shipments	6,500 gal	-	-
MWBT-31 & 34 Leachate	-	-	14,000 gal
Perched Water Tanker Shipments	-	7,500 gal	-
ERDF Leachate Transfers	-	~136,860 gal	-

Operational Status, Planned Actions in the Next 6 Months, and Permit Conditions:

The ETF is currently in shutdown mode and is undergoing maintenance in preparation of an anticipated Spring 2016 startup. Staff training, component and system testing, and readiness activities will be performed before restart approval can be granted. The heat exchanger unit replacement was completed in Summer 2015. Pressure safety valve replacements are to be replaced before a leak test is conducted on the system. Berm coating of specific areas at the ETF and LERF are to be repaired in the following months. Additionally, Class 1 Modifications are under development for the quarter ending December 31, 2015.

Issues:

None.

WORKING ORP Key Documents List – August 2015

	Milestone ID	Document	TPA Milestone Due Date (if applicable) ¹	Delivery to Regulators Date ²	Anticipated Regulatory Review Completion Date ³	Completion Date ⁴	DOE-ORP Lead	Contractor Lead	Agency Lead	Comments/Issues
Submit to Ecology, in accordance with HPFACO secondary document review process, a Phase 2 RCRA Facility Investigation (RFI) report Draft A for WMA C.	Supports M-045-61A	WMA-C PA Initial Document		09/30/2016			C. Kemp	S. Eberlein	J. Lyon	• Feeds input for M-045-61A and all Closure Plans
	M-045-61	Phase 2 Draft A RFI Report for WMA C	12/31/14	12/31/14			C. Kemp	S. Eberlein	J. Lyon	• TPA Change Package M-45-14-03 signed on 10/01/14 split up the WMA C RFI and CMS into separate deliverables. • New M-045-61 Complete
Submit to Ecology, as a primary document, a Phase 2 Corrective Measures Study (CMS), and Revision 0 update to the RFI Report for WMA C	M-045-61A	Phase 2 CMS and Revision 0 of RFI for WMA C	12/31/16							• TPA Change Package M-45-14-03 signed on 10/01/14 split up the WMA C RFI and CMS into separate deliverables.
Submit to Ecology for Review and Approval as an Agreement Primary Document, a Phase 2 Corrective Measures Implementation Work Plan for WMA-C.	M-045-62	Phase 2 Corrective Measures Implementation Work Plan for WMA-C	Six (6) months after the approval of the CMS submitted under milestone M-045-61A	TBD			C. Kemp	S. Eberlein	J. Lyon	• Reported as To Be Missed in the March 2013 TPA PMM. Discussions ongoing at the PM level. • TPA Change Package M-45-15-02 signed on 04/14/15 modifies the due date to Six (6) months after the approval of the CMS submitted under milestone M-045-61A.
Prior to beginning construction & at least one year before construction is to be complete, DOE will submit to Ecology a final design & monitoring plan for each interim barrier.	M-045-920	Future Barrier Design 3	06/30/15	TBD			C. Kemp	S. Eberlein	J. Lyon	• ORP/ECY TPA Change Package M-45-12-04 modified this to a due date of 06/30/15. • TPA Change Package M-045-15-01 is in dispute, per letter 15-TF-0042
	M-045-92P	Future Barrier Design 4	06/30/16	TBD			C. Kemp	S. Eberlein	J. Lyon	• ORP/ECY TPA Change Package M-45-12-04 modified this to a due date of 06/30/16. • TPA Change Package M-045-15-01 is in dispute, per letter 15-TF-0042
M-045-91 Interim Milestones and Target Dates for SST Integrity Implementing the Expert Panel's Recommendations	M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	12/26/14	12/26/14			J. Johnson	R. Gregory	J. Lyon	
	M-045-91G-T04	Provide AOR Final Doc. for SSTs on 53,000 Gallon Tanks	01/30/15	01/30/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91B-T01	Provide Ecology report on the Concrete Core from TankA-106 or alt	01/31/15	01/31/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91F-T02	Provide Report of Liner Failures for SSTs	03/31/15	03/31/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91F	Provide Summary Conclusions Report on Leak Integrity	06/30/15	06/30/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91G	Provide Summary Conclusions Report of AOR for SSTs	07/28/15	07/28/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91H	Submit Change Pckg (if necessary) to est. Additional Milestones	07/31/15	07/31/15			J. Johnson	R. Gregory	J. Lyon	
M-045-91I	Provide IQRPE Certification of SSTs Structural Integrity	09/30/18	09/30/18			J. Johnson	R. Gregory	J. Lyon		
Complete final design and submit RCRA Part B Permit Modification Request	M-062-31-T01	RCRA Part B Permit Modification—Final Design.	04/30/16	04/30/16			S. Pfaff		D. McDonald	

¹ TPA Milestone Due Dates are the direct regulatory drivers for completion of milestones.

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WORKING ORP Key Documents List – August 2015

Topic Areas	Document	ORP Delivery to Regulators	Anticipated Regulatory Review Completion Date	Final Completion Date	DOE-ORP Lead	Contractor Lead	Regulator Lead	Comments/Issues
PERMIT DOCUMENTS	Tier 1 Framework Closure Plan Update	09/30/15	09/30/2015		C. Kemp	P. Rutland	J. Lyon	<ul style="list-style-type: none"> Tier 1, 2, 3 Submittal is associated with M-045-82, due 09/30/2015. This MS was reported as To Be Missed in the March 2013 TPA PMM. Discussions ongoing at the PM level. ORP submitted TPA Change Package M-45-15-03 for approval on June 30, 2015, modifying the dates for the Tier 2 and 3 closure plans
	Tier 2 WMA-C Closure Plan	TBD			C. Kemp	P. Rutland	J. Lyon	<ul style="list-style-type: none"> ORP submitted TPA Change Package M-45-15-03 for approval on June 30, 2015, modifying the dates for the Tier 2 and 3 closure plans
	All Remaining Closure Plans for WMA-C	09/30/15			C. Kemp	P. Rutland	J. Lyon	<ul style="list-style-type: none"> ORP submitted TPA Change Package M-45-15-03 for approval on June 30, 2015, modifying the dates for the Tier 2 and 3 closure plans
	WMA-C Closure Conceptual Design	TBD			C. Kemp	P. Rutland	J. Lyon	
	Tier 3 Closure Plans for Tanks Already Received	TBD			C. Kemp	P. Rutland	J. Lyon	<ul style="list-style-type: none"> Due 180-day post EIS
	Tier 3 Closure Plans for Additional Tanks	09/30/15			C. Kemp	P. Rutland	J. Lyon	<ul style="list-style-type: none"> Several Dates in out years ORP submitted TPA Change Package M-45-15-03 for approval on June 30, 2015, modifying the dates for the Tier 2 and 3 closure plans
	WMA-C Closure Design	TBD			C. Kemp	P. Rutland	J. Lyon	<ul style="list-style-type: none"> Final dates not yet determined; provides basis for the Tier 2 Closure Plan
	Supplemental Treatment Technology Notice of Construction	TBD			L. Huffman		J. Lyon	
	Submit Part B Permit Application for Selected Supplemental Treatment Technology	TBD			L. Huffman		J. Lyon	
	Submit Wiped Film Evaporator Class 3 Permit Modification or Part B Permit Application	TBD			L. Huffman		J. Lyon	
IDF Performance Assessment	TBD			T. Fletcher		S. Dahl		
OTHER DOCUMENTS	Submit Categorical TOC HIA	TBD					J. Lyon	
	Temporary Waste Transfer Line Management Program Plan (also known as Hose-In-Hose Transfer Lines (HIHTL) Management Plan), RPP-12711	TBD			C. Kemp		J. Alzheimer	<ul style="list-style-type: none"> To be made into a TPA Primary Document with submittal of revision 7 per a TPA Project Managers Agreement, signed 01/22/2013
	Single-Shell Tank System Leak Detection and Monitoring Functions and Requirements Document, RPP-9937	TBD			J. Johnson		J. Alzheimer	<ul style="list-style-type: none"> Discussions are underway for a number of revisions to this document
	WMA Quarterly Groundwater Reports	Ongoing Quarterly			D. Hildebrand		J. Lyon	<ul style="list-style-type: none"> Ecology SST counterparts have been added to this distribution list as of March 2013 ORP continues to provide reports to Ecology

AOR = Analysis of Record
 DOE = U.S. Department of Energy.
 Ecology = Washington State Department of Ecology.
 EIS = environmental impact statement.
 N/A = not applicable.
 ORP = U.S. Department of Energy, Office of River Protection.
 PM = project manager.
 PMM = project manager's meeting.

RCRA = Resource Conservation and Recovery Act.
 RDR = Retrieval Data Report
 RFI/CMS = RCRA Facility Investigation/Corrective Measures Study.
 SST = single-shell tank.
 TBD = to be determined.
 TPA = Tri-Party Agreement.
 WMA-C = Waste Management Area C.
 WRPS = Washington River Protection Solutions LLC.

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WORKING ORP Key Documents List – August 2015

Document Description	Milestone ID	Document Title	Start Date	End Date	Responsible Party	Reviewer	Approver	Notes	
Submit to Ecology, in accordance with HFFACO secondary document review process, a phase 2 RCRA Facility Investigation (RFI) report Draft A for WMA C.	Supports M-045-61A	WMA-C PA Initial Document		09/30/2016		C. Kemp	S. Eberlein	J. Lyon	• Feeds input for M-045-61A and all Closure Plans
	M-045-61	Phase 2 Draft A RFI Report for WMA C	12/31/14	12/31/14		C. Kemp	S. Eberlein	J. Lyon	• TPA Change Package M-45-14-03 signed on 10/01/14 split up the WMA C RFI and CMS into separate deliverables. • New M-045-61 Complete
Submit to Ecology, as a primary document, a Phase 2 Corrective Measures Study (CMS), and Revision 0 update to the RFI Report for WMA C	M-045-61A	Phase 2 CMS and Revision 0 of RFI for WMA C	12/31/16						• TPA Change Package M-45-14-03 signed on 10/01/14 split up the WMA C RFI and CMS into separate deliverables.
Submit to Ecology for Review and Approval as an Agreement Primary Document, a Phase 2 Corrective Measures Implementation Work Plan for WMA-C.	M-045-62	Phase 2 Corrective Measures Implementation Work Plan for WMA-C	Six (6) months after the approval of the CMS submitted under milestone M-045-61A	TBD		C. Kemp	S. Eberlein	J. Lyon	• Reported as To Be Missed in the March 2013 TPA PMM. Discussions ongoing at the PM level. • TPA Change Package M-45-15-02 signed on 04/14/15 modifies the due date to Six (6) months after the approval of the CMS submitted under milestone M-045-61A
Prior to beginning construction & at least one year before construction is to be complete, DOE will submit to Ecology a final design & monitoring plan for each interim barrier.	M-045-92D	Future Barrier Design 3	06/30/15	TBD		C. Kemp	S. Eberlein	J. Lyon	• ORP/ECY TPA Change Package M-45-12-04 modified this to a due date of 06/30/15. • TPA Change Package M-045-15-01 is in dispute, per letter 15-TF-0042
	M-045-92P	Future Barrier Design 4	06/30/16	TBD		C. Kemp	S. Eberlein	J. Lyon	• ORP/ECY TPA Change Package M-45-12-04 modified this to a due date of 06/30/16. • TPA Change Package M-045-15-01 is in dispute, per letter 15-TF-0042
M-045-91 Interim Milestones and Target Dates for SST Integrity Implementing the Expert Panel's Recommendations	M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	12/26/14	12/26/14		J. Johnson	R. Gregory	J. Lyon	
	M-045-91G-T04	Provide AOR Final Doc. for SSTs on 55,000 Gallon Tanks	01/30/15	01/30/15		J. Johnson	R. Gregory	J. Lyon	
	M-045-91B-T01	Provide Ecology report on the Concrete Core from TankA-106 or alt	01/31/15	01/31/15		J. Johnson	R. Gregory	J. Lyon	
	M-045-91F-T02	Provide Report of Liner Failures for SSTs	03/31/15	03/31/15		J. Johnson	R. Gregory	J. Lyon	
	M-045-91F	Provide Summary Conclusions Report on Leak Integrity	06/30/15	06/30/15		J. Johnson	R. Gregory	J. Lyon	
	M-045-91G	Provide Summary Conclusions Report of AOR for SSTs	07/28/15	07/28/15		J. Johnson	R. Gregory	J. Lyon	
	M-045-91H	Submit Change Pckg (if necessary) to est. Additional Milestones	07/31/15	07/31/15		J. Johnson	R. Gregory	J. Lyon	
M-045-91I	Provide IQRPE Certification of SSTs Structural Integrity	09/30/18	09/30/18		J. Johnson	R. Gregory	J. Lyon		
Complete final design and submit RCRA Part B Permit Modification Request	M-062-31-T01	RCRA Part B Permit Modification—Final Design	04/30/16	04/30/16		S. Pfaff		D. McDonald	

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ORP/Ecology TPA and CD Agreements, Issues, and Action Items – October 2015

Agreements:

1. 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).
2. 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. Ecology disagrees with ORP's letter 15-WSC-0027 and the System Plan.

