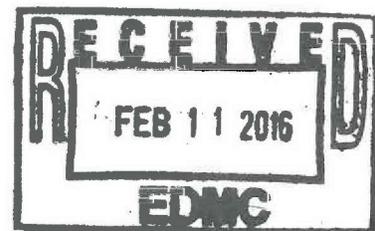


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Office of River Protection Tri-Party Agreement Milestone Review Meeting Minutes

Washington State Department of Ecology Building
Richland, Washington

November 19, 2015



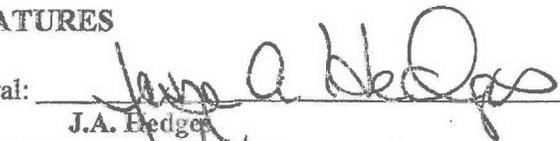
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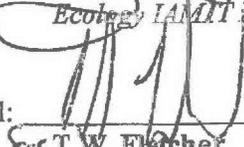
Approval: _____


J.A. Hedges
Ecology IAMIT Representative

Date: _____

2/4/16

Approval: _____

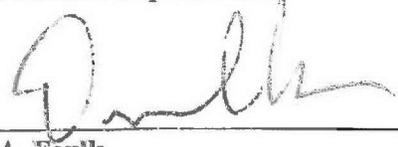

T.W. Fletcher
DOE IAMIT Representative

GLYN TRENCHARD

Date: _____

1-27-16

Approval: _____

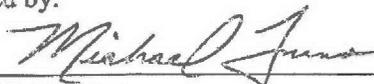


D.A. Faulk
EPA IAMIT Representative

Date: _____

2/9/16

Minutes Prepared by:



M.J. Turner
Mission Support Alliance

Date: _____

1/14/16

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TRI-PARTY AGREEMENT MILESTONE REVIEW AND MONTHLY SUMMARY REPORT

1.0 ADMINISTRATIVE ITEMS/MILESTONE STATUS

The reports, agreements, issues, actions, and key documents list were discussed and updated as follows.

Upcoming Meetings

The next U.S. Department of Energy (DOE), Office of River Protection (ORP) quarterly milestone review meeting is scheduled for February 18, 2016, from 8:30 to 10:15 a.m. at the Washington State Department of Ecology (Ecology) office in Richland, Washington.

Recent Items Entered/To Be Entered into the Administrative Record

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 noted that milestone M-045-62 was moved to fiscal year 2017 in the milestone status table. ORP stated that M-045-62 has a TBD date because it is based on completion of M-45-61A and any activities associated with that milestone.

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

ORP stated that there were no updates to provide regarding this action. ORP noted that a meeting is scheduled with Ecology on December 3, 2015, to provide the status of the Waste Management Area C (WMA-C) performance assessment (PA). This action remains open.

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

ORP stated that it has been reporting milestone M-045-83 is to be missed for closure of WMA-C. Ecology asked if ORP is still planning to provide a schedule for the single-shell tank (SST) closures for WMA-C. ORP responded that it had planned to provide an update on the schedule under M-045-82 status. ORP stated that a draft integrated schedule for the tier 2 and tier 3 closure plans, which will lead to closure of WMA-C, will be provided to Ecology by December 31, 2015. Ecology stated that ORP's plan to provide the draft schedule by the end of December 2015 is acceptable. This action remains open.

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

ORP noted that this action remains open as a placeholder to remind the parties that a list of team members is needed.

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

ORP stated that action No. 2 provides a status for action No. 4. This action remains open.

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

There were no updates provided today regarding the Low-Activity Waste Pretreatment System (LAWPS). This action remains open.

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

There were no updates provided today regarding LAWPS. This action remains open.

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

ORP reported that a meeting was held with Ecology, and a proposed path forward was agreed to regarding M-045-91E. ORP stated that a status will be provided during today's meeting when SST integrity assurance is discussed. This action remains open.

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

ORP stated that this action was closed last month and will be removed from the action table.

Action No. 10 (TF-15-07-03)

ORP indicated that it has been reporting updates on this action and will continue to follow up. This action remains open.

Action No. 11 (TF-15-08-01)

ORP stated that this action was carried over from the first Liquid Effluent Retention Facility (LERF)/Effluent Treatment Facility (ETF) project managers meeting and was incorporated into this action table. This action is closed.

Action No. 12 (TF-15-08-02)

See action No. 11. This action is closed.

Action No. 13 (TF-15-08-03)

ORP stated that this action was carried over from a standalone meeting and is not applicable.

Action No. 14 (TF-15-08-04)

ORP stated that this action was carried over from a standalone meeting and is not applicable.

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

ORP stated that it is working on this action and will set up a discussion with Ecology at the appropriate time. This action remains open.

Action No. 16 (TF-15-10-02)

There were no updates provided today. This action remains open.

Action No. 17 (TF-15-10-03)

ORP reported that it is working on this action and will provide the information to Ecology in the near future. This action remains open.

Key Documents List

ORP provided an updated key documents list.

2.0 SYSTEM PLAN

ORP stated that there were no updates regarding System Plan 7.

3.0 ACQUISITION OF NEW FACILITIES

ORP stated that there were no changes to report, although progress and changes are anticipated in the next couple of months.

4.0 SUPPLEMENTAL TREATMENT AND PART B PERMIT APPLICATIONS

ORP stated that there were no updates to report. Ecology inquired about the status of supplemental treatment. ORP responded that ORP and Ecology are in dispute on the M-062-45 milestone series, and the dispute has been extended until February 2016. ORP added that there has not been much action regarding supplemental treatment. Ecology asked what the scope of supplemental treatment includes from a double-shell tank (DST) perspective. Ecology referred to the status of milestone M-062-31-T01 for completing the RCRA Part B permit modification, which is on schedule and due in April 2016. ORP pointed to M-062-45ZZ-A, which is in dispute and includes M-062-31-T01, and stated that ORP is researching whether M-062-31-T01 would technically be considered in dispute and need to be added into a change package.

Action TF-18 - ORP took an action to provide a briefing to Ecology regarding the process for supplemental treatment.

5.0 242-A EVAPORATOR STATUS

ORP reported that the next evaporator campaign will be EC-04, which is estimated to start during the third quarter of fiscal year (FY) 16, although the goal is to start the campaign at the end of the second quarter in March 2016. ORP added that the EC-04 campaign date changes along with the critical path schedule. ORP stated that preventive maintenance and calibrations are being done on the evaporator in between campaigns. ORP noted that three campaigns were completed in FY15, achieving a waste volume reduction of 1.9 million gallons.

Oregon Department of Energy asked if the 1.9 million gallons was a year-to-date amount. ORP responded that it was for FY15, which ended at the end of September 2015. ORP offered to provide the amount by calendar year. Ecology referred to discussions about the possibility of three evaporator campaigns in FY16, and inquired about including that information in the status table. ORP responded that there is the possibility of three campaigns in FY16, and that is what ORP and the contractor are working towards, but the preference is to wait until there is more certainty about the campaigns. Ecology inquired about the sampling schedule for the campaign in March 2016. ORP responded that the sampling has been scheduled, and the analysis and

calculations are being done now, which will result in the process control plan. Ecology asked if an Independent Qualified Registered Professional Engineer (IQRPE) assessment was scheduled for FY16. ORP responded that an IQRPE was done in the last couple years on the main vessel and the condenser tank, and those components were extended out for 10 years. ORP added that there may be other components of the evaporator in IQRPE evaluations.

Ecology Request 1: ORP to follow up with Ecology regarding FY16 IQRPE assessment on the evaporator.

Ecology inquired about the life expectancy of the evaporator. ORP responded that the evaporator has had numerous evaluations, and the last integrity assessment that was done provided a life expectancy through 2039. ORP noted that life extension upgrades to the evaporator have been done over the years and will continue to be done. Ecology asked if that meant the evaporator could last beyond 2039 if the upgrades continue. ORP indicated that it should last beyond 2039, if needed, and noted that the evaporator is expected to serve as long as it will be needed. ORP added that with the continued upgrades and maintenance, the evaporator is in very good condition. (Note: At the end of today's meeting, an update was provided on the latest IQRPE evaluation that gave a life extension for the evaporator through 2052.)

6.0 LIQUID EFFLUENT RETENTION FACILITY/200 AREA EFFLUENT TREATMENT FACILITY

ORP reported that the 200 Area ETF will remain in shutdown mode for maintenance, and startup is still anticipated for spring 2016. ORP stated that staff training continues, primarily for the nuclear chemical operators. Component and system testing will follow in the near future, along with readiness activities, to support startup. ORP stated that readiness activities are primarily associated with documentation that will be followed to ensure a comprehensive startup. ORP stated that the subcontract has been awarded for the berm coating of specific areas, and the procurement is pending. Ecology referred to the LERF basin table, and inquired about the ERDF leachate potentially being sent to the 200 West pump-and-treat system. Ecology noted that there is a hard pipe source coming into LERF/ETF, and that the ERDF leachate activity needs to be captured. ORP responded that an action item could be established to follow up with the ERDF leachate. ORP noted that the pipeline is a DOE Richland Operations Office (RL) function, and RL has asked ORP if it would maintain the pipeline. ORP added that it is still evaluating RL's proposal to maintain the pipeline. Ecology asked if there was a timeline for when changeover of the pipeline might occur. ORP responded that it is still planning to receive ERDF leachate, and all of the forecasting still assumes there will not be any change unless a definitive response to RL's proposal is made.

7.0 TANK SYSTEM UPDATE

ORP stated that DST system updates have been reported for the past several months, and since the SST integrity milestones are wrapping up, the DST and SST systems are being consolidated as one update in the monthly summary report. ORP noted that at the request of Ecology, the FY16 planned actions have been included in the tank system update, and it includes the annulus video inspections and the ultrasonic testing that are planned for the DSTs.

ORP noted that there are a number of SSTs that are identified for video inspections this year. ORP reported that a current SST integrity-related activity is the use of the portable exhauster at T-111. The plan is to complete that effort and remove the remaining liquid, and then identify another tank to utilize the same exhauster. ORP stated that 3,000 gallons of water have been removed from T-111 since the portable exhauster has been operating, and multiple videos have been taken.

8.0 SINGLE-SHELL TANK INTEGRITY ASSURANCE

ORP noted that there is one remaining SST integrity milestone, which is the IQRPE in 2018. ORP referred to action No. 8 (TF-15-06-02) and the discussion about continuing to carry milestone M-045-91E-1 for submittal of dome deflection surveys. ORP stated that a change package has been prepared that would call the milestone complete, and that ORP would continue to report on the dome deflection surveys in the new consolidated section in the monthly summary report entitled Tank System Update. ORP noted that Ecology could request reports associated with the dome deflection survey. Ecology stated that a decision has not been made about closing the milestone and tracking the information in the tank system update.

9.0 IN-TANK CHARACTERIZATION SUMMARY

ORP noted that four best basis inventory updates were issued. ORP stated that sampling for the next six months is in support of C Farm retrieval, chemistry control, and the upcoming 242-A Evaporator campaign.

10.0 TANK OPERATIONS CONTRACT OVERVIEW

ORP reported that overall the cost and schedule performance is good. ORP stated that the positive cost variance in base operations was mainly due to the overhead pass back of 3.1 million, and a small part of it is due to good progress at the 242-A Evaporator. ORP noted that the positive schedule variance for retrieval was an earned value anomaly. The performance was based on the number of technologies, and since the Mobile Arm Retrieval System (MARS) vacuum technology will not be continued, the remaining performance for the MARS vacuum was closed out. ORP stated that waste feed delivery is on track and does not have a large cost or schedule variance.

11.0 SINGLE-SHELL TANK CLOSURE PROGRAM

ORP reported that the annual interim measures meeting was held associated with M-045-56, and all of the action items from the previous year were closed out and future action items were developed related to T-111 and the 242-A Evaporator. ORP stated that an internal discussion is needed regarding M-045-59 to determine whether ORP needs to keep reporting on the milestone. ORP noted that M-045-59 refers to M-045-58, which was completed.

ORP reported M-045-61A and M-045-62 as being on schedule, to be completed December 2016 and six months thereafter, respectively.