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – October 2015

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	TF-14-06-02	06/19/14	Schedule an oversight opportunity with ORP and ECY for the Waste Management Area (WMA)-C performance assessment (PA) modeling	Open	Meetings were held on 09/11/14, 10/30/14, and 12/16/14. WMA-C PA workshop held 01/28 and 01/29/15. Additional meetings held 03/10/15, 06/02/15, 06/17/15, 07/09/15, and 09/10/15. This action remains open and will continue status on this task in both ORP/ECY bi-weekly and a requested meeting with Whalen/Lyon on calibrating to the low end of the hydraulic conductivity curve.	Kemp / Beach	
2	TF-14-02-02	02/18/14	ECY would like a schedule/project management plan (if available) for the closure of WMA C and milestone M-045-83.	Open	Draft closure schedule will be provided to ECY by 12/30/2015.	Beach	
3	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	It was noted in the 9-8-15 TPA Milestone meeting that Ecology provided a list of team members, and that this action would be kept open as a reminder to keep the list of team members up to date.	Lyon / McDonald	

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – October 2015

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
4	TF-13-02-03	02/21/13	ECY and ORP will continue to meet at the project manager level to discuss work on the WMA C PA (see TF-14-06-02) and other options for M-045-82.	Open	ORP and ECY to schedule meeting in early June to discuss options for M-045-82. ECY has a draft TPA change package and commitment from Price/Kemp to meet between TPA PMs in June when Jeff Lyon returns from leave/training. ORP and ECY met on 06/18/15 to discuss draft change control form M-45-15-03 that proposed modifying milestone M-045-82. ORP delivered signed change control form M-45-15-03 to ECY on 06/30/15.	Beach / Eberlein / Price	
5	TF-15-03-02	03/18/15	ECY has requested additional data for the next four 242-A Evaporator campaigns (i.e. tank chemistry, estimated volume reductions/goals, specific gravity before and after, etc.).	Closed	ORP provided a three-page handout at the June PMM. ECY requested the handout via electronically, and committed to follow up if additional information or meetings are necessary.	Hernandez	6-17-15
6	TF-15-03-05	03/18/15	ECY would like to obtain technical white papers supporting LAWPS design.	Open		Pfaff/ Diediker	

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – October 2015

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
7	TF-15-06-01	06/15/15	ECY would like to be included in future Low-Activity Waste Pretreatment System (LAWPS) work discussions and meetings.	Open		Pfaff/ Diediker	
8	TF-15-06-02	06/15/15	ECY would like DOE to schedule a discussion on M-045-91E-1 to determine if the milestone needs to be closed and what the alternative reporting method would be.	Open	Meeting scheduled for October 13, 2015.	Johnson	
9	TF-15-07-01	07/16/15	ECY requests ORP review TPA paragraph 148 and 149 reporting requirements.	Open	ORP provided ECY with a copy of a 1996 IAMIT agreement "Interim Replacement of Site Management System Report."	Trimberger	
10	TF-15-07-03	07/16/15	ECY requests the information ORP is using to select retrieval technologies. This request stems from Ecology's disagreement with the statement in letter TF-15-058 that the current body of knowledge compiled in the Best Basis Inventory is sufficient to plan retrieval actions to develop Tank Waste Retrieval Work Plans.	Open		Beach	

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	WTP-14-10-01	10/23/14	ECY requests information on DOE's plans and timeline for the Low Activity Waste (LAW) (replacement) melter assembly building.	Open		Wendell Wrzesinski	

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – October 2015

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
2	WTP-14-10-02	10/23/14	ECY would like to know what the plans are for operating BOF in support of Direct Feed Low Activity Waste (DFLAW) and then transitioning into full WTP operations.	Open	This issue is impacted by the ongoing CD judicial process.	Jason Young	
3	WTP-14-10-03	10/23/14	ECY and ORP need to discuss how to document Analytical Laboratory (LAB) substantially complete milestone after completion of radioactive liquid waste disposal (RLD) vessel repairs.	Open	This issue is impacted by the ongoing CD judicial process.	Jason Young	
4	WTP-14-10-04	10/23/14	ECY requests a status update to include a schedule on the 8 technical team issues for High Level Waste (HLW) and Pretreatment (PT).	Open	Completed for HLW. This issue is impacted by the ongoing CD judicial process.	Dan Knight	
5	WTP-14-10-05	10/23/14	ECY requests on update on the details of the 2-year work plan for HLW and PT.	Open	Completed for HLW. This issue is impacted by the ongoing CD judicial process.	Dan Knight	
6	WTP-14-06-02	06/19/14	ECY requests that DOE provide a presentation on how DOE incorporates, vets, and considers all technical issues (including the Safety Design Strategy).	Open		Joni Grindstaff	
7	WTP-14-06-03	06/19/14	ECY requests a briefing on the LAW Design and Operability review before the September timeframe.	Open	The Design and Operability Review Report is with the contractor for factual accuracy review. ORP will schedule a briefing once the report is issued.	Jeff Bruggeman	
8	WTP-14-04-01	04/22/14	ORP and ECY have a placeholder action to hold a comprehensive briefing/discussion on the PT efforts.	Open		Joni Grindstaff	

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – October 2015

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
9	WTP-15-01-01	1/22/15	ECY requests a presentation on standardized high-solids vessel design (SHSVD) to include impacts and optimization in planning area 2, 3, and 4	Open	Impacts will be better understood in September with issuance of design studies.	Dan Knight	
10	WTP-15-01-03	1/22/15	ECY requests a technical update on the LAB RLD vessels	Open		Jason Young	
11	WTP-15-06-01	06/15/15	ORP took an action to provide ECY a copy of the corrosion simulant basis document.	Open		Dan Knight	
12	WTP-15-06-02	06/15/15	ECY would like to understand how the bounding conditions for the HEPA filters were identified.	Open		Wahed Abdul	

FINAL

Office of River Protection
Consent Decree 08-5085-FVS

Monthly Summary Report

October 2015

Office of River Protection**Consent Decree 08-5085-FVS
Monthly Summary Report****October 2015 (Monthly Summary Report/Project Earned Value Management System
reflects August 2015 information)**

Page	Topic	Leads
3	CD Milestone Statistics/Status	Bryan Trimberger/Dan McDonald/Jeff Lyon
3	Consent Decree Reports/Reviews	
4	Single-Shell Tank Retrieval Program • D-00B-01, D-00B-02, D-00B-03, D-00B-04	Chris Kemp/Jeff Lyon
5	Tank Waste Retrieval Work Plan Status • Consent Decree Appendix C	Chris Kemp/Jeff Lyon
9	Waste Treatment and Immobilization Plant Project • D-00A-06, D-00A-17, D-00A-01	Joni Grindstaff/Dan McDonald
12	Pretreatment Facility • D-00A-18, D-00A-19, D-00A-13, D-00A-14, D-00A-15, D-00A-16	Dan Knight/Dan McDonald
15	High-Level Waste Facility • D-00A-20, D-00A-21, D-00A-02, D-00A-03	Wahed Abdul/Dan McDonald
18	Low-Activity Waste Facility • D-00A-07, D-00A-08, D-00A-09	Jeff Bruggeman/Dan McDonald
20	Balance of Facilities • D-00A-12	Jason Young/Dan McDonald
22	Analytical Laboratory • D-00A-005	
24	Waste Treatment Plant Project Percent Complete Status (Table)	

CD Milestone Statistics/Status

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2014				
D-00B-01	Complete Retrieval of Tank Waste from 10 SSTs in WMA-C	09/30/2014		Past Due
D-00B-02	Advise Ecology of the Nine 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		Past Due
D-00A-19	Complete elevation 98 feet Concrete Floor Slab Placements in PT Facility	12/31/2014		Past Due
Fiscal Year 2016				
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2015		Ongoing
Fiscal Year 2017				
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2016		Ongoing

CD = Consent Decree.

Ecology = Washington State Department of Ecology.

HLW = high-level waste.

LAW = low-activity waste.

PT = pretreatment.

SST = single-shell tank.

WMA-C = C Farm waste management area.

Consent Decree Reports/Reviews

D-00C-01 series, Submit to State of Washington and State of Oregon Semi-Annual Report, Due: Semiannually – January 31 and July 31 of each year, Status: Ongoing. The July 2015 Semiannual Report was issued on July 31, 2015, via U.S. Department of Energy (DOE), Office of River Protection (ORP) letter 15-ECD-0037, “July 2015 Semi-Annual Report for State of Washington vs. U.S. Department of Energy, Case No. 08-5085-FVS, for Waste Treatment and Immobilization Plant Construction and Startup Activities and Tank Retrieval Activities – November 1, 2014, thorough April 30, 2015.”

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

D-006-00-B1, Provide State of Oregon notice of meetings in D-006-00-B, etc. no less than 30 days before they are scheduled, Due: September 25, 2016, Status: On Schedule.

D-006-00-B, Meet Approximately Every Three Years after Entry of Decree to review requirements of the Consent Decree, Due: October 25, 2016, Status: On Schedule.

Single-Shell Tank Retrieval Program

Milestone	Title	Due Date	Status
D-00B-01	Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C	September 30, 2014	Past Due
D-00B-01A through D-00B-01J	Submit Tank Retrieval Complete Certification	One year following each retrieved tank retrieval completion report ^a	Ongoing
D-00B-02	Advise Ecology of the Nine SSTs from which Waste Will Be Retrieved by 2022	September 30, 2014	Completed
D-00B-03	Initiate Startup of Retrieval in At Least 5 of 9 SSTs in D-00B-02	December 31, 2017	Ongoing*
D-00B-04	Complete Retrieval of Tank Wastes from the nine SSTs in D-00B-02	September 30, 2022	Ongoing*
D-00B-04A through D-00B-04I	Submit Tank Retrieval Complete Certification	TBD	TBD

a. Pursuant to Section IV-B-5 of the Consent Decree, the 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 Single-Shell Tank (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. Completed for SST C-107 on September 30, 2014, via ORP letter 14-TF-0114. Completed for SST C-112 on September 30, 2014, via ORP letter 14-TF-0115.

SST = single-shell tank.

TBD = to be determined.

WMA-C = C Farm waste management area.

Significant Past Accomplishments:

- Submitted practicability evaluation request to forego a third retrieval technology in Tank 241-C-102 to the Washington State Department of Ecology (Ecology) for review.

- Continued operation of Tank 241-C-105 Mobile Arm Retrieval System – Vacuum (MARS V) retrieval system using high-pressure water, volume retrieved is approximately 45 percent..
- Completed Tank 241-C-111 extended reach sluicers system (ERSS) installation at risers 3 and 6. The hose in hose transfer lines (HIHTL) were connected and passed a leak check. Construction Acceptance Testing of the new equipment is on-going.

Significant Planned Activities in the Next Six Months:

- Finish a Tank 241-C-105 systems engineering evaluation of the current retrieval method; will potentially need a revised tank waste retrieval work plan
- Continue retrieval of Tank 241-C-105 using MARS-V through September 30th.
- Begin startup of hard heel retrieval in Tank 241-C-111 using high-pressure water, with caustic/water dissolution in early October 2015.

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	First Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Complete	MARS-V	MARS-V-High Pressure Water Spray	-
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S-High Pressure Water Spray	Water Dissolution
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0025	-

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	Complete	Modified Sluicing	Mechanical Waste Conditioning with an In-Tank Vehicle	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water using the ERSS	Chemical Dissolution Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

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 Six Months:

- Develop AX Farm tank waste retrieval work plans.

Issues:

None.

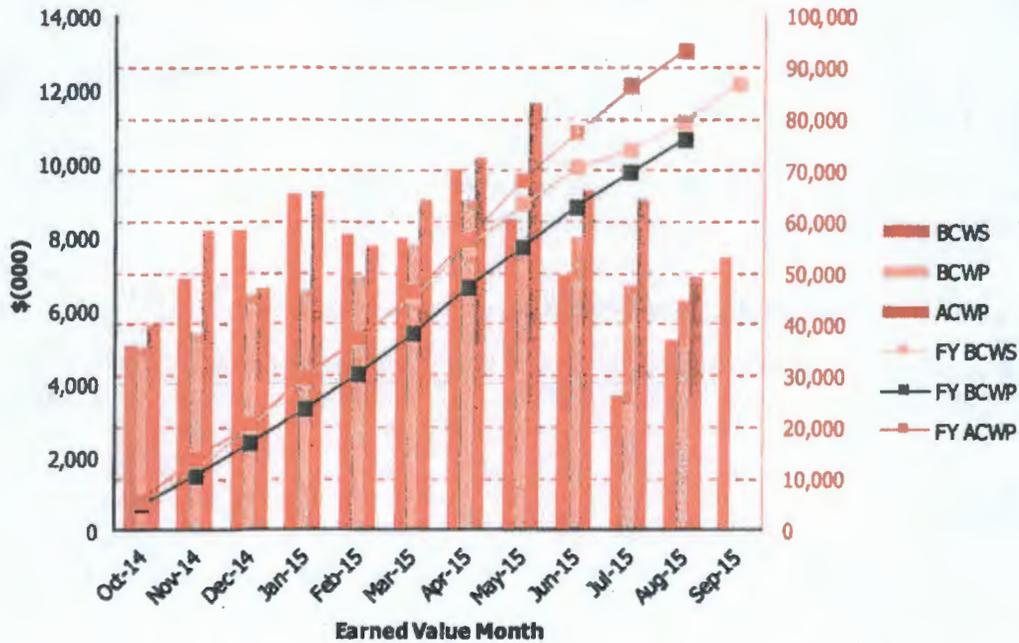
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

August-15

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$5,024	\$5,011	\$5,609	1.00	0.89	\$5,024	\$5,011	\$5,609	1.00	0.89
Nov 2014	\$6,852	\$5,392	\$8,174	0.79	0.66	\$11,876	\$10,403	\$13,783	0.88	0.75
Dec 2014	\$8,171	\$6,453	\$6,612	0.79	0.98	\$20,047	\$16,856	\$20,395	0.84	0.83
Jan 2015	\$9,167	\$6,524	\$9,195	0.71	0.71	\$29,214	\$23,380	\$29,589	0.80	0.79
Feb 2015	\$8,075	\$6,924	\$7,719	0.86	0.90	\$37,290	\$30,304	\$37,309	0.81	0.81
Mar 2015	\$7,971	\$7,801	\$9,009	0.98	0.87	\$45,261	\$38,105	\$46,318	0.84	0.82
Apr 2015	\$9,818	\$9,019	\$10,148	0.92	0.89	\$55,079	\$47,124	\$56,466	0.86	0.83
May 2015	\$8,474	\$7,830	\$11,613	0.92	0.67	\$63,553	\$54,954	\$68,079	0.86	0.81
Jun 2015	\$6,981	\$8,021	\$9,247	1.15	0.87	\$70,534	\$62,976	\$77,326	0.89	0.81
Jul 2015	\$3,666	\$6,714	\$8,983	1.83	0.75	\$74,199	\$69,690	\$86,309	0.94	0.81
Aug 2015	\$5,201	\$6,256	\$6,916	1.20	0.90	\$79,400	\$75,946	\$93,225	0.96	0.81
Sep 2015	\$7,417					\$86,818				
CTD	\$584,899	\$571,363	\$602,569	0.98	0.95					

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

Retrieve and Close Single-Shell Tanks

The current month favorable schedule variance (SV) of \$1,055K is due to:

- **Schedule Recovery:** Tank 241-C-105 retrieval operations estimated 19,000 gallons of waste has been retrieved since the last reporting period.
- **Schedule Recovery:** Crews completed ERSS installation activities at riser 6 at Tank 241-C-111 to support retrieval operations in early October, this work was originally planned to be completed in May.
- **Schedule Recovery:** Crews continued field activities relates to the replacement of the Tank 241-C-111 slurry pump. This work was originally schedule to be completed in July.
- **Schedule Recovery:** Receipt of previously delayed materials related to mechanical components for the A/AX Ventilation System.

The current month unfavorable cost variance (CV) of (\$660K) is due to:

- Project required to carry full retrieval crew during work stoppages: lockout/tag out (LOTO), AN-106 decant and slow retrieval rates (1 gallon per minute versus planned 3 gallons per minute).

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*

WTP = Waste Treatment and Immobilization Plant.

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 2,863 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 605 craft, 393 non-manual, and 147 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

In October 2012, the percent-complete values for Pretreatment (PT) and High-Level Waste (HLW) facilities were frozen at the September 2012 rate. Construction, procurement, and production engineering activities were placed on hold for PT and significantly slowed down for HLW. In August 2014, DOE approved continuation of production engineering activities for HLW. Subsequently, DOE has approved the fiscal year (FY) 2015 and FY 2016 2-Year Interim Work Plan. In April 2015, a 3-Year Interim Work Plan for the PT Facility was implemented emphasizing prioritization of technical issue resolution activities. The WTP Project is focused on resolving PT Facility technical issues and finalizing HLW Facility design.

The WTP Project continues to focus on completion of the Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) (collectively LBL). As of August 2015, LBL facilities were 49 percent complete, design and engineering was 78 percent complete, procurement was 72 percent complete, construction was 78 percent complete, and startup and commissioning was 7 percent complete.

In August 2015, the cumulative to-date WTP Project schedule variance was a negative \$19.4 million, and the cumulative to-date WTP Project cost variance was a positive \$58.0 million. The cumulative to-date cost and schedule variance is based on the progress of the LBL internal forecast.

The following is the project status through the end of August 2015.

Significant Past Accomplishments:

- Completed turnover of all major systems of the Nonradioactive Liquid Waste Disposal Facility, WTP switchgear, and BOF switchgear buildings for component level testing (BOF)
- Initiated excavation and drilling activities to install cathodic protection system upgrades (BOF)
- All thermal catalytic oxidizer (TCO) housing units welding is complete (LAW)
- Completed the Nuclear Safety Engineering Hazards Analysis of C3V/C2V (LAW)

- Completed plant cooling water system design review (HLW)
- Completed one concrete placement (slab 4023) for a total of 21 placements in FY 2015 (HLW)
- Installed 38.5 tons of structural steel (HLW).

Significant Planned Actions in the Next Six Months:

- Receive caustic scrubber (LAW)
- Perform multi-discipline review of Effluent Management Facility design (BOF)
- DOE approval of the radioactive liquid waste disposal (RLD) safety basis change package (HLW)
- Complete vendor documentation reviews in preparation for the installation of autosampling system (ASX) framing (HLW)
- Complete modification at Full-Scale Vessel Testing Facility to continue testing for the pulse-jet mixer (PJM) control system (PT)
- Finalize standard high solids vessels design vessel testing planning, test specification/plan, and define simulate and supplemental mixing engineering study (PT)
- Begin LAB system walk downs in support of direct-feed LAW (DFLAW) modifications (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 related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

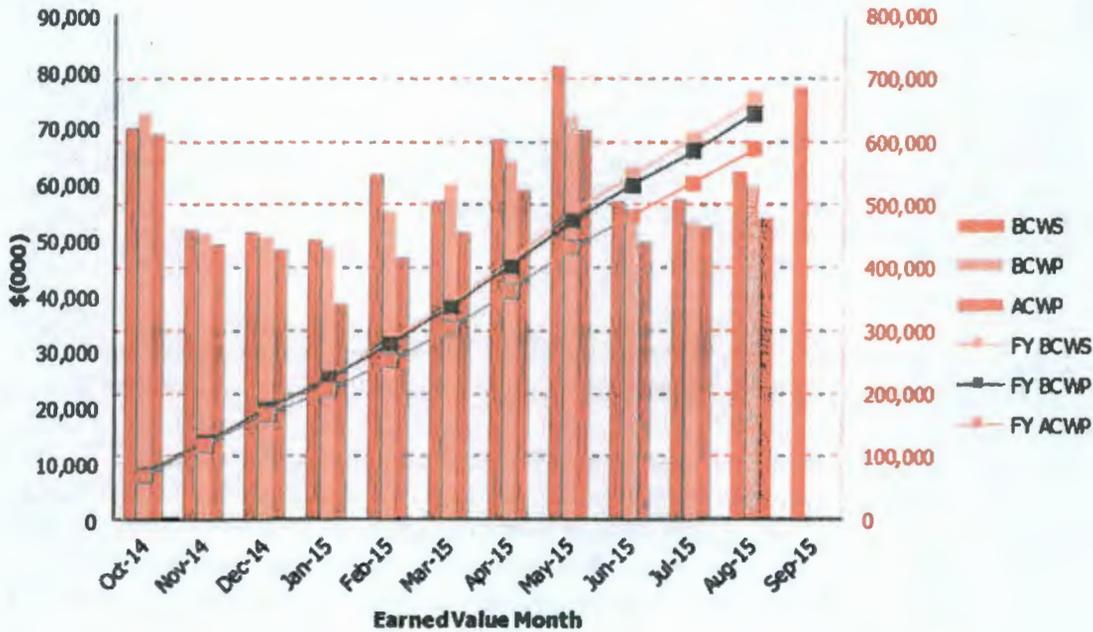
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: August 2015

**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 2014	\$69,893	\$72,879	\$69,039	1.04	1.06	\$69,893	\$72,879	\$69,039	1.04	1.06
Nov 2014	\$51,713	\$51,323	\$49,300	0.99	1.04	\$121,606	\$124,202	\$118,339	1.02	1.05
Dec 2014	\$51,573	\$50,885	\$48,245	0.99	1.05	\$173,179	\$175,087	\$166,583	1.01	1.05
Jan 2015	\$50,143	\$48,696	\$38,818	0.97	1.25	\$223,323	\$223,783	\$205,401	1.00	1.09
Feb 2015	\$61,729	\$55,235	\$46,859	0.89	1.18	\$285,052	\$279,018	\$252,260	0.98	1.11
Mar 2015	\$56,799	\$59,925	\$51,563	1.06	1.16	\$341,850	\$338,942	\$303,823	0.99	1.12
Apr 2015	\$67,809	\$64,010	\$58,892	0.94	1.09	\$409,659	\$402,952	\$362,716	0.98	1.11
May 2015	\$80,875	\$72,114	\$69,468	0.89	1.04	\$490,534	\$475,066	\$432,184	0.97	1.10
Jun 2015	\$56,972	\$55,423	\$49,685	0.97	1.12	\$547,506	\$530,489	\$481,869	0.97	1.10
Jul 2015	\$57,131	\$53,298	\$52,407	0.93	1.02	\$604,637	\$583,787	\$534,276	0.97	1.09
Aug 2015	\$62,130	\$59,762	\$53,793	0.96	1.11	\$666,767	\$643,549	\$588,069	0.97	1.09
Sep 2015	\$77,081									
PTD	\$9,038,247	\$9,018,888	\$8,960,854	1.00	1.01					

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

EVMS = Earned Value Management System.
 FY = fiscal year.
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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	Past Due
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*

PT = pretreatment.

The PT 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 revised PT Facility 3-Y Interim Work Plan

BNI has submitted resolution plans for eight technical issues: T1, Hydrogen in Vessels; T2, Criticality; T3, Hydrogen in Piping and Ancillary Vessels (HPAV); T4, Mixing; T5, Erosion Corrosion; T6, PT Facility Optimization; T7, Vessel Analysis; and T8, Ventilation. Phase 1 of the Full-Scale Vessel Testing is continuing for the PJM controls utilizing the RLD-8T vessel. Technical review teams continue to evaluate open PT Facility technical issues. An evaluation is ongoing relative to a standardized design for high-solids vessels within the PT Facility. With primary emphasis on design and fabrication of hold point releases supporting procurement, fabrication and delivery of the standardized high solids vessel design (SHSVD)-T16ft vessel.

Significant Past Accomplishments:

- Issue T2 PT Facility criticality calculation report
- Issue technical basis for scaled testing of SHSVD
- Complete design loop test platform drawing

Significant Planned Actions in the Next Six Months:

- Complete technical work plan for hydrogen gas release T1
- Conduct H2 control gap analysis for T1
- Receive criticality report for final review for T2
- Receive technical issue closure work package

- Issue Phase 1 PJM controls study
- Complete SHSVD info test and identify design features.

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 related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

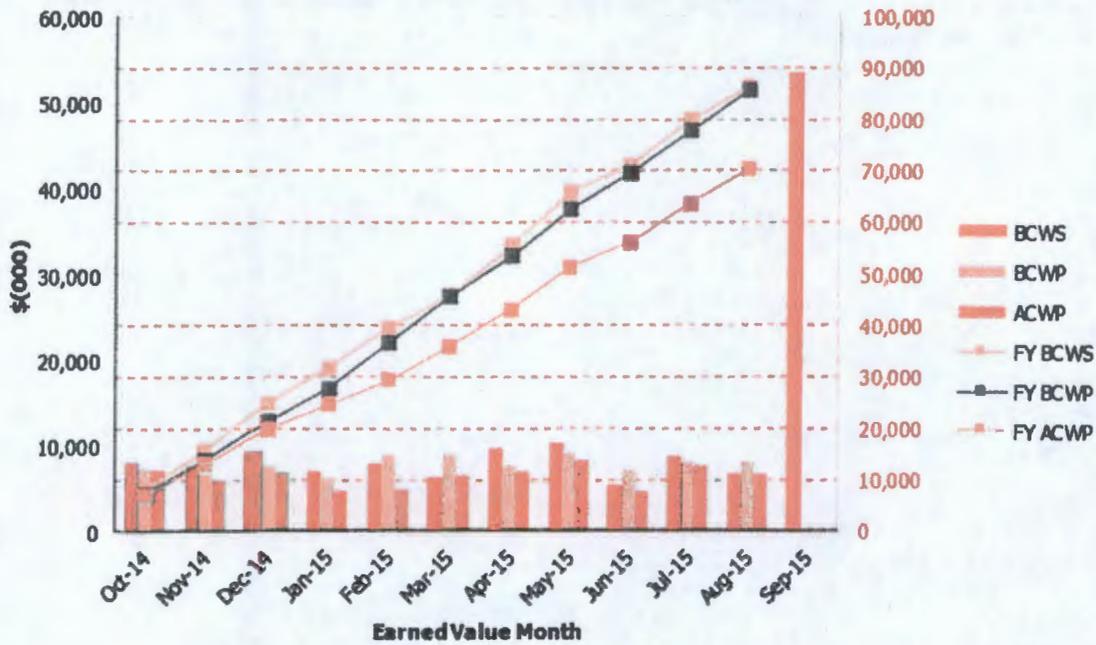
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: August 2015

River Protection Project Pretreatment Facility (WBS 1.01)

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$8,100	\$7,285	\$7,050	0.90	1.03	\$8,100	\$7,285	\$7,050	0.90	1.03
Nov 2014	\$7,582	\$6,657	\$5,917	0.88	1.13	\$15,682	\$13,942	\$12,967	0.89	1.08
Dec 2014	\$9,361	\$7,472	\$6,841	0.80	1.09	\$25,043	\$21,414	\$19,808	0.86	1.08
Jan 2015	\$6,819	\$6,293	\$4,765	0.92	1.32	\$31,862	\$27,707	\$24,574	0.87	1.13
Feb 2015	\$7,877	\$9,034	\$4,869	1.15	1.86	\$39,740	\$36,742	\$29,442	0.92	1.25
Mar 2015	\$6,180	\$8,917	\$6,567	1.44	1.36	\$45,920	\$45,659	\$36,009	0.99	1.27
Apr 2015	\$9,661	\$7,631	\$7,008	0.79	1.09	\$55,581	\$53,290	\$43,017	0.96	1.24
May 2015	\$10,243	\$9,161	\$8,322	0.89	1.10	\$65,823	\$62,451	\$51,340	0.95	1.22
Jun 2015	\$5,406	\$7,122	\$4,769	1.32	1.49	\$71,229	\$69,573	\$56,109	0.98	1.24
Jul 2015	\$8,740	\$8,112	\$7,602	0.93	1.07	\$79,970	\$77,685	\$63,710	0.97	1.22
Aug 2015	\$6,613	\$8,122	\$6,608	1.23	1.23	\$86,583	\$85,808	\$70,318	0.99	1.22
Sep 2015	\$53,484									

PTD \$1,693,254 \$1,692,426 \$1,676,945 1.00 1.01

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

EVMS = Earned Value Management System.
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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*

HLW = high-level waste.

The HLW Facility will receive the separated HLW concentrate from the PT Facility. This concentrate will be blended with glass formers, converted into molten glass in one of the two HLW melter, and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated before shipping 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 been significantly slowed down, resulting in minimal change to the percent completion status since September 2012.

Currently, all activities are being performed in accordance with the FY 2015/FY 2016 2-Year. Efforts are focused on completing activities required to obtain full production authorization by DOE. Limited construction is continuing with the concrete placements, installation of support steel, and crane rails in the canister decontamination cave and melter cave.

To support construction, engineering continues to execute detailed evaluations of structural supports for future installation of heating, ventilation, and air-conditioning (HVAC); fire protection; process piping; and electrical commodities. Engineering recently completed the first preliminary design review on the plant cooling water system. The purpose of the design review is to demonstrate to a multifunctional team that the preliminary design meets all the established requirements.

Systems Engineering has completed the initial phase of system design descriptions (SDD) development in accordance with the implementation of the Systems Engineering Management Plan. Twenty SDD's and one Facility Design Description have been generated. With incorporation of the Emergency Turbine Generator System (ETX) into the HLW scope, an ETX SDD will also be developed.

Other than the construction support, design activities are focused to support safety design strategy gap analysis, technical core team recommendations, and studies to resolve design and operability review. Studies are being performed to determine the ventilation system capability,

waste handling capability, etc. Hazard and accident analyses are ongoing to support the Preliminary Documented Safety Analysis (PDSA) update to align design and the safety basis.

Preliminary testing has begun to support design and qualification of ventilation and off gas system high-efficiency particulate air (HEPA) filters. Multiple filter media designs will be tested to ensure that the qualified filters support the needs for HLW and LBL facilities.

Design is progressing for RLD vessels 7 and 8. PDSA change packages for these vessel designs have been submitted to DOE for approval and comment resolution is ongoing

Significant Past Accomplishments:

- Completed issuance of all system design descriptions originally committed to be completed for HLW
- Initiated preliminary HEPA filter testing in accordance with the HEPA Filter Test Plan at the Mississippi State University facility
- Completed plant cooling water system design review
- Completed one concrete placement (slab 4023) for a total of 21 placements in FY 2015
- Installed 38.5 tons of structural steel
- Issued personnel access door and HVAC system evaluation report.