ORP stated that a change control form for M-045-82 was submitted to Ecology, and the milestone is in dispute since Ecology disagreed with the dates in the change control form. ORP stated that it had initially planned to submit a draft integrated schedule for the tier 2 and 3 closure

plans at the end of December 2016, which Ecology disagreed with, and a draft integrated schedule will be submitted by December 31, 2015. ORP stated that there is an extension through February 18, 2016 for the parties to negotiate agreement on dates. Ecology asked if new milestones will be negotiated based on the draft integrated schedule or any adjustments to the schedule. ORP responded that new milestones would be negotiated. ORP noted that the draft integrated schedule will be resource-loaded, and if the appropriated funds are not received, the TPA process will be utilized to possibly adjust milestones in the future. ORP stated that milestone M-045-83 is to be missed, and when the integrated schedule is completed, the milestones can be adjusted.

ORP stated that M-045-92 is in dispute, and an extension to December 2, 2015 was presented to and signed by Ecology during today's meeting. ORP noted that the extension will provide additional time to get the settlement agreement in place, which is currently being negotiated and expected to be signed next week.

12.0 SINGLE-SHELL TANK RETRIEVAL PROGRAM

ORP reported that the C-102 request to forego the third technology was approved by Ecology, and a retrieval completion certificate will be sent to Ecology. ORP noted that C-105 and C-111 are the two tanks remaining. ORP stated that the MARS vacuum technology in C-105 had been progressing until the recent failure of the current system, and an evaluation of various options was done. It was determined that the most prudent approach was to not proceed with repairing the MARS vacuum, but to put in a separate slurry pump and two extended reach sluicers (ERSS) and to utilize caustic conditioning. ORP stated that the option was discussed with Ecology, and ORP is in the process of modifying the C-105 tank waste retrieval work plan (TWRWP).

ORP reported that recently there have been some issues with the C-111 pump. There were two ERSSs ready to operate in C-111, and a hydraulic leak was discovered on the pump. Modifications were done to the hydraulic system, and when the pump was operated for a short period of time, it appeared that the leak had slowed. Caustic was added to C-111, and the caustic will be recirculated. Planning is under way to replace the pump if it cannot finish the remaining retrieval.

ORP reported that the design work for AX Farm continues, and the field work has primarily been duct work isolation. The ventilation stacks have been placed, and one of the stacks will be turned over to support AY-102 retrieval. Ecology inquired about a TWRWP for AX Farm. ORP responded that an AX TWRWP has been drafted, and it will be a TWRWP for all the AX tanks. ORP noted that the draft has been shared with Ecology. Ecology acknowledged receipt of the draft, and asked if the AX TWRWP addresses individual tanks for the entire farm system. ORP stated that each individual tank has its own TWRWP, and they are all included in the package that was sent over. Ecology asked if ORP will be sending over an updated draft. ORP responded that a detailed TWRWP will be transmitted to Ecology in the near future.

13.0 TANK WASTE RETRIEVAL WORK PLAN STATUS

ORP stated that the C-105 TWRWP is being modified, and the AX farm TWRWPs are being finalized (see SST retrieval program above).

14.0 TANK TRI-PARTY AGREEMENT APPENDIX H STATUS

There was no change in status for tank C-106.

15.0 TANK RETRIEVALS WITH INDIVIDUAL MILESTONES

There was no change in status to tanks A-103 or S-112.

CONSENT DECREE MONTHLY SUMMARY REPORT REVIEW

1.0 CONSENT DECREE MILESTONE STATISTICS/STATUS

The reports, agreements, issues, and actions were discussed and updated as follows.

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

There were no updates provided today. This action remains open.

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

ORP stated that there have been several briefings provided to Ecology on direct feed LAW (DFLAW). ORP requested clarification regarding additional outstanding items for discussion to be able to close this action. Ecology noted that the Pretreatment (PT) Facility has one pipeline that goes to LAW, and inquired about the new plan for two separate pipelines with the LAWPS and the Effluent Management Facility (EMF). ORP responded that a meeting would be scheduled with Ecology to explain how the interface between EMF and the Balance of Facilities (BOF) will occur for bringing in the waste. Ecology stated that it would do an internal query to ensure there are no other outstanding questions before the meeting is held. ORP added that any questions Ecology might have regarding DFLAW would be addressed during the meeting. This action remains open.

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

ORP stated that all of the available information has been provided to Ecology regarding this action. Ecology stated that it is still discussing internally what is needed to close this action. This action remains open.

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

ORP noted that Ecology and ORP have been communicating in an effort to clarify what is needed to close this action. ORP stated that schedules on the eight technical team issues for the High-Level Waste (HLW) and PT Facilities are impacted by the ongoing litigation and cannot be provided. This action remains open.

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

See status of action No. 4. Ecology asked if any information could be provided on the details of the two-year work plan. Ecology clarified that it was not requesting schedules, but information about what is included and the work scope for HLW and PT in the next two years. ORP responded that the update for HLW and PT in the CD will provide the information that can be given at this time. This action remains open.

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

ORP stated that it would follow up to determine whether a briefing could be given. This action remains open.

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

ORP recommended closing this action due to the current litigation and a determination by legal counsel that a briefing could not be provided. This action was closed.

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

ORP stated that this action remains open until ORP and Ecology have a discussion to further define and clarify what information is needed. This action remains open.

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

ORP stated that the design studies have not been issued, and an update will be provided during the PT status. Ecology inquired about a time frame for issuing the design studies. ORP deferred Ecology to the PT update. This action remains open.

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

ORP noted that this action is tied to action No. 3. See action No. 3. This action remains open.

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

ORP stated that the results of the corrosion simulant basis are expected in late December 2015. This action remains open.

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

ORP reported that the results of the high-efficiency particulate air filter analysis are expected in the next couple months, and that a status will be provided during the HLW update. This action remains open.

2.0 SINGLE-SHELL TANK RETRIEVAL AND CLOSURE

ORP indicated that the status remains the same, and no updates were provided.

3.0 TANK WASTE RETRIEVAL WORK PLAN STATUS

The CD TWRWP table is identical to the table in the TPA monthly summary report.

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

See pages 7 and 8 of CD Monthly Summary Report.