Significant Planned Actions in the Next Six Months:

- DOE approval of the RLD safety basis change package
- Complete installation of crane rails and supports in the canister decontamination cave
- Issue ETX system design description
- Continue HEPA filter testing in accordance with the HEPA Filter Test Plan at the Mississippi State University facility
- Complete C5 ventilation study for personnel access
- Initiate high-level waste melter offgas treatment process/process vessel vent (HOP/PVV) design study.

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 related to the WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

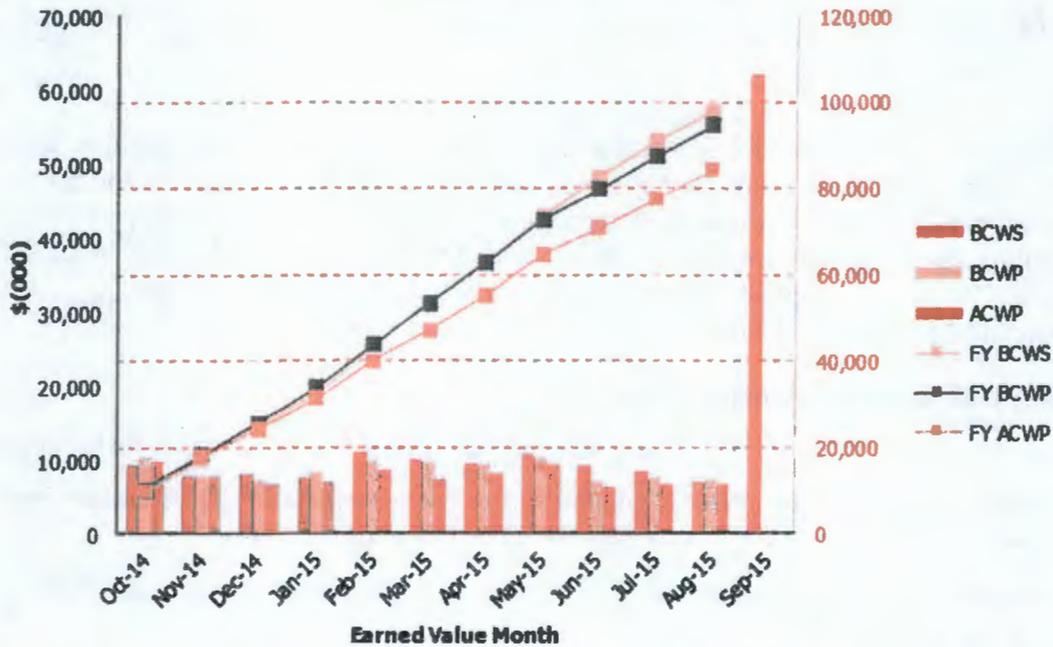
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: August 2015

**River Protection Project
High-Level Waste Facility (WBS 1.03)**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$9,449	\$10,367	\$9,783	1.10	1.06	\$9,449	\$10,367	\$9,783	1.10	1.06
Nov 2014	\$7,743	\$7,833	\$7,880	1.01	0.99	\$17,192	\$18,200	\$17,663	1.06	1.03
Dec 2014	\$7,973	\$7,359	\$6,631	0.92	1.11	\$25,165	\$25,559	\$24,294	1.02	1.05
Jan 2015	\$7,490	\$8,342	\$6,994	1.11	1.19	\$32,655	\$33,901	\$31,288	1.04	1.08
Feb 2015	\$10,995	\$9,796	\$8,662	0.89	1.13	\$43,650	\$43,698	\$39,949	1.00	1.09
Mar 2015	\$9,792	\$9,760	\$7,295	1.00	1.34	\$53,442	\$53,458	\$47,244	1.00	1.13
Apr 2015	\$9,391	\$9,411	\$8,115	1.00	1.16	\$62,834	\$62,868	\$55,359	1.00	1.14
May 2015	\$10,774	\$10,029	\$9,242	0.93	1.09	\$73,608	\$72,897	\$64,601	0.99	1.13
Jun 2015	\$9,004	\$6,949	\$6,124	0.77	1.13	\$82,611	\$79,846	\$70,725	0.97	1.13
Jul 2015	\$8,380	\$7,599	\$6,797	0.91	1.12	\$90,991	\$87,445	\$77,522	0.96	1.13
Aug 2015	\$6,904	\$7,168	\$6,825	1.04	1.05	\$97,895	\$94,613	\$84,347	0.97	1.12
Sep 2015	\$61,995									
PTD	\$1,152,008	\$1,148,984	\$1,138,408	1.00	1.01					

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

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Low-Activity Waste Facility

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

LAW = low-activity waste.

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 anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of August 2015, the LAW Facility was 53 percent complete overall, with engineering design 76 percent complete, procurement 75 percent complete, construction 76 percent complete, and startup and commissioning 4 percent complete.

Significant Past Accomplishments:

- Installed over 290 linear feet of process piping and hydro-tested 400 linear feet of piping
- Installed over 1,050 linear feet of conduit and pulled approximately 21,680 linear feet of cable
- Installed 121 pen seals comprised of 78 conduit/steel, 11 spares, 28 pipe and 4 HVAC duct penetrations
- All TCO housing units welding is complete
- Completed electrical rough-ins and trim out of lights, receptacles, emergency lights, split units, and duct heaters
- Completed HVAC grills and diffusers, doors/hardware and bathroom accessories, and cable tray installations in the control/server room
- Completed the Nuclear Safety Engineering Hazards Analysis of C3V/C2V.

Significant Planned Actions in the Next Six Months:

- Complete subcontractor work scope in the annex
- Receive caustic scrubber
- Assemble and install wet electrostatic precipitator internals
- Receive the TOC and ammonia skid.

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.

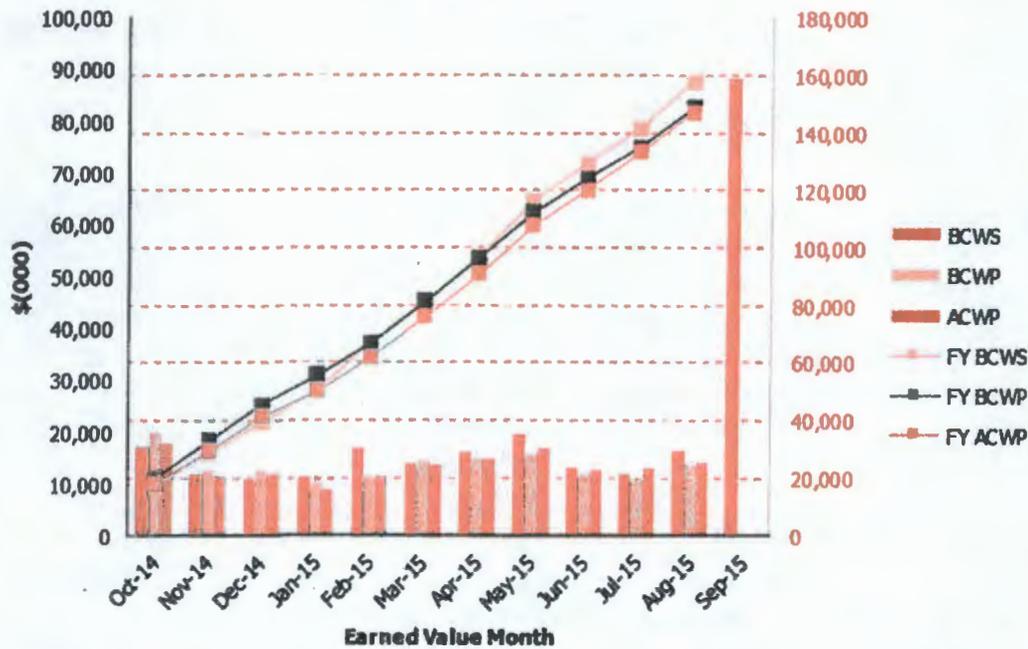
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Data as of: August 2015

**River Protection Project
Low-Activity Waste Facility (WBS 1.02)**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$16,994	\$19,896	\$17,781	1.17	1.12	\$16,994	\$19,896	\$17,781	1.17	1.12
Nov 2014	\$11,700	\$12,666	\$11,597	1.08	1.09	\$28,694	\$32,562	\$29,378	1.13	1.11
Dec 2014	\$10,760	\$12,499	\$11,927	1.16	1.05	\$39,454	\$45,061	\$41,305	1.14	1.09
Jan 2015	\$11,248	\$10,387	\$9,033	0.92	1.15	\$50,702	\$55,448	\$50,338	1.09	1.10
Feb 2015	\$16,654	\$11,341	\$11,676	0.68	0.97	\$67,356	\$66,789	\$62,014	0.99	1.08
Mar 2015	\$13,681	\$14,539	\$13,778	1.06	1.06	\$81,037	\$81,329	\$75,792	1.00	1.07
Apr 2015	\$16,031	\$14,925	\$15,002	0.93	0.99	\$97,068	\$96,254	\$90,794	0.99	1.06
May 2015	\$19,533	\$15,802	\$16,674	0.81	0.95	\$116,601	\$112,056	\$107,468	0.96	1.04
Jun 2015	\$12,899	\$11,881	\$12,626	0.92	0.94	\$129,500	\$123,936	\$120,094	0.96	1.03
Jul 2015	\$12,044	\$10,770	\$12,910	0.89	0.83	\$141,543	\$134,707	\$133,004	0.95	1.01
Aug 2015	\$16,309	\$13,852	\$13,987	0.85	0.99	\$157,853	\$148,558	\$146,991	0.94	1.01
Sep 2015	\$88,142									

PTD \$1,129,067 \$1,122,578 \$1,122,024 0.99 1.00

ACWP = actual cost of work performed.
 BCWS = budgeted cost of work scheduled.
 BCWP = budgeted cost of work performed.
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EVMS = Earned Value Management System.
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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 August 2015, BOF was 55 percent complete overall, with engineering design 79 percent complete, procurement 71 percent complete, construction 80 percent complete, and startup and commissioning 14 percent complete.

Engineering activities are in progress to develop the preliminary design for BOF systems in support of DFLAW. Current efforts are focused on progressing the design of the Effluent Management Facility (EMF), defining the required BOF system isolations, preparing procurements, and initiating the Preliminary Design Safety Analysis (PDSA) process for EMF. Construction efforts are focused on initiation of BOF system isolations and completion of the remaining punch list items required to support turnover of all major systems within the Nonradioactive Liquid Waste Disposal Facility, WTP switchgear, and BOF switchgear buildings for component level testing.

Significant Past Accomplishments:

- Completed turnover all major systems of the Nonradioactive Liquid Waste Disposal Facility, WTP switchgear, and BOF switchgear buildings for component level testing
- Initiated excavation and drilling activities to install Cathodic Protection system upgrades
- Pulled 5,790 linear feet of cable

Significant Planned Actions in the Next Six Months:

- Perform multi-discipline review of EMF design
- Complete EMF PDSA
- Begin excavation for EMF
- Complete site energization from permanent power supply.

Issues:

No major issues at this time.

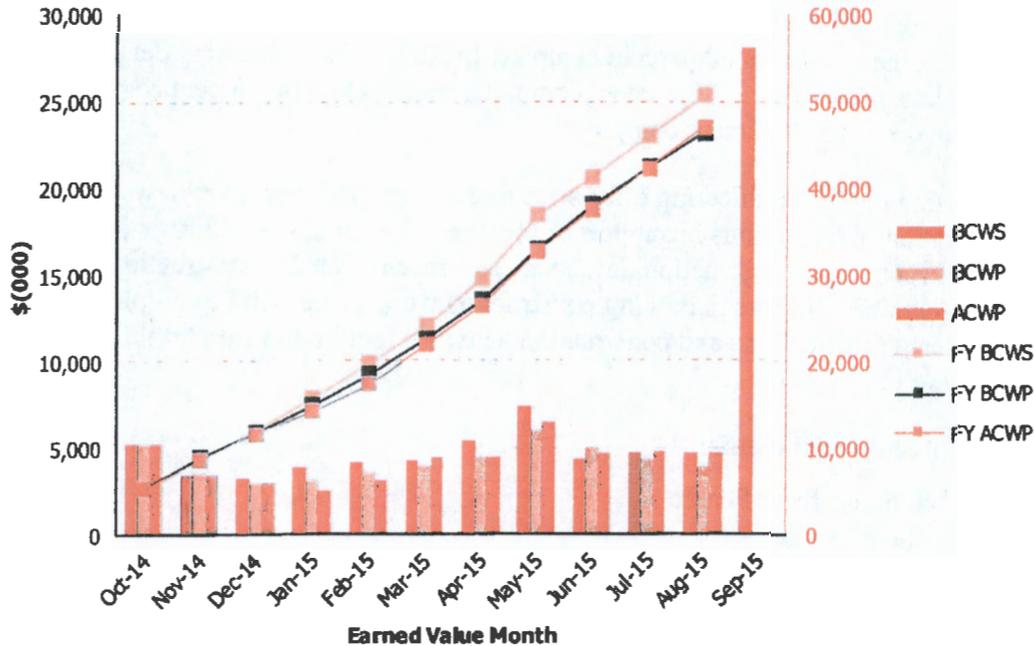
EXC-01a: Fiscal Year Cost and Schedule Report

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Data as of: August 2015

**River Protection Project
Balance of Facilities (WBS 1.05)**

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 2014	\$5,300	\$5,238	\$5,223	0.99	1.00	\$5,300	\$5,238	\$5,223	0.99	1.00
Nov 2014	\$3,429	\$3,578	\$3,454	1.04	1.04	\$8,729	\$8,816	\$8,677	1.01	1.02
Dec 2014	\$3,240	\$3,023	\$2,976	0.93	1.02	\$11,969	\$11,839	\$11,653	0.99	1.02
Jan 2015	\$3,885	\$3,098	\$2,584	0.80	1.20	\$15,854	\$14,937	\$14,237	0.94	1.05
Feb 2015	\$4,074	\$3,578	\$3,151	0.88	1.14	\$19,928	\$18,515	\$17,388	0.93	1.06
Mar 2015	\$4,270	\$4,016	\$4,491	0.94	0.89	\$24,198	\$22,531	\$21,879	0.93	1.03
Apr 2015	\$5,384	\$4,497	\$4,491	0.84	1.00	\$29,582	\$27,029	\$26,370	0.91	1.02
May 2015	\$7,347	\$6,027	\$6,470	0.82	0.93	\$36,930	\$33,056	\$32,841	0.90	1.01
Jun 2015	\$4,403	\$4,990	\$4,649	1.13	1.07	\$41,333	\$38,046	\$37,489	0.92	1.01
Jul 2015	\$4,638	\$4,339	\$4,769	0.94	0.91	\$45,971	\$42,386	\$42,259	0.92	1.00
Aug 2015	\$4,690	\$3,880	\$4,646	0.83	0.84	\$50,661	\$46,265	\$46,905	0.91	0.99
Sep 2015	\$28,022									
PTD	\$397,328	\$393,364	\$394,035	0.99	1.00					

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

EVMS = Earned Value Management System.
 FY = fiscal year.
 SPI = schedule performance index.