5.0 WASTE TREATMENT AND IMMOBILIZATION PLANT PROJECT

ORP stated that the cumulative-to date Waste Treatment and Immobilization Plant schedule variance was a negative 20 million and the cumulative-to-date WTP cost variance was a positive 61 million. ORP noted those cost and schedule variances are based on the progress of the LAW, BOF, and Analytical Laboratory (LAB) internal forecast. ORP added that there is some reflected

earned value, which readjusted the numbers from July 2015. ORP stated that contract negotiations are continuing regarding contract line item number (CLIN) 1.0, which includes overarching activities that changed due to DFLAW. ORP reported that CLIN 2.1 (engineering) was completed in June 2015, and CLINs 2.2 and 2.3 (construction and procurement) were received from Bechtel in August 2015. ORP is conducting a technical and cost evaluation of CLINs 2.2 and 2.3, which is anticipated to be completed within two weeks. When the technical evaluation is completed, ORP will prepare a pre-negotiation memorandum and move forward with negotiating with Bechtel to incorporate CLINs 2.2 and 2.3 into the contract. ORP noted that once CLINs 2.2 and 2.3 are incorporated, that will reflect most of the DFLAW activities within the contract. ORP stated that the next step will be to develop the baseline change proposal, which will take at least a year to have a complete baseline. ORP added that the internal forecast will be used until the full baseline is completed, and noted that the internal forecast is very close to what is reflected in Bechtel's proposal for DFLAW. Ecology asked if the internal forecast could be shared. ORP responded that it could not be shared while contract negotiations are ongoing with Bechtel, but once the baseline change proposal is developed, there would be information that could be shared with Ecology. ORP noted the key topics associated with the contract negotiations are included in the CD monthly summary report.

Ecology referred to the second bullet under significant planned actions (Assemble and install wet electrostatic precipitator internals [LAW]), and asked if it was referring to assembling and installing both of the wet electrostatic precipitator internals. ORP responded that it is to complete the overall activity. ORP added that it would follow up with Ecology's inquiry to ensure that the bullet is more specific.

ORP noted that the surveying and staking has been done at the location for the EMF, and the excavation will be initiated within the next six months.

6.0 PRETREATMENT FACILITY

ORP stated that the PT team has been focusing mainly on closure work packages for technical issues T1, hydrogen in vessels; T2, criticality; and T3, hydrogen in piping. ORP noted that T1 and T3 are listed in the third bullet under significant planned actions, but T2 is also a part of that effort.

ORP noted that the second bullet under significant past accomplishments about completing the first Phase 2 test refers to the pulse jet mixer (PJM) control. ORP added that a Phase 3 test plan is being developed, so there will be continued testing that needs to be done. Ecology referred to the third bullet under significant past accomplishments regarding the standardized high solids vessel design (SHSVD) info testing, and noted that issuance of the report is tied to action No. 9. ORP responded that the SHSVD info testing was to test instrument nozzles that correlate to the SHSVD structural analysis test, and that effort continues. ORP stated that the PJM fabrication includes fabrication of the skirt, the bottom head, and the first shell assembly.

ORP referred to the first bullet under significant planned actions regarding the criticality safety evaluation engineering study, and stated that up to this point, resources had to be shared with some other projects. ORP added that this activity is still planned for the next six months and efforts are continuing.

Ecology referred to the first bullet of past accomplishments and the first bullet for significant planned actions are associated with criticality, and asked which report has been issued. ORP responded that it was a criticality calculation report that was issued, and the efforts to correlate to the criticality final report are still under way, although they are behind schedule due to an issue with shared resources. Ecology asked if the criticality calculation report could be shared. ORP responded that it would follow up with Ecology's request. Ecology noted that criticality is one of the main issues in PT.

Ecology Request 1: ORP to follow up with Ecology's request regarding the PT T2 criticality calculation report.

7.0 HIGH-LEVEL WASTE FACILITY

ORP stated that evaluations and studies continue to resolve issues so that full production can proceed in HLW. ORP noted that a study has been issued regarding the personnel access door, which analyzed the system's ability to maintain cascade ventilation during operations. Ecology asked if the personnel access door study could be shared. ORP stated that it will follow up with Ecology's request.

Ecology Request 2: ORP to follow up with Ecology's request regarding the personnel access door study.

Ecology inquired about the acronym ETX. ORP stated that it is the emergency turbine generator system.

Ecology raised a concern regarding rusting in the I-beams that will support the filled canisters, and asked if the rust is being monitored. Ecology stated its opinion is that the rust is significant and needs to be evaluated. Ecology noted that the rusting has progressed throughout the HLW Facility, and the concern was raised approximately two years ago in the PT Facility, which resulted in an evaluation on all the support beams that had rusting. Ecology added that the rust was pointed out during a tour to two ORP permitting staff, who made note of the issue.

8.0 LOW-ACTIVITY WASTE FACILITY

ORP noted that there was an update in the completion percentages for HLW as of September 2015. Ecology inquired about the internal changes needed in LAW because of two pipes that will be coming in. ORP responded that there will be no interface or any significant changes in LAW, and the changes will be done external to the facility. ORP added that there will be very minor valving that will be done inside the LAW Facility. ORP clarified that Ecology was asking about modification to the facility to accommodate the waste for DFLAW and how the waste will come into the facility. Ecology concurred with ORP's clarification. ORP explained that there is an area right outside of the LAW Facility where valving will be installed, and there will be few modifications inside the facility. ORP suggested that Ecology could be provided more details during the meeting that will be scheduled to discuss DFLAW, LAWPs, and EMF (see action No. 2).

9.0 BALANCE OF FACILITIES

ORP reported that the current focus in BOF is on DFLAW and getting preparations in place to support the upcoming mission. ORP stated that the engineering groups are currently focused on further development of the EMF design and the design of other systems needed to support DFLAW. ORP reported that the 30 percent design review for the EMF was completed. ORP stated that the design review consisted of about 40 engineers going through a model run of the EMF to look for any type of interferences that might occur and any type of structural changes that may be needed in order to support the initial procurements. ORP stated that the results of the design review are being assessed, and no significant changes to the facility have been identified. Ecology noted that it will be attending a 30 percent design review for LAWPS, and asked if Ecology could attend future design reviews for EMF. ORP responded that Ecology will be included in future reviews.

Ecology Request 3: ORP to involve Ecology in future design reviews for EMF.

ORP stated that the DFLAW basis of design change notice (BODCN) was issued, and that it was needed to incorporate the language of DFLAW since it is new work scope to the contract. ORP stated that another key activity is development of the preliminary documented safety analysis (PDSA) to support the EMF, and it will be part of the LAW PDSA. ORP stated that the 30 percent design review for EMF, the BODCN, and the PDSA in support of EMF are the three key items needed to be able to release Rev. 0 drawings to the subcontractor for procurement. ORP noted that initial staking for the EMF has been done, and excavation is under way to reroute the fire water service lines that are currently in place. Excavations for the EMF are anticipated to start in early December 2015. Ecology inquired about the dimensions of the footprint for the EMF. ORP responded that it did not have the dimensions, but they could be provided during the meeting that will be scheduled (see action No. 2). ORP noted that the EMF will consist of several facilities, including the main facility housing the evaporator and tanks, and a standalone electrical building.

ORP stated that permitting meetings are being held with Ecology regarding the EMF, including a meeting that was held to provide an overview of EMF, and that discussions will continue on what is needed for the permit.

ORP reported that efforts in BOF continue in support of DFLAW, but there are still startup and commissioning activities that will be key to bringing up the rest of BOF in order to support the overall plant operations. ORP noted that turnover was accomplished for the Nonradioactive Liquid Waste Disposal (NLD) system and the switchgear systems, and efforts continue toward the final testing of those facilities. ORP stated that planning is under way for site energization in May 2016, and that is when permit site power will be brought in from the 86 substation to the Waste Treatment and Immobilization Plant. That site power will allow final testing in the switchgear buildings and preparations to provide permanent power to BOF to start commissioning and startup activities.

10.0 ANALYTICAL LABORATORY

ORP stated that from a construction perspective, the LAB is complete and the facility is completely built out, with the exception of the hot cell. ORP noted that the hot cell will need the

shield windows and manipulator arms installed, but that will be done after installation of the analytical equipment. ORP stated that there is some work being done in room 117 to support the temporary engineering test station, which will help with the initial commissioning in some of the BOF systems and provide a backup location for running some of the control systems.

ORP stated that a walk-down of specific systems is being done within the LAB to ensure the proper isolations are in place and that there are no energized sources in the hot cell. ORP noted that it is similar to what is being done in BOF, where all the isolations are being rolled within the operating island to avoid having an energized line in the construction area outside of the operating island. Ecology asked if isolations are currently being installed. ORP responded that isolations are not being installed, and the walk-downs are being done to determine where the isolations are needed. ORP indicated that it will be a fairly minimal effort, and it does not involve large process systems within the LAB.

ORP stated that the analytical methods procedures are being developed and reviewed to support the methods development, which is a significant portion of the LAB work. ORP added that the process is to ensure the methods that have been developed are working correctly so they can be applied and validated. Ecology asked if there will be any major changes to the LAB to support DFLAW, other than a few valve isolations. ORP responded that the support services will need to be isolated, which are very small systems like the high-purity gas and the deionized water.

DISTRIBUTION AND ATTENDEES:

W. Abdul	ORP	H6-60
R. E. Beach	ORP	H6-60
S. M. Braswell	Northwind/ORP	H6-60
J. M Bruggeman	ORP	H6-60
K. W. Burnett	ORP	H6-60
C. J. Carter	ORP	H6-60
B. L. Charboneau	ORP	H6-60
B. M. Crock	ORP	H6-60
J. A. Diediker	ORP	H6-60
J. A. Dowell	ORP	H6-60
K. A. Ebert	ORP	H6-60
R. L. Evans	ORP	H6-60
J. F. Grindstaff	ORP	H6-60
C. C. Harrington	ORP	H6-60
P. R. Hernandez	OPR	H6-60
D. R. Hildebrand	RL	A5-11
F. B. Hidden	ORP	H6-60
B. J. Harp	ORP	H6-60
K. L. Higgins	ORP	H6-60
L. A. Huffman	ORP	H6-60
J. M. Johnson	ORP	H6-60
C. J. Kemp	ORP	H6-60
K. Kidder	USACE/ORP	H6-60
D. P. Knight	ORP	H6-60
J. J. Lynch	ORP	H6-60
D. M. MacDonald	ORP	H6-60
B. M. Mauss	ORP	H6-60
E. M. Mattlin	ORP	H6-60
D. L. Noyes	ORP	H6-60
S. H. Pfaff	ORP	H6-60
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J. J. Rambo	ORP	H6-60
D. M. Smith	ORP	H6-60
S. C. Stubblebine	ORP	H6-60
G. D. Trenchard	ORP	H6-60
B. R. Trimberger	ORP	H6-60
R. J. Valle	ORP	H6-60
K. G. Wade	ORP	H6-60
I. Wheeler	ORP	H6-60
W. R. Wrzesinski	ORP	H6-60
J. D. Young	ORP	H6-60
D. A. Faulk	EPA	A3-46

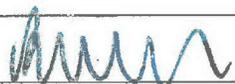
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M. Barnes	Ecology	H0-57
R. K. Biyani	Ecology	H0-57
C. Carlson	Ecology	H0-57
N. Chandron	Ecology	H0-57
T. Z. Gao	Ecology	H0-57
J. Hedges	Ecology	H0-57
M. Jones	Ecology	H0-57
A. Kapell	Ecology	H0-57
S. Lowe	Ecology	H0-57
J. J. Lyon	Ecology	H0-57
J. D. McDonald	Ecology	H0-57
J. Price	Ecology	H0-57
B. Rockette	Ecology	H0-57
M. Skorska	Ecology	H0-57
A. Tortoso	Ecology	H0-57
C. Whalen	Ecology	H0-57
M. Walmsley	Ecology	H0-57
T. Beam	WRPS	H0-55
H. M. Bowers	WRPS	H0-55
J. W. Donnelly	WRPS	H0-55
J. A. Joyner	WRPS	H0-55
J. J. Luke	WRPS	H0-55
R. S. Wiegman	WRPS	H0-56
D. H. Butler	MSA	A3-01
J. M. Colborn	MSA	A3-01
J. L. Copeland	MSA	A3-10
C. P. Noonan	MSA	A3-01
R. E. Piippo	MSA	A3-01
M. J. Turner	MSA	A3-01
J. G. Woolard	MSA	A3-01
S. Cimon	ODOE	

ADMINISTRATIVE RECORD – Heather Childers: H16-08

Agenda
November 19, 2015
Office of River Protection Quarterly Milestone Review Meeting
Ecology Offices, Conference Room 3A/B
Chairperson: Tom Fletcher