Analytical Laboratory

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

LAB = Analytical Laboratory.

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of August 2015, the LAB was 60 percent complete overall, with engineering design 82 percent complete, procurement 86 percent complete, construction 96 percent complete, and startup and commissioning 10 percent complete.

During this reporting period engineering efforts are focused on LAB system reviews to evaluate potential modifications or isolations in support of the direct feed of LAW. Closure of nonconformance reports and construction deficiency reports continued. Construction efforts within the LAB are minimal. The remaining construction work scope will be completed in parallel with system modifications and construction activities required to support the direct feed of LAW.

Significant Past Accomplishments:

- Pulled 4,340 linear feet of cable.

Significant Planned Actions in the Next Six Months:

- Initiate component level testing of select LAB systems
- Complete LAB system walk downs in support of DFLAW modifications.

Issues:

No major issues at this time.

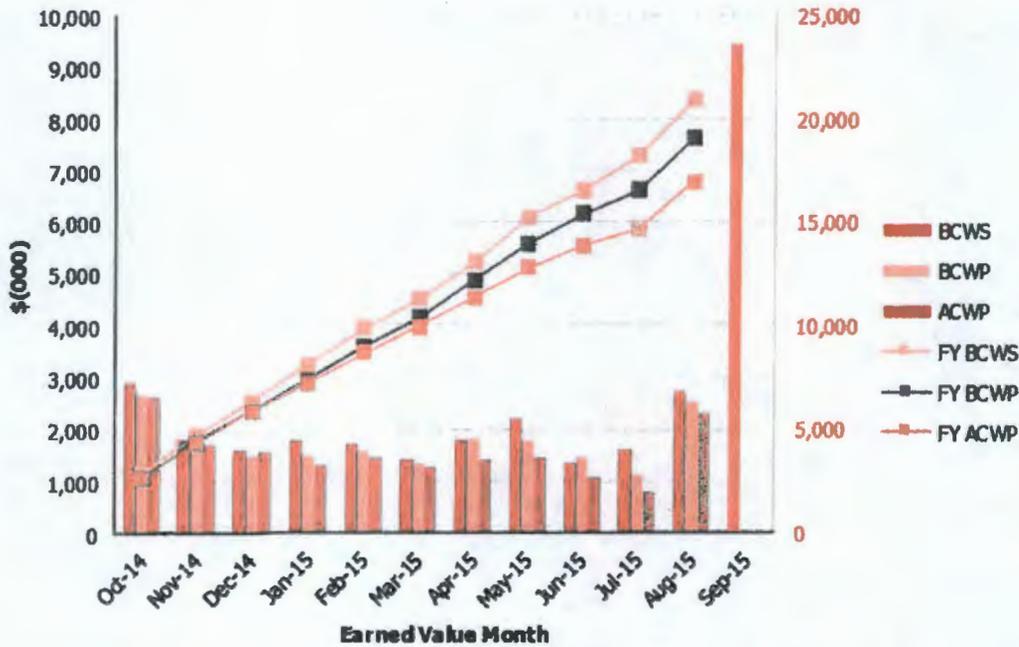
EXC-O1a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: August 2015

**River Protection Project
Analytical Laboratory (WBS 1.06)**

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 2014	\$2,920	\$2,670	\$2,645	0.91	1.01	\$2,920	\$2,670	\$2,645	0.91	1.01
Nov 2014	\$1,827	\$1,748	\$1,695	0.96	1.03	\$4,747	\$4,418	\$4,340	0.93	1.02
Dec 2014	\$1,614	\$1,482	\$1,552	0.92	0.95	\$6,361	\$5,900	\$5,892	0.93	1.00
Jan 2015	\$1,788	\$1,490	\$1,304	0.83	1.14	\$8,149	\$7,390	\$7,196	0.91	1.03
Feb 2015	\$1,716	\$1,618	\$1,447	0.94	1.12	\$9,865	\$9,008	\$8,643	0.91	1.04
Mar 2015	\$1,413	\$1,322	\$1,266	0.94	1.04	\$11,278	\$10,330	\$9,909	0.92	1.04
Apr 2015	\$1,781	\$1,833	\$1,407	1.03	1.30	\$13,059	\$12,163	\$11,316	0.93	1.07
May 2015	\$2,186	\$1,773	\$1,459	0.81	1.21	\$15,245	\$13,936	\$12,775	0.91	1.09
Jun 2015	\$1,338	\$1,453	\$1,077	1.09	1.35	\$16,584	\$15,390	\$13,852	0.93	1.11
Jul 2015	\$1,608	\$1,130	\$777	0.70	1.45	\$18,192	\$16,520	\$14,629	0.91	1.13
Aug 2015	\$2,730	\$2,534	\$2,323	0.93	1.09	\$20,922	\$19,054	\$16,952	0.91	1.12
Sep 2015	\$9,427									
PTD	\$303,335	\$301,883	\$300,006	1.00	1.01					

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

EVMS = Earned Value Management System.
 FY = fiscal year.
 SPI = schedule performance index.

Waste Treatment Plant Project Percent Complete Status (Table)

**Waste Treatment Plant Project - (LBL/Project Services) Percent Complete Status
Through August 2015**

(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars			Project Management & Shared Services Unallocated Dollars		
	Performance Measurement (PMA)	Budgeted (BUD)	% Complete	Performance Measurement (PMA)	Budgeted (BUD)	% Complete	Performance Measurement (PMA)	Budgeted (BUD)	% Complete	Performance Measurement (PMA)	Budgeted (BUD)	% Complete	Performance Measurement (PMA)	Budgeted (BUD)	% Complete	Performance Measurement (PMA)	Budgeted (BUD)	% Complete
Facilities																		
Low-Activity Waste	2,118.9	1,122.6	53%	471.9	360.6	76%	837.3	253.6	75%	827.4	477.5	70%	677.6	26.8	4%	4.0	4.0	100%
Balance of Facilities	719.2	393.4	55%	132.5	104.8	79%	75.7	53.8	71%	248.9	199.3	80%	282.7	36.0	14%	0.5	0.5	100%
Analytical Lab	507.0	301.9	60%	98.4	77.4	62%	65.7	56.8	86%	156.8	148.9	96%	190.7	18.4	10%	0.5	0.5	100%
LBL Facility Services	424.0	50.8	12%	0.0	0.0	0%	42.8	9.4	22%	30.8	3.6	12%	241.7	17.5	7%	108.7	20.31	19%
Total LBL	3,767.0	1,869.5	70%	689.0	542.9	77%	1,411.5	373.8	77%	1,604.9	528.2	75%	1,172.6	98.5	7%	111.7	25.3	32%
Direct Feed LAW	67.8	15.5	23%	99.1	14.3	24%	1.87	0.00	0%	2.2	0.4	19%	0.0	0.0	0%	4.6	0.84	18%
Project Services	362.7	190.8	53%	53.2	24.6	46%	35.4	17.0	48%	72.7	51.9	71%	1.7	1.7	100%	180.6	95.6	48%
Total OF LAW & PS	439.5	207.3	48%	152.3	38.9	26%	37.3	17.0	46%	74.9	52.3	70%	1.7	1.7	100%	215.2	96.5	45%
Total LBL, OF LAW & Project Services	4,197.0	2,076.9	49%	841.3	581.7	70%	1,448.8	390.8	70%	1,679.8	580.5	70%	1,174.3	100.2	7%	116.3	125.7	30%
PTMLWSS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)																		
High-Level Waste	1,479.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	139.3	4.4	4%	n/a	n/a	n/a
Pretreatment	2,517.3	1,410.5	56%	761.7	645.9	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%	n/a	n/a	n/a
Shared Services	4,726.9	3,632.6	77%	1,047.6	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	463.5	133.2	29%	1,338.1	983.5	73%
Total HLWPTSS	8,723.8	5,965.2	69%	2,173.7	1,949.0	90%	1,565.5	1,124.8	72%	2,887.6	1,764.8	61%	788.6	143.2	18%	1,381.1	983.5	71%
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	n/a	n/a	n/a
Total WTP	12,927.7	8,040.1	62%	2,844.9	2,520.6	89%	2,144.3	1,510.3	71%	4,022.4	2,549.3	63%	2,132.8	213.4	11%	1,346.0	1,105.2	67%

Source: Preliminary WTP Contract Performance Report - Format 1, Data for August 2015

Note: In September 2012, the LBL Region was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/facilities to-date percent complete values. In October 2012, the PTMLWSS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PTMLWSS facility budgets. This was due to a work scope shift from the Distributed budget to US. 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 US. US value for the project for PTMLWSS is \$2,014M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLWPTSS BCWP values. In March 2014, Project Controls and Project Management work scope was moved out of Shared Services control accounts into the facilities with new control accounts being set up in the facilities. These will now be seen under Project Management/Shared Services by facility. The Shared Services PMA value has not been changed to reflect this change due to the freeze on HLWPT and SS and the budgets remaining in US. October 2014 data reflects the incorporation of Direct Feed LAW and the split of Shared Services into LBL Facility Services and Project Services. July 2015 LBL percent complete data is a total of LAW-SCF-LAB and LBL Facility Services. The Project Services Allocation account (PMA), as shown on the CFR Format 1, is not added to LBL for percent complete purposes.

FINAL

Office of River Protection
Tri-Party Agreement
Monthly Summary Report
October 2015



**Office of River Protection (ORP)
Tri-Party Agreement (TPA) Milestone Review
October 2015 (Monthly Summary Report)**

Project Earned Value Management System reflects August 2015 information

Page	Topic	Leads
1	Administrative Items/Milestone Status	Bryan Trimberger/Dan McDonald/Jeff Lyon
2	System Plan	DaBrisha Smith/Jeff Lyon/Dan McDonald
3	Acquisition of New Facilities	Janet Diediker/Jeff Lyon/Dan McDonald
4	Supplemental Treatment and Part B Permit Applications	Steve Pfaff/Jeff Lyon/Dan McDonald
5	242-A Evaporator Status	Richard Valle/Paul Hernandez/Jeff Lyon
7	Double-Shell Tank System Update	Jeremy Johnson/Jeff Lyon
7	Single-Shell Tank Integrity Assurance	Jeremy Johnson/ Jim Alzheimer
8	In Tank Characterization and Summary	Billie Mauss/Michael Barnes
10	Tank Operations Contract Overview	ORP TPA Program Managers/Jeff Lyon
19	Single-Shell Tank Retrieval and Closure Program	Ryan Beach/Jeff Lyon
22	Tank Waste Retrieval Work Plan Status	Chris Kemp/Jeff Lyon
23	Tank in Appendix H, "Status - Single Shell Waste Retrieval Criteria"	Chris Kemp/Jeff Lyon
24	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	Joni Grindstaff/Dan McDonald

Administrative Items/Milestone Status
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Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2015				
M-062-45-T01	Comp. Neg's 6-Mo After Last Issuance of System Plan	04/30/2015		In Dispute
M-062-45-ZZ	Negotiate a One Time Supplemental Treatment Selection	04/30/2015		In Dispute
M-062-45-ZZ-A	Convert M-062-31-T01 Thru M-062-34-T01 to Interim Milestones	04/30/2015		In Dispute
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA-C	TBD		On Schedule
M-045-92O	Barrier 3 Design/Monitoring Approval From Ecology	06/30/2015		In Dispute
M-045-82	Submit Comp. Permit Modification Request for Tiers 1,2,3	09/30/2015		In Dispute
M-045-91E1	Provide SST Farms Dome Deflection Surveys Every Two Years	09/30/2015	9/21/15	Complete
Fiscal Year 2016				
M-045-92N	Construct Barriers 1 and 2 in 241-SX Farm	10/31/2015		In Dispute
M-062-01AF	Submit Semi-Annual Project Compliance Report	01/31/2016		On Schedule
M-047-07	CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to Ecology	03/31/2016		To Be Missed
M-090-13	CD-1 for Interim Hanford Storage Project and CR for CD-2 to Ecology	03/31/2016		To Be Missed
M-062-31-T01	Comp. Final Design & Submit RCRA Part B Permit Mod Request for Enhanced WTP & Supplemental Treatment	04/30/2016		On Schedule
M-045-92Q	Submit Barrier 4 Design/Monitoring Plan	06/30/2016		In Dispute
M-062-01AG	Submit Semi-Annual Project Compliance Report	07/31/2016		On Schedule
M-045-56L	Ecology And DOE Agree, At A Minimum, To Meet Yearly (By July)	07/31/2016		On Schedule
Fiscal Year 2017				
M-045-92P	Barrier 3 Construction Complete	10/31/2016		In Dispute
M-062-40E	Select a Minimum of Three Scenario's	10/31/2016		On Schedule

Milestone	Title	Due Date	Completion Date	Status
M-045-61A	Submit to Ecology a primary doc. Phase 2 CMD and Rev. O update to the RFI Report for WMA C	12/31/2016		On Schedule
M-045-84	Comp Neg's of HFFACO Interim Milestones for Closure of 2 nd SST WMA	01/31/2017		On Schedule
M-062-01AH	Submit Semi-Annual Project Compliance Report	01/31/2017		On Schedule
M-062-01AI	Submit Semi-Annual Project Compliance Report	07/31/2017		On Schedule
M-045-91E2	Provide SST Farms Dome Deflection Surveys' Every Two Years	09/30/2017		On Schedule

CD-1/-2 = critical decision-1/-2.

CMD = current measuring device.

CR = change request.

DOE = U.S. Department of Energy.

Ecology = Washington State Department of Ecology

HFFACO = Hanford Federal Facility Agreement and Consent Order.

RCRA = Resource Conservation and Recovery Act.

RFI = RCRA Facility Investigation.

SST = single-shell tank.

TBD = to be determined.

WMA-C = Waste Management Area C.