Topic	Leads	Time
Administrative Items / Milestone Status / ORP Key Documents List	Bryan Trimmerger / Dan McDonald / Jeff Lyon	8:30
System Plan	Kaylin Burnett / Jeff Lyon / Dan McDonald	8:35
Acquisition of New Facilities	Janet Diediker / Jeff Lyon / Dan McDonald	8:40
Supplemental Treatment and Part B Permit Applications	Steve Pfaff / Jeff Lyon / Dan McDonald	8:45
242-A Evaporator Status	Paul Hernandez / Jeff Lyon	8:50
Liquid Effluent Retention Facility (LERF) and 200 Area Effluent Treatment (ETF)	Richard Valle / Stephanie Schleif	8:55
Tank System Update	Jeremy Johnson / Jeff Lyon	9:00
In Tank Characterization and Summary	Billie Mauss / Michael Barnes	9:10
Tank Operations Contract (TOC) Overview	ORP Project Leads / Jeff Lyon	9:15
Single-Shell Tank Closure Program	Ryan Beach / Jeff Lyon	9:20
Single-Shell Retrieval Program (TPA and CD), including: <ul style="list-style-type: none"> • Tank Waste Retrieval Work Plan Status • Tank in Appendix H • Tanks with Individual Milestones 	Jeremy Johnson / Jeff Lyon	9:25
Waste Treatment Plant (WTP) Overall TPA and CD Summary and Milestones Status	Joni Grindstaff / Dan McDonald	9:30
WTP Pretreatment (PT) Facility	Joni Grindstaff / Dan McDonald	
WTP High-Level Waste (HLW) Facility	Joni Grindstaff / Dan McDonald	
WTP Low-Activity Waste (LAW) Facility	Joni Grindstaff / Dan McDonald	
WTP Analytical Laboratory (LAB)		
WTP Balance of Facilities (BOF)		10:00

19 November 2015
 TPA Quarterly Meeting and IAMIT Meeting

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19 November 2015
 TPA Quarterly Meeting and IAMIT Meeting

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Wiegman, Rebecca	<i>Rebecca Wiegman</i>	Rebecca_S_Wiegman@rl.gov

Jones, Mandy

Mandy Jones

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – November 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 – November 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 – November 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	
6	TF-15-03-05	03/18/15	ECY would like to obtain technical white papers supporting LAWPS design.	Open		Pfaff/ Diediker	
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	

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

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
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.	Closed	Meeting held on October 13, 2015, and Ecology and ORP agreed on a path forward. A change control form will be drafted to document the agreement.	Johnson	10-13-15
9	TF-15-07-01	07/16/15	ECY requests ORP review TPA paragraph 148 and 149 reporting requirements.	Closed	ORP provided ECY with a copy of a 1996 IAMIT agreement "Interim Replacement of Site Management System Report."	Trimberger	10-15-15
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	
11	TF-15-08-01	08/24/15	ECY requests WRPS provide a simplified schedule for ETF facility start-up.	Complete		Jim Foster	09/16/15
12	TF-15-08-02	08/24/15	ECY requests WRPS to develop of an operations summary	Complete		Paul Haigh	09/16/15
13	TF-15-08-03	8/15	Ecology will forward meeting notice for LERF/ETF PMM at Ecology offices to Jessica Joyner and Cindy Lacy. Meetings are scheduled from 3:30 – 4:30 every 3 rd Tuesday of the month.	N/A		Stephanie Schlieff	

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

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
14	TF-15-08-04	08/15/15	WRPS to provide a draft agenda and draft meeting minutes one week before the next meeting.	NA		Cindy Lacy	09/15/16
15	TF-15-10-01	10/15/15	ECY requested a discussion regarding ETF tanks 109 and 117	Open		Richard Valle	
16	TF-15-10-02	10/15/15	ECY requests ORP provide information regarding plans and concepts for LERF/ETF to be ready to accommodate Direct Feed Low Activity Waste (DFLAW).	Open		Wendell Wrzesinski	
17	TF-15-10-03	10-15-15	ECY requests ORP provide information regarding the LERF basin covers, including the target and plan to reduce inventory in the basins.	Open		Richard Valle	

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	An engineering study conducted in 2008 will be provided to Ecology. Additional information on replacements plans will also be provided to Ecology.	Wendell Wrzesinski	
2	WTP-14-10-02	10/23/14	ECY would like to know what the plans are for operating BOF in support of DFLAW and then transitioning into full WTP operations.	Open	It was agreed that ORP and Ecology would meet to develop an outline of the information that is needed to close this action.	Jason Young	

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

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
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	<p>This issue is impacted by the ongoing CD judicial process.</p> <p>ORP provided Ecology with the requested information concerning repairs to the RLD vessels.</p> <p>Ecology will internally discuss what is needed to close this action.</p>	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	<p>Completed for HLW. This issue is impacted by the ongoing CD judicial process.</p>	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	<p>Completed for HLW. This issue is impacted by the ongoing CD judicial process.</p>	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	

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

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
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, if the ORP legal counsel determines the information can be shared with Ecology.	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	ORP will follow-up with Ecology to further define and clarify this action so that it can be address and closed.	Joni Grindstaff	
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 once the design studies are issued.	Dan Knight	
10	WTP-15-01-03	1/22/15	ECY requests a technical update on the LAB RLD vessels	Open	ORP suggested that this action be closed, and that any additional discuss on the RLD vessels could be moved to Action 3. Ecology will internally discuss the suggestion and provide an update at the next meeting.	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	Results are now expected in late December 2015.	Dan Knight	

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

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
12	WTP-15-06-02	06/15/15	ECY would like to understand how the bounding conditions for the HEPA filters were identified.	Open	Results of the HEPA filter analysis are expected in the December 2015/January 2016 timeframe.	Wahed Abdul	

FINAL

Office of River Protection
Consent Decree 08-5085-FVS

Monthly Summary Report

November 2015

Office of River Protection

Consent Decree 08-5085-FVS
Monthly Summary ReportNovember 2015 (Monthly Summary Report/Project Earned Value Management System
reflects September 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	Jeremy Johnson/Jeff Lyon
5	Tank Waste Retrieval Work Plan Status • Consent Decree Appendix C	Jeremy Johnson/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:

- Received approval to forego a third retrieval technology in Tank 241-C-102 from the Washington State Department of Ecology (Ecology).
- 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 extended reach sluicers system (ERSS) installation and operational testing in preparation for restarting retrieval operations at Tank 241-C-111.

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 due to recent MARS-V failure.
- 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	-
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

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
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:

- Finalize AX-Farm TWRWP.

Issues:

None.

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-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	\$7,578	\$13,863	\$7,404	1.83	1.87	\$86,979	\$89,809	\$100,629	1.03	0.89
CTD	\$592,478	\$585,227	\$609,972	0.99	0.96					

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 \$6,285K is due to:

- The remaining performance taken on the MARS-V due to an end effector hose leak that permanently shut down this retrieval system for Tank-241-C-105.

The current month favorable cost variance (CV) of \$6,477K is due to:

- Performance was claimed with minimal costs due to the permanent shut down of the MARS-V due to an end effector hose leak.

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 2,874 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 627 craft, 419 non-manual, and 146 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 PTF and significantly slowed down for HLW. In August 2014, the U.S. Department of Energy (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 September 2015, LBL facilities were 50 percent complete, design and engineering was 78 percent complete, procurement was 71 percent complete, construction was 79 percent complete, and startup and commissioning was 8 percent complete.

In September 2015, the cumulative to-date WTP Project schedule variance was a negative \$20.2 million, and the cumulative to-date WTP Project cost variance was a positive \$61.7 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 September 2015.

Significant Past Accomplishments:

- Completed multi-discipline review of Effluent Management Facility (EMF) design (BOF)
- Issued the direct-feed LAW (DFLAW) Basis of Design Change Notice (BOF)
- Completed melter 1 internal structural reinforcement welding (LAW)
- Completed one concrete placement (wall 4104) (HLW)
- Installed 17.2 tons of structural steel (HLW)
- Issued PT T2 Criticality Calculation Report (PT)

Significant Planned Actions in the Next Six Months:

- Receive caustic scrubber (LAW)
- Assemble and install wet electrostatic precipitator internals (LAW)
- Receive the thermal catalytic oxidizer (TCO) and ammonia skid
- Complete EMF Preliminary Documented Safety Analysis (PDSA) (BOF)
- Begin excavation for EMF (BOF)
- Complete site energization from permanent power supply (BOF)
- Begin LAB system walk downs in support of DFLAW modifications (LAB)
- Begin full scale high-efficiency particulate air (HEPA) filter testing in accordance with the HEPA Filter Test Plan at the Mississippi State University facility (HLW)
- Initiate HLW melter off-gas treatment process/process vessel vent (HOP/PVV) design study (HLW)
- Complete criticality safety evaluation engineering study for ultrafiltration process system (UFP)/HLW lag storage and feed blending process (HLP)/plant wash and disposal system (PWD) with controls (PT)
- Complete hydrogen control strategy gap analysis (engineering study includes gap analysis and post design basis event [DBE] ventilation and air requirements) (PT).

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, pulse-jet mixers (PJM), corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

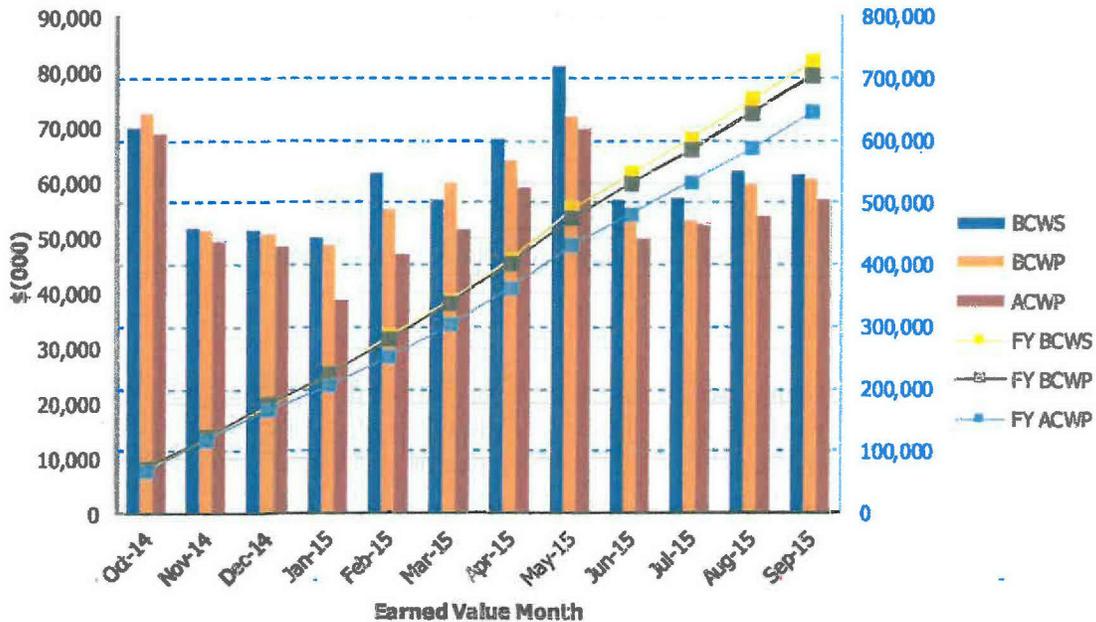
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$61,517	\$60,659	\$56,948	0.99	1.07	\$728,284	\$704,208	\$645,017	0.97	1.09

PTD \$9,099,763 \$9,079,546 \$9,017,802 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.

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:

- Issued PT T2 Criticality Calculation Report (PT)
- Completed first Phase 2 test
- Completed SHSVD info testing and identify design features
- Started PJM fabrication

Significant Planned Actions in the Next Six Months:

- Complete criticality safety evaluation engineering study for UFP/HLP/PWD with controls

- Complete hydrogen control strategy gap analysis (engineering study includes gap analysis and post DBE ventilation and air requirements)
- Receive technical issue closure work packages T1 and T3
- Issue Phase 2 PJM controls study
- Complete sliding bed evaluation report and brief DOE Office of River Protection (ORP)
- Issue SHSVD Design Verification Guide

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.