System Plan

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

Significant Past Accomplishments:

1. On October 24, 2013, Washington State Department of Ecology (Ecology) and U.S. Department of Energy (DOE), Office of River Protection (ORP) signed the Tri-Party Agreement (TPA) Change Control Form M-62-13-02, moving out the due date for this embedded milestone from October 31, 2013 to December 15, 2013, for selection of three, or more, scenarios to be modeled in the System Plan.
2. Ecology has defined five scenarios to be analyzed in System Plan 7. Washington River Protection Solutions LLC (WRPS) has included a description of each scenario in the *Selected Scenarios for the River Protection Project System Plan, Rev. 7* document released to ORP on December 4, 2013. See joint ORP and Ecology letter 13-TPD-0070, dated December 12, 2013, for completion and description of M-062-40C scenarios.
3. Detailed assumption review was completed and has been approved by Ecology.
4. On February 11, 2014, ORP transmitted a letter (14-TPD-0003) to WRPS in response to letter WRPS-14003 13 to approve the use of Ecology's Appendix B, "Key Assumptions and Success Criteria," for ORP 11242, *River Protection Project System Plan, Rev. 7. (System Plan 7)*

5. On February 13, 2014 Ecology presented the five selected scenarios to the Hanford Advisory Board Tank Waste Committee.
6. Ecology, ORP, and WRPS reviewed and provided comments for Sections 1.0 and 2.0 of System Plan 7 during the week of February 17, 2014.
7. Ecology, ORP and WRPS reviewed and provided comments for Section 3.0 of the System Plan 7 during the week of March 21, 2014.
8. Ecology, ORP and WRPS reviewed and provided comments for Appendix C, "Modeling Tools," of the System Plan 7 during the week of April 1, 2014.
9. During the week of April 28, 2014, WRPS and ORP facilitated meetings for Ecology to define detail spending assumptions for Case 5.
10. On July 29, 2014, WRPS case authors presented the results of the five cases to Ecology and ORP.
11. System Plan 7 was reviewed, all comments resolved, and comments incorporated into the document.
12. On October 31, 2014, ORP transmitted System Plan 7 to Ecology.
13. ORP received Ecology's January 14, 2015, transmitted letter 15-NWP-004, regarding Ecology's review of System Plan 7.
14. ORP met with Ecology at the Tank Farms TPA and Consent Decree (CD) monthly status meeting on February 25, 2015.
15. ORP transmitted Letter 15-WSC-0027, ORP's response to Ecology's letter 15-NWP-004 to Ecology on June 2, 2015. ORP's letter provided clarification and several attachments of additional information requested in Ecology's January 14, 2015, letter.

Significant Planned Actions in the Next Six Months: None.

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: March 31, 2016, Status: To be missed. 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: March 31, 2016, Status: To be missed. 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:

ORP and Ecology signed TPA Change Packages M-47-14-01 and M-90-14-01 on July 14, 2014 moving the due date for M-047-07 and M-090-13 to March 31, 2016.

Significant Planned Actions in the Next Six Months: None.

Issues: None.

Supplemental Treatment and Part B Permit Applications

M-062-45ZZ (designation for M-062-45 item 3), Negotiate a one-time supplemental treatment selection, Due: April 30, 2015, Status: In dispute.

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

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:

*Per ORP letter 14-TF-0052, signed by ORP on May 6, 2014 and provided to Ecology on May 7, 2014, ORP documented the ORP/Ecology discussions for the *One-Time Hanford Tank Waste Supplemental Treatment Technologies Report* and that ORP does not intend to submit this report. ORP received Ecology's response letter, 14-NWP-110, on May 29, 2014. ORP letter 14-TF-0088, dated and delivered to Ecology on July 31, 2014, submitted a signed TPA change package to delete the requirement of the *One-Time Hanford Tank Waste Supplemental Treatment Technologies Report* from TPA Milestone M-062-40. Ecology signed TPA Change Package M-62-14-01 deleting M-062-40ZZ on August 12, 2014.

Significant Planned Actions in the Next Six Months: None.

Issues:

On January 30, 2015, ORP provided Ecology Change Control Form M-62-14-02, which proposed adding language under TPA Milestone M-062-45 to defer negotiations required under M-062-45. Ecology did not respond with the 14 day review period that ended February 13, 2015 which is deemed disapproval in accordance with the TPA. In letter 15-TF-0014, dated February 20, 2015, ORP initiated a dispute resolution. Ecology provided a justification for their disapproval on March 12, 2015 via letter 15-NWP-036. Ecology and ORP signed an extension of the dispute resolution period at the TPA project manager level until February 18, 2016. The extension is available in the TPA Administrative Record at

<http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=1509230319>

242-A Evaporator Status

(previously reported under Milestone M-48, which has been closed out)

242-A Evaporator Status:

The 242-A Evaporator 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	N/A	N/A	N/A	No campaign conducted in FY 2011 due to ongoing 242-A Evaporator and tank farm facility life extension and American Recovery and Reinvestment Act funded upgrades.
FY 2012	N/A	N/A	N/A	No campaign conducted in FY 2012 due to ongoing 242-A Evaporator and tank farm facility upgrades and revision to the 242-A Evaporator Documented Safety Analysis.
FY 2013	N/A	N/A	N/A	No campaigns to be conducted in FY 2013 due to ongoing 242 A Evaporator and tank farm facility upgrades and revision to the 242-A Evaporator Documented Safety Analysis.
FY 2014	13-01	AP-107	AP-107	Campaign started September 9, 2014. Campaign completed on October 9, 2014.
FY 2015	EC-01	AP-103 AP-104	AP-107	Campaign and flush activities completed on June 21, 2015.
FY 2015	EC-02	AZ-102	AP-103	Completed July 21, 2015.
FY 2015	EC-03	AZ-102	AP-103	Completed September 25, 2015.
FY 2016	EC-04	AW-106	AP-103	Estimated to begin February or March 2016.

FY = fiscal year.
N/A = not applicable.

Significant Planned Actions in the Next Six Months:

Steam system safety instrumental systems (SIS) upgrades were completed prior to performance of the EC-03 campaign. EC-03 was initiated on September 13, 2015, and completed September 25, 2015. Waste Volume Reduction was 375,000 including all flush activities.

Issues: None.

Double-Shell Tank System Update

Ultrasonic Testing Inspection

- Ultrasonic testing (UT) for Tank AN-103 is complete and inspection of the annulus floor has indicated thinning. The results have been documented in RPP-RPT-58776, *Ultrasonic Inspection Results for Double-Shell Tank 241-AN-103 – FY 2015, Rev 0*.
- Ultrasonic inspection operations are ongoing for Tank AN-104. Initial scans have indicated some thinning along the annulus floor. To further evaluate the condition, additional scanning of the annulus floor is currently being performed and the UT work is being completed by ITIVS of South Carolina.

Visual Inspection

- Continuing bi-weekly inspections of AY-102 waste accumulation sites.
- Continuing bi-monthly comprehensive inspection of AY-102 annulus.
- Annulus visual inspections are completed in Tanks AP-102, AP-103, AP-104, AP-105, AP-106, AP-108 AW-101, AW-102, and AW-104. This completes the FY 2015 annulus inspections for the double-shell tanks (DST).

Single-Shell Tank Integrity Assurance

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

Significant Past Accomplishments:

Completion of M-045-91H. The work completed to date under M-045-91F and M-045-91G does not necessitate the creation of any additional milestones. In accordance with a March 25, 2015, meeting with Ecology, ORP considers M-045-91H complete and does not intend to submit a change package for the creation of any additional milestones for SST integrity.

Significant Planned Actions in the Next Six Months:

Begin planning for the SST integrity assessment by an IQRPE (M-045-91I).

Issues: None.

In Tank Characterization and Summary

For the period from September 1 through September 30, 2015:

Accomplishments:

- Completed RPP-RPT-58766, *Derivation of Best-Basis Inventory for Tank 241-SX-110*, Rev 0.
- Completed RPP-RPT-58765, *Derivation of Best-Basis Inventory for Tank 241-SX-109*, Rev 0.
- Completed RPP-RPT-58764, *Derivation of Best-Basis Inventory for Tank 241-SX-107*, Rev 0.
- Completed RPP-RPT-58456, *Derivation of Best-Basis Inventory for Tank 241-AP-103 as of July 4, 2015*, Rev 1.
- Completed RPP-RPT-58698, *Derivation of Best-Basis Inventory for Tank 241-TX-107 as of July 1, 2015*, Rev 0.
- Completed RPP-RPT-58771, *Derivation of Best-Basis Inventory for Tank 241-SX-115*, Rev 0.
- Completed RPP-RPT-58770, *Derivation of Best-Basis Inventory for Tank 241-SX-114*, Rev 0.
- Completed RPP-RPT-50313, *Derivation of Best-Basis Inventory for Tank 241-AP-101 as of July 1, 2015*, Rev 2.
- Completed RPP-RPT-48103, *Derivation of Best-Basis Inventory for Tank 241-AP-107 as of July 1, 2015*, Rev 5.
- Completed RPP-RPT-46792, *Derivation of Best-Basis Inventory for Tank 241-AW-102 as of July 1, 2015*, Rev 8.
- Completed RPP-RPT-44049, *Derivation of Best-Basis Inventory for Tank 241-AZ-102 as of July 7, 2015*, Rev 8.
- Completed RPP-RPT-58620, *Derivation of Best-Basis Inventory for Tank 241-AX-101 as of July 1, 2015*, Rev 0.
- Completed RPP-CALC-60596, *Tank 241-AP-107 FY15 Q4 Process Knowledge Concentration Vector Calculations*, Rev 0.
- Completed RPP-CALC-60595, *Tank 241-AW-102 FY15 Q4 Process Knowledge Concentration Vector Calculation*, Rev 0.
- Completed RPP-CALC-60591, *Tank AZ-102 FY15 Q4 Supernatant Process Knowledge Vector Concentrations Calculation*, Rev 0.
- Completed RPP-SPEC-33590, *Data Quality Objectives for the Evaluation of Stack Chemical Emissions*, Rev 2.
- RPP-RPT-58891, *Final Report for Tank 241-AY-102A Leak-Detection Pit Liquid Grab Samples, July 2015*, Rev 0, was released September 9, 2015.
- Completed 241-SY-102 core sample anaerobic extrusions September 10, 2015. Three samples were extruded for lab analysis.

- Completed slurry sampling for 242-A Evaporator campaign EC-03. Two samples were obtained for lab analysis.

Planned Action within the Next Six Months:

Tank sampling:

- Tank 241-AN-106 grab sampling is planned for October 2015.
- Tank 241-C-111 hard heel retrieval in-process grab sampling is planned for October 2015.
- Tank 241-SY-101 grab sampling is planned for December 2015.
- Tank 241-AN-101 grab sampling is planned for December 2015.
- Tank 241-C-102 clamshell closure sampling is planned for January 2016.
- Tank 241-C-111 ORSS closure sampling is planned for March 2016.
- Tank 241-AP-107 grab sampling is planned for March 2016.
- Tank 241-AW-102 grab sampling (Evaporator campaign EC-05) is planned for March 2016.
- Tank 241-AW-106 grab sampling (Evaporator campaign EC-06) is planned for April 2016.

Best-Basis Inventory (BBI) updates:

BBI updates for the following tanks were completed in September:

- | | |
|--------------|--------------|
| • 241-AP-101 | • 241-SX-107 |
| • 241-AP-103 | • 241-SX-109 |
| • 241-AP-107 | • 241-SX-110 |
| • 241-AW-102 | • 241-SX-114 |
| • 241-AX-101 | • 241-SX-115 |
| • 241-AZ-102 | • 241-TX-107 |

BBI updates for the following tanks currently are planned to be completed in October:

- | | |
|--------------|--------------|
| • 241-AY-101 | • 241-C-105 |
| • 241-C-102 | • 241-SY-102 |

Data Quality Objectives (DQO):

- RPP-44057, *Data Quality Objectives to Support Strategic Planning*, Rev 2, is in-process to clarify DQO applicability and obtain data used to update the BBIs.
- HNF-SD-WM-DQO-001, *Data Quality Objectives for the Tank Farms Waste Compatibility Program*, Rev 21, is in-process to simplify quality control parameters.
- RPP-8532, *Double-Shell Tanks Chemistry Control Data Quality Objectives*, Rev 15, is in-process to identify additional analyses for corrosion mitigation and to simplify quality control parameters.

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 (TOC) for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing TPA milestones.

As of August 31, 2015, WRPS TOC has worked 315 days without a Lost Time Workday Injury, and 4 days since the last recordable case. There was one recordable case in August.

August-15										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	31,307	34,786	43,513	3,479	(8,727)	1.11	0.80			
FYTD	445,884	447,319	471,368	1,435	(24,049)	1.01	0.95	506,645		
CTD	2,789,789	2,765,798	2,772,314	(23,991)	(6,515)	0.99	1.01	3,665,322	3,675,072	(9,750)

ACWP = actual cost of work performed.
 BAC = budget at completion.
 BCWP = budgeted cost of work performed.
 BCWS = budgeted cost of work scheduled.
 CM = current month
 CPI = cost performance index.
 CTD = cumulative to date

CV = cost variance.
 EAC = estimate at completion.
 FYTD = fiscal year to date
 SPI = schedule performance index.
 SV = schedule variance.
 VAC = variance at completion.

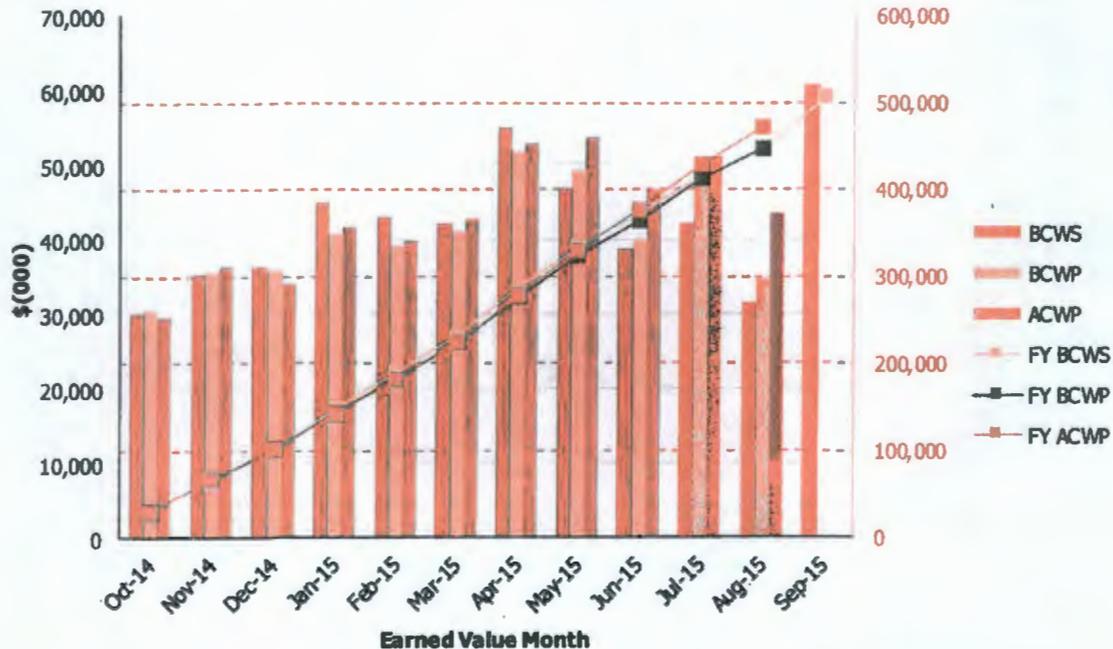
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

August-15

Tank Farms ORP-0014

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$30,052	\$30,480	\$29,607	1.01	1.03	\$30,052	\$30,480	\$29,607	1.01	1.03
Nov 2014	\$35,246	\$35,697	\$36,417	1.01	0.98	\$65,298	\$66,178	\$66,024	1.01	1.00
Dec 2014	\$36,377	\$35,858	\$33,978	0.99	1.06	\$101,675	\$102,036	\$100,002	1.00	1.02
Jan 2015	\$45,082	\$40,697	\$41,603	0.90	0.98	\$146,757	\$142,733	\$141,605	0.97	1.01
Feb 2015	\$42,913	\$39,189	\$39,643	0.91	0.99	\$189,671	\$181,922	\$181,248	0.96	1.00
Mar 2015	\$42,159	\$41,174	\$42,721	0.98	0.96	\$231,830	\$223,096	\$223,968	0.96	1.00
Apr 2015	\$54,958	\$51,747	\$52,923	0.94	0.98	\$286,788	\$274,843	\$276,891	0.96	0.99
May 2015	\$46,888	\$49,161	\$53,532	1.05	0.92	\$333,676	\$324,005	\$330,423	0.97	0.98
Jun 2015	\$38,744	\$40,149	\$46,503	1.04	0.86	\$372,420	\$364,154	\$376,926	0.98	0.97
Jul 2015	\$42,157	\$48,379	\$50,929	1.15	0.95	\$414,577	\$412,533	\$427,855	1.00	0.96
Aug 2015	\$31,307	\$34,786	\$43,513	1.11	0.80	\$445,884	\$447,319	\$471,368	1.00	0.95
Sep 2015	\$60,762					\$506,645				

CTD \$2,789,789 \$2,765,798 \$2,772,314 0.99 1.00

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

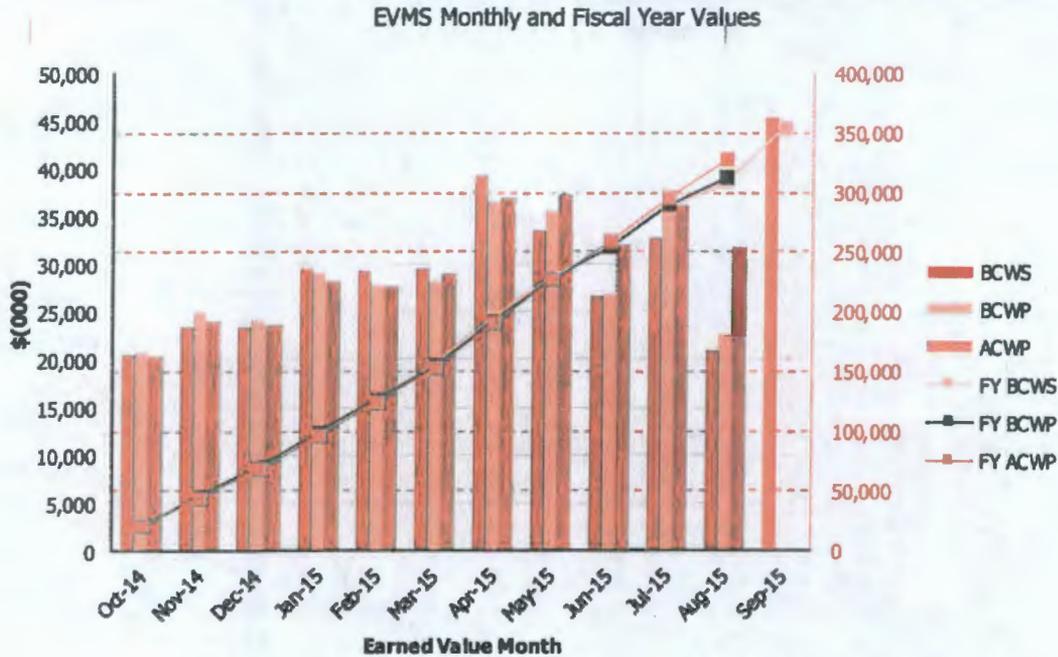
EVMS = Earned Value Management System.
 FY = fiscal year.
 SPI = schedule performance index

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

August-15

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



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$20,627	\$20,833	\$20,428	1.01	1.02	\$20,627	\$20,833	\$20,428	1.01	1.02
Nov 2014	\$23,471	\$24,929	\$23,988	1.06	1.04	\$44,098	\$45,762	\$44,416	1.04	1.03
Dec 2014	\$23,467	\$24,105	\$23,548	1.03	1.02	\$67,565	\$69,867	\$67,964	1.03	1.03
Jan 2015	\$29,511	\$29,162	\$28,218	0.99	1.03	\$97,075	\$99,029	\$96,182	1.02	1.03
Feb 2015	\$29,299	\$27,739	\$27,582	0.95	1.01	\$126,375	\$126,768	\$123,764	1.00	0.98
Mar 2015	\$29,525	\$28,162	\$28,967	0.95	0.97	\$155,900	\$154,929	\$152,732	0.99	0.99
Apr 2015	\$39,203	\$36,623	\$36,998	0.93	0.99	\$195,103	\$191,553	\$189,730	0.98	0.99
May 2015	\$33,584	\$35,557	\$37,250	1.06	0.95	\$228,686	\$227,109	\$226,980	0.99	1.00
Jun 2015	\$26,594	\$26,830	\$32,081	1.01	0.84	\$255,280	\$253,940	\$259,061	0.99	1.02
Jul 2015	\$32,674	\$35,612	\$36,276	1.09	0.98	\$287,954	\$289,551	\$295,337	1.01	1.02
Aug 2015	\$20,845	\$22,598	\$31,783	1.08	0.71	\$308,799	\$312,150	\$327,120	1.01	1.05
Sep 2015	\$45,399					\$354,198				
CTD	\$1,846,227	\$1,837,993	\$1,834,803	1.00	1.00					

Base Operations and Tank Farm Projects

The current month favorable schedule variance (SV) of \$1,753K is due to the following:

- AP-102 HIHTL installation authorized unpriced work (AUW) replan; scope resulted in a single-point adjustment by aligning BCWS and BCWP to ACWP.
- AP-102 equipment removal and installation AUW replan; scope resulted in a single-point adjustment by aligning BCWS and BCWP to ACWP.

- Level rise/Leak checks completed the AP-107 and AP-104 level rises ahead of schedule. Completion was expected in the next period but the majority of the work was completed in the current period.
- AP exhauster installation schedule performance recovery from earlier periods related to the Inlet Air Control Station work. Field work and procurement was initially planned for completion in an earlier period in FY 2015.

The current month unfavorable cost variance (CV) of (\$9,185K) is due to the following:

- AP-102 HIHTL procured shielding originally planned to be delivered/costed in August was actually delivered in March. Additionally, A UW replan scope resulted in a single-point adjustment by aligning BCWS and BCWP to ACWP.
- AY-102 Administrative Order and Environmental Support A UW replan; scope resulted in a single-point adjustment by aligning BCWS and BCWP to ACWP.
- Effluent Treatment Facility (ETF)/ Liquid Effluent Retention Facility (LERF)/Treatment Effluent Disposal Facility (TEDF) spare parts A UW replan; scope resulted in a single-point adjustment by aligning BCWS and BCWP to ACWP.
- ETF/LERF/TEDF materials and subcontract support replan on the A UW; scope resulted in a single-point adjustment by aligning BCWS and BCWP to ACWP.

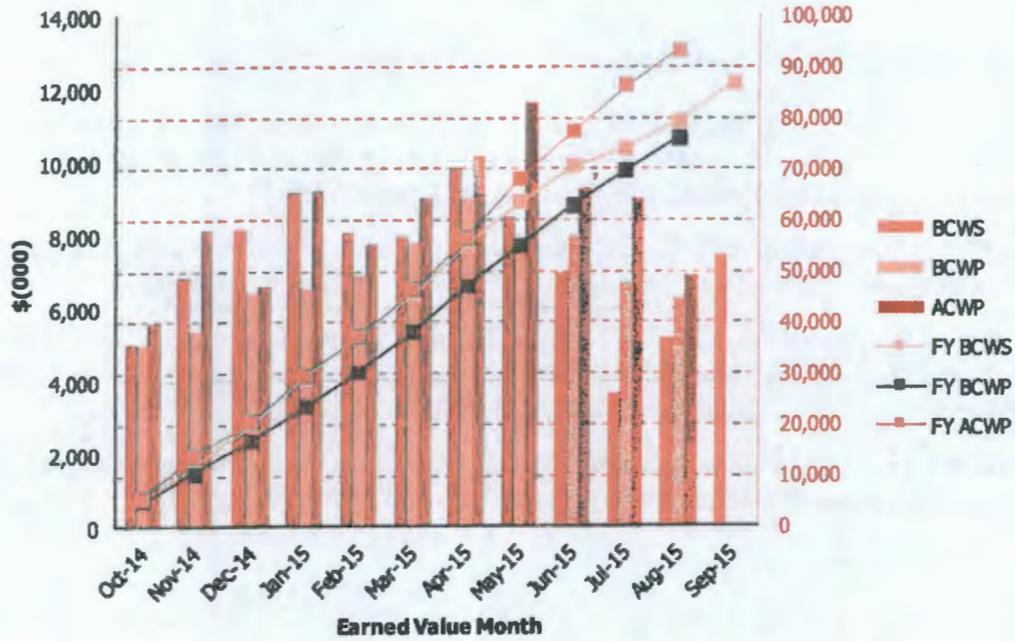
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

August-15

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$5,024	\$5,011	\$5,609	1.00	0.89	\$5,024	\$5,011	\$5,609	1.00	0.89
Nov 2014	\$6,852	\$5,392	\$8,174	0.79	0.66	\$11,876	\$10,403	\$13,783	0.88	0.75
Dec 2014	\$8,171	\$6,453	\$6,612	0.79	0.98	\$20,047	\$16,856	\$20,395	0.84	0.83
Jan 2015	\$9,167	\$6,524	\$9,195	0.71	0.71	\$29,214	\$23,380	\$29,589	0.80	0.79
Feb 2015	\$8,075	\$6,924	\$7,719	0.86	0.90	\$37,290	\$30,304	\$37,309	0.81	0.81
Mar 2015	\$7,971	\$7,801	\$9,009	0.98	0.87	\$45,261	\$38,105	\$46,318	0.84	0.82
Apr 2015	\$9,818	\$9,019	\$10,148	0.92	0.89	\$55,079	\$47,124	\$56,466	0.86	0.83
May 2015	\$8,474	\$7,830	\$11,613	0.92	0.67	\$63,553	\$54,954	\$68,079	0.86	0.81
Jun 2015	\$6,981	\$8,021	\$9,247	1.15	0.87	\$70,534	\$62,976	\$77,326	0.89	0.81
Jul 2015	\$3,666	\$6,714	\$8,983	1.83	0.75	\$74,199	\$69,690	\$86,309	0.94	0.81
Aug 2015	\$5,201	\$6,256	\$6,916	1.20	0.90	\$79,400	\$75,946	\$93,225	0.96	0.81
Sep 2015	\$7,417					\$86,818				
CTD	\$584,899	\$571,363	\$602,569	0.98	0.95					

Retrieve and Close Single Shell Tanks

The current month favorable schedule variance (SV) of \$1,055K is due to:

- Schedule Recovery: Tank 241-C-105 retrieval operations estimated 19,000 gallons of waste has been retrieved since the last reporting period.

- **Schedule Recovery:** Crews completed extended reach sluicer system (ERSS) installation activities at riser 6 and initiated ERSS installation activities at riser 3 at Tank 241-C-111 to support retrieval operations in early October: this work was originally planned to be completed in May.
- **Schedule Recovery:** Crews continued field activities relates to the replacement of the 241-C-111 slurry pump: this work was originally schedule to be completed in July.
- **Schedule Recovery:** Receipt of previously delayed materials related to mechanical components for the A/AX Ventilation System.

The current month unfavorable cost variance (CV) of **(\$660K)** is due to:

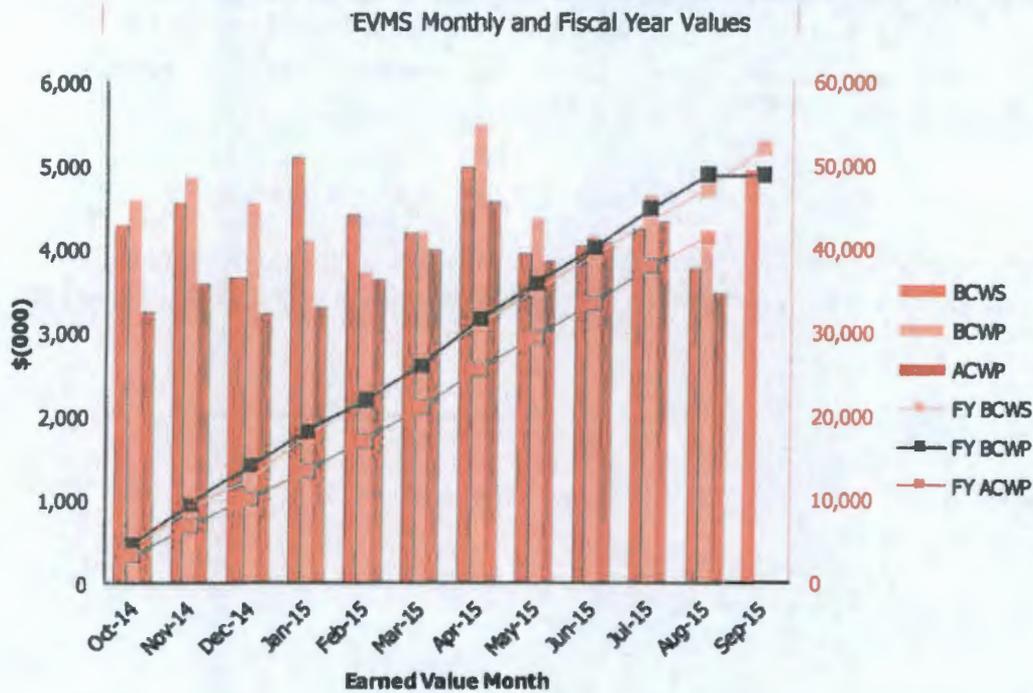
- Project required to carry full retrieval crew during work stoppages: lockout/tag out (LOTO), AN-106 decant and slow retrieval rates (1 gallon per minute versus planned 3 gallons per minute).

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

August-15

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



Earned Value Month	BCWS (\$K)	BCWP (\$K)	ACWP (\$K)	SPI	CPI	FY BCWS (\$K)	FY BCWP (\$K)	FY ACWP (\$K)	FY SPI	FY CPI
Oct 2014	\$4,277	\$4,604	\$3,261	1.08	1.41	\$4,277	\$4,605	\$3,261	1.08	1.41
Nov 2014	\$4,549	\$4,876	\$3,585	1.07	1.36	\$8,826	\$9,480	\$6,846	1.07	1.38
Dec 2014	\$3,652	\$4,559	\$3,229	1.25	1.41	\$12,478	\$14,040	\$10,075	1.13	1.39
Jan 2015	\$5,101	\$4,113	\$3,308	0.81	1.24	\$17,579	\$18,152	\$13,383	1.03	1.36
Feb 2015	\$4,413	\$3,734	\$3,636	0.85	1.03	\$21,992	\$21,887	\$17,019	1.00	1.29
Mar 2015	\$4,185	\$4,206	\$3,988	1.00	1.05	\$26,177	\$26,092	\$21,008	1.00	1.24
Apr 2015	\$4,989	\$5,497	\$4,584	1.10	1.20	\$31,166	\$31,590	\$25,592	1.01	1.23
May 2015	\$3,946	\$4,372	\$3,849	1.11	1.14	\$35,112	\$35,961	\$29,441	1.02	1.22
Jun 2015	\$4,043	\$4,154	\$4,082	1.03	1.02	\$39,155	\$40,115	\$33,522	1.02	1.20
Jul 2015	\$4,250	\$4,650	\$4,341	1.09	1.07	\$43,406	\$44,765	\$37,864	1.03	1.18
Aug 2015	\$3,759	\$4,116	\$3,473	1.09	1.19	\$47,165	\$48,881	\$41,336	1.04	1.18
Sep 2015	\$4,933					\$52,098	\$48,881			
CTD	\$323,734	\$321,445	\$301,681	0.99	1.07					

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

The current month favorable schedule variance (SV) of \$356K is due to:

- Schedule recovery of subcontractor work supporting secondary waste form development and low temperature waste form.

The current month favorable cost variance (CV) of \$643K is due to:

- Reflects under-stated performance in previous months, resulting this month in a positive cost variance. The performance was not aligned with actual cost data received from Pacific Northwest National Laboratory (PNNL)/Savannah River National Laboratory (SRNL) primarily on low temperature waste form development and is now being trued up at the end of FY 2015.

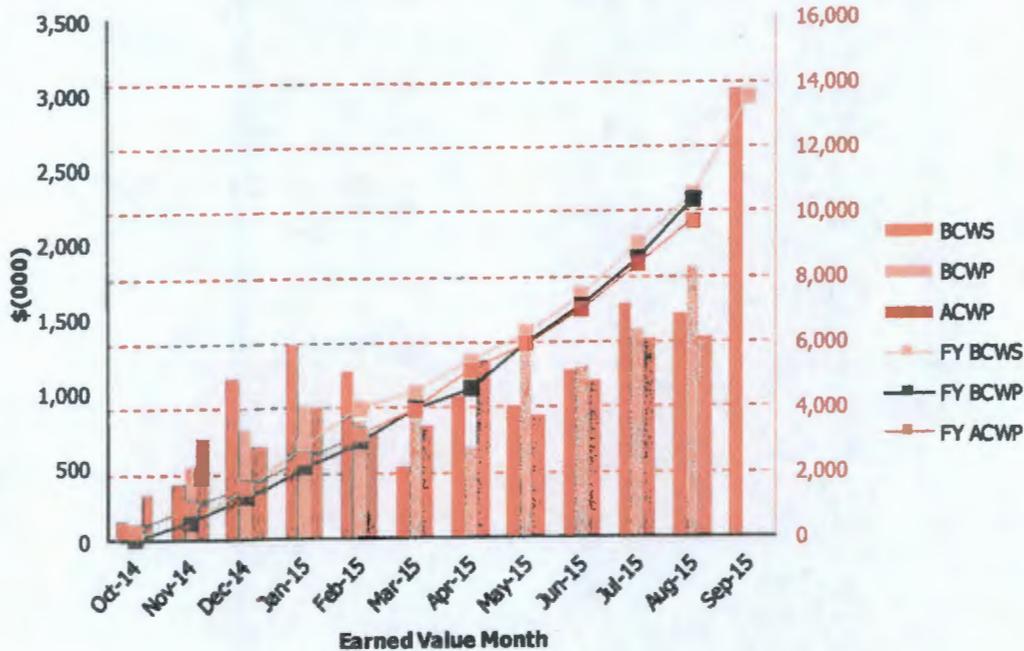
EXC-O1a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

August-15

Tank Farms ORP-0014
Treat Waste 5.5

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	\$124	\$32	\$308	0.26	0.10	\$124	\$32	\$308	0.26	0.10
Nov 2014	\$374	\$500	\$674	1.34	0.74	\$498	\$532	\$982	1.07	0.54
Dec 2014	\$1,087	\$741	\$628	0.68	1.18	\$1,585	\$1,273	\$1,610	0.80	0.79
Jan 2015	\$1,304	\$899	\$883	0.69	1.02	\$2,889	\$2,172	\$2,493	0.75	0.87
Feb 2015	\$1,126	\$792	\$707	0.70	1.12	\$4,015	\$2,964	\$3,200	0.74	0.93
Mar 2015	\$478	\$1,006	\$754	2.11	1.33	\$4,492	\$3,970	\$3,954	0.88	1.00
Apr 2015	\$948	\$607	\$1,194	0.64	0.51	\$5,441	\$4,577	\$5,148	0.84	0.89
May 2015	\$884	\$1,403	\$818	1.59	1.71	\$6,325	\$5,980	\$5,966	0.95	1.00
Jun 2015	\$1,127	\$1,144	\$1,057	1.02	1.08	\$7,452	\$7,124	\$7,023	0.96	1.01
Jul 2015	\$1,566	\$1,402	\$1,328	0.90	1.06	\$9,018	\$8,526	\$8,351	0.95	1.02
Aug 2015	\$1,501	\$1,816	\$1,341	1.21	1.35	\$10,519	\$10,342	\$9,692	0.98	1.07
Sep 2015	\$3,012					\$13,531				
CTD	\$14,818	\$14,887	\$14,089	1.00	1.06					

Treat Waste

The primary current month favorable schedule variance (SV) of \$314K is due to:

- Recovery of expanded isotherm testing (sRF-3) request for proposal, issue contract, and draft test plan activities that were planned to be performed in a previous reporting period.

The primary current month favorable cost variance (CV) of \$475K is due to:

- Lower than planned subcontract labor usage and material procurement during integrated scale technology maturation driven by utilizing: existing equipment, equipment modifications, and existing materials.

Single-Shell Tank Retrieval and Closure Program

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

M-045-56K, Complete Implementation of Agreed to Interim Measures, Due: July 31, 2015, Status: Complete. Annual meeting was held July 15, 2015. Meeting notes have been placed in the Administrative Record at this location:

<http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0080444H>

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-045-61A, Submit to Ecology for review and approval as an Agreement primary document, document review process, a Phase 2 Corrective Measures Study, and Revision 0 update to the RFI Report for WMA-C), Due: December 31, 2016, Status: On Schedule. The *Phase 2 RCRA Facility Investigation Report Draft A for Waste Management Area C (WMA-C)*, RPP-RPT-58339, was transmitted to Ecology on December 23, 2014, via letter 14-TF-0131. This milestone was created by *Hanford Federal Facility Agreement and Consent Order (HFFACO)* change package M-45-14-03, signed October 1, 2014.

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: Six months after the approval of the corrective measures study (CMS) submitted under milestone M-045-61A Status: TPA Change Control form M-45-15-02 approved on April 14, 2015.

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

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

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

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

- M-045-86I: RDR for C-101 was due September 24, 2015, completed on September 24, 2015 with letter 15-TF-0099.
- M-045-86C: RDR for C-104 was due March 21, 2014, completed on February 18, 2014 with letter 14-TF-0013
- M-45-86E: RDR for C-107 was due July 28, 2015, completed on September 15, 2015 with letter 15-TF-0086.
- M-045-86F: RDR for C-108 was due May 1, 2014, completed on November 27, 2013 with letter 13-TF-0120
- M-045-86G: RDR for C-109 was due June 4, 2014, completed on March 13, 2014 with letter 14-TF-0020
- M-045-86H: RDR for C-110 was due January 29, 2015, completed on August 6, 2014 with letter 14-TF-0086.
- M-045-86K: RDR for C-112 was due September 30, 2015, completed on September 30, 2015 with letter 15-TF-0098

M-045-92, Complete Installation of Four (4) Additional Interim Barriers (see interim milestones below), Due: October 31, 2017, Status: In Dispute. TPA Change Control form M-45-15-01 submitted via letter 15-TF-0027 on March 31, 2015. Change was not approved and dispute resolution process was initiated via letter 15-TF-0042 on April 20, 2015. Dispute is at the project manager level and has been extended to October 15, 2015.

M-045-92N, Construct Barriers 1 and 2 in 241-SX Farm, Due: October 31, 2015, Status: In Dispute. TPA Change Control form M-45-15-01 submitted via letter 15-TF-0027 on March 31, 2015. Change was not approved and dispute resolution process was initiated via letter 15-TF-0042 on April 20, 2015. Dispute is at the project manager level and has been extended to October 15, 2015.

M-045-92O, Submit a Final Design and Monitoring Plan for Interim Barrier 3, Due: June 30, 2015, Status: In Dispute. TPA Change Control form M-45-15-01 submitted via letter 15-TF-0027 on March 31, 2015. Change was not approved and dispute resolution process was initiated via letter 15-TF-0042 on April 20, 2015. Dispute is at the project manager level and has been extended to October 15, 2015.

Significant Past Accomplishments:

- Automated data collection systems for T Farm and TY Farm interim barrier monitoring continue gathering data

- Documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act (RCRA) Facility Investigation Report (RFI) was completed, and RPP-RPT-58339 was transmitted to Ecology on December 23, 2014, completing M-045-61.
- Completed the annual interim barrier monitoring report for data collected in 2014, RPP-ENV-58420.
- Submitted practicability evaluation request to forego a third retrieval technology in Tank 241-C-102 to Ecology for review.
- Completed Tank-C-105 MARS-V initial retrieval campaign (45 percent retrieved at end of August).
- Completed Tank-C-111 ERSS Installation at Riser #6.
- Completed C-107, C-112 and C-101 retrieval data reports (RDR).
- Completed uncertainty analysis for the Tank Farm Risk Assessment.
- Finalized Integrated Disposal Facility (IDF) Performance Assessment (PA) data packages from Workshop 2

Significant Planned Activities in the Next Six Months:

- Continue data collection for T Farm and TY Farm interim surface barrier monitoring
- Develop the annual interim barrier monitoring report for data collected in 2015
- M-45-56K meet yearly – complete implementation of agreed to interim measures (meeting minutes/TPA Administrative Record)
- Complete C-105 first and second technology retrieval operations.
- M-45-86a - Complete C-101 RDR
- Complete C-111 ERSS installation and complete retrieval operations (second and third technologies)
- M-45-86j – Complete C-112 RDR
- Complete A/AX infrastructure (water and utilities) design – FY 2015 Phase 4A and Phase 5
- Finalize AX-Farm tank waste retrieval work plans (TWRWP)
- Complete C.2.2.2-1 integrated SST WMA closure plan (FY 2015)
- PBI-11.0.3 – Complete AX Farm tank retrieval system media for AX Farm to AX-102 retrieval system
- Complete AX Farm field work for tower, stack extension, and platform installation
- Complete AX Farm office trailer design (temporary facilities)
- Complete A/AX infrastructure SIS design modifications
- Complete equipment removal/disposal at AX-101 pit and riser
- Complete AX-2707 fencing and gate upgrades

- Finalize TPA/RCRA Tier 1 Closure Plan
- Finalize/Issue material for Workshop 3 and 4 for IDF PA
- Complete TPA/RCRA Tier 3 closure plan templates and perform scoping for PA (A Complex)
- Complete WMA-C tank residuals draft performance assessment results

Issues:

- Change control form M-45-15-01 was submitted by ORP via letter 15-TF-0027 to Ecology for approval. Ecology disapproved M-45-15-01 via 15-NWP-075 due to (1) interim barriers are necessary to mitigate impacts to human health and the environment, (2) the sooner barriers are installed the better along with further delays to the WTP, and (3) barrier size of 100 foot boundary is important. On April 20, 2015 via 15-TF-0042 ORP initiated dispute. On April 23, 2015 the first extension was signed to August 16, 2015. On May 14, 2015, and June 25, 2015, ORP and Ecology met to resolve the dispute in two meetings and a draft M-45-15-04 with Force Majeure language as per the request from Ecology on May 14, 2015. On July 1, 2015, ORP and Ecology had a third and final meeting to resolve the dispute. This dispute has been extended to October 15, 2015, with a proposed draft settlement proposed by Ecology.
- Change Control Form M-45-15-03 for M-045-82 milestone was sent on June 30, 2015 via 15-TF-0065. On July 14, 2015, Ecology disputed the M-45-15-03 via 15-NWP-128 based on (1) M-45-15-3 does not cite good cause for extensions, (2) the form does not describe all impacts of the changes, and (3) Ecology would like to work with ORP to develop a logic diagram that describes the sequence of activities necessary to complete the milestone. On July 16, 2015, via 15-TF-0069 ORP initiated dispute resolution and on July 31, 2015, the extension of dispute at the project manager level was extended to October 20, 2015.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Complete	MARS-V	MARS-V-High Pressure Water Spray	-

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S -High Pressure Water Spray	Water Dissolution
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	Complete	Modified Sluicing	Mechanical Waste Conditioning with an In-Tank Vehicle	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water using the ERSS	Chemical Dissolution Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

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 Six Months:

- Develop AX Farm tank waste retrieval work plans.

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 Six Months:

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

Issues:

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

provided until the PA is published.

Tank Retrievals with Individual Milestones

Tank 241-A-103

M-045-15, Completion of Tank A-103 SST Waste Retrieval, Due: September 30, 2022, Status: On schedule. Change package M-45-11-04 replaced Tank S-102 with Tank A-103 and changed 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 six 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 six months and no issues for Tank 241-S-112.