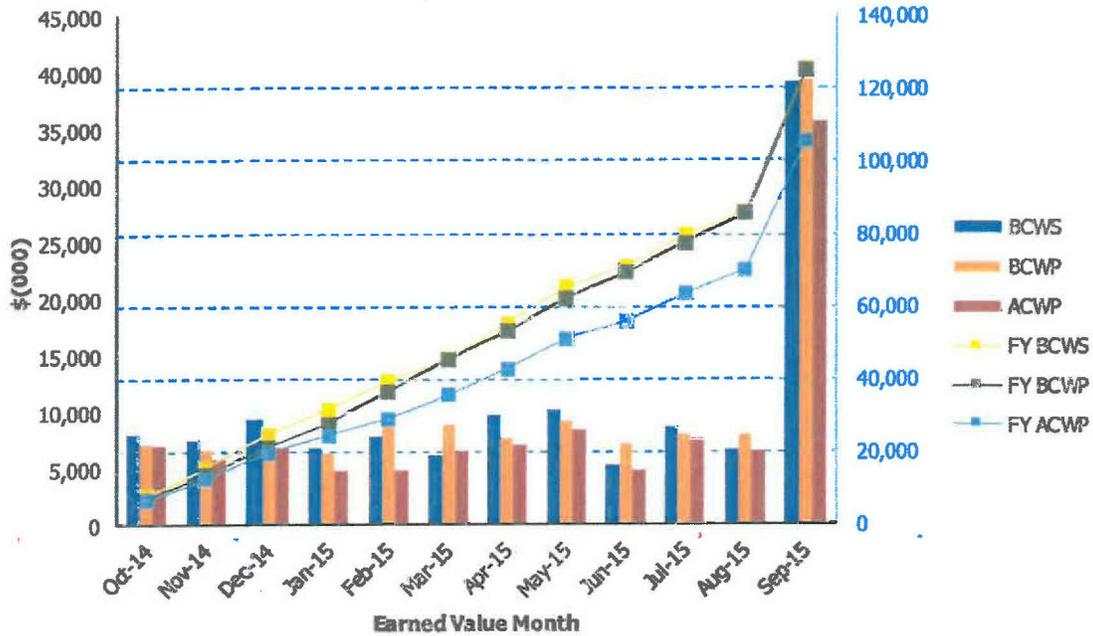
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$39,146	\$39,406	\$35,615	1.01	1.11	\$125,729	\$125,214	\$105,933	1.00	1.18

PTD \$1,732,400 \$1,731,832 \$1,712,560 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.

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 melters, 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 Work Plan. 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. Design activities are focused to support safety design strategy gap analysis, technical core team recommendations, and engineering study development to resolve design and operability reviews. Studies are being performed to determine the ventilation system capability, waste handling capability, etc. One such study, the Personnel Access Door Study, which analyzed the system's ability to maintain cascade ventilation during operations has been issued. Hazard and accident analyses are ongoing to support the Preliminary Documented Safety Analysis (PDSA) update to align design and the safety basis.

Systems Engineering continues to implement the Systems Engineering Management Plan. The development of the emergency turbine generator system (ETX) system design description continues.

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 are being

tested to ensure that the qualified filters support the needs for HLW and LBL facilities. Fabrication of full scale test filters has begun.

Design is progressing for radioactive liquid waste disposal (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:

- Continued HEPA filter testing in accordance with the HEPA Filter Test Plan at the Mississippi State University facility
- Began fabrication of full scale HEPA test filters
- Completed one concrete placement (wall 4104)
- Installed 17.2 tons of structural steel
- Issued personnel access door study

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
- Begin full scale HEPA filter testing in accordance with the HEPA Filter Test Plan at the Mississippi State University facility
- Initiate high-level waste melter off gas 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.

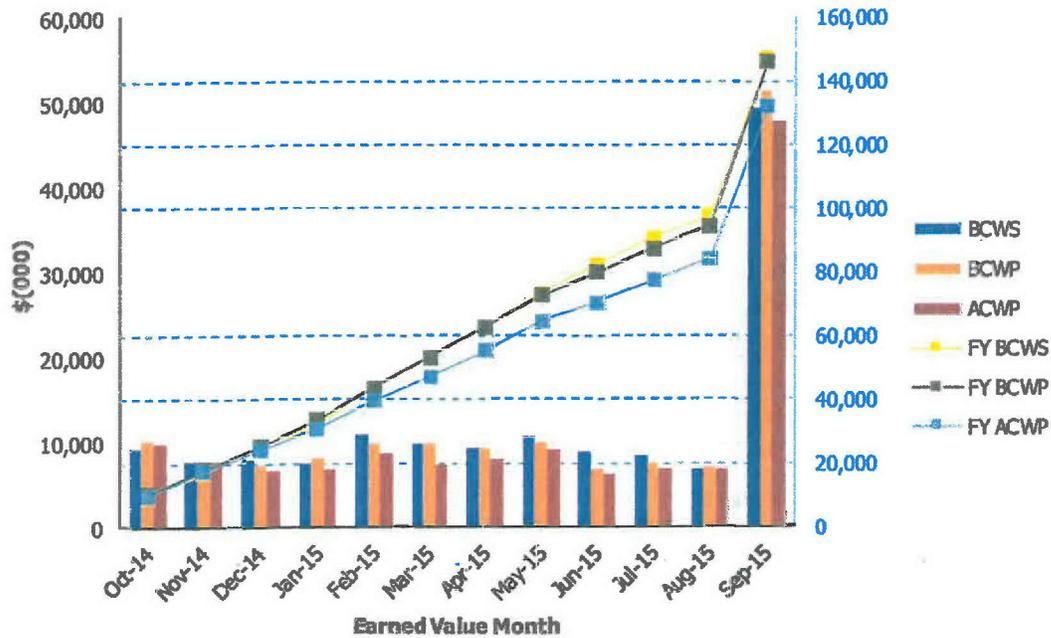
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$49,280	\$51,282	\$47,721	1.04	1.07	\$147,175	\$145,894	\$132,068	0.99	1.10

PTD \$1,201,288 \$1,200,265 \$1,186,130 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.

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 September 2015, the LAW Facility was 53 percent complete overall, with engineering design 77 percent complete, procurement 75 percent complete, construction 77 percent complete, and startup and commissioning 4 percent complete.

Significant Past Accomplishments:

- Installed over 260 linear feet of process piping and hydro-tested 380 linear feet of piping
- Installed over 860 linear feet of conduit and pulled approximately 23,730 linear feet of cable
- Installed over 138 pen seals comprised of 29 conduit/steel, 92 spares, 16 pipe and 1 HVAC duct penetrations
- Completed melter 1 internal structural reinforcement welding
- Completed coating repairs on melter 1 structural steel

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 TCO 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.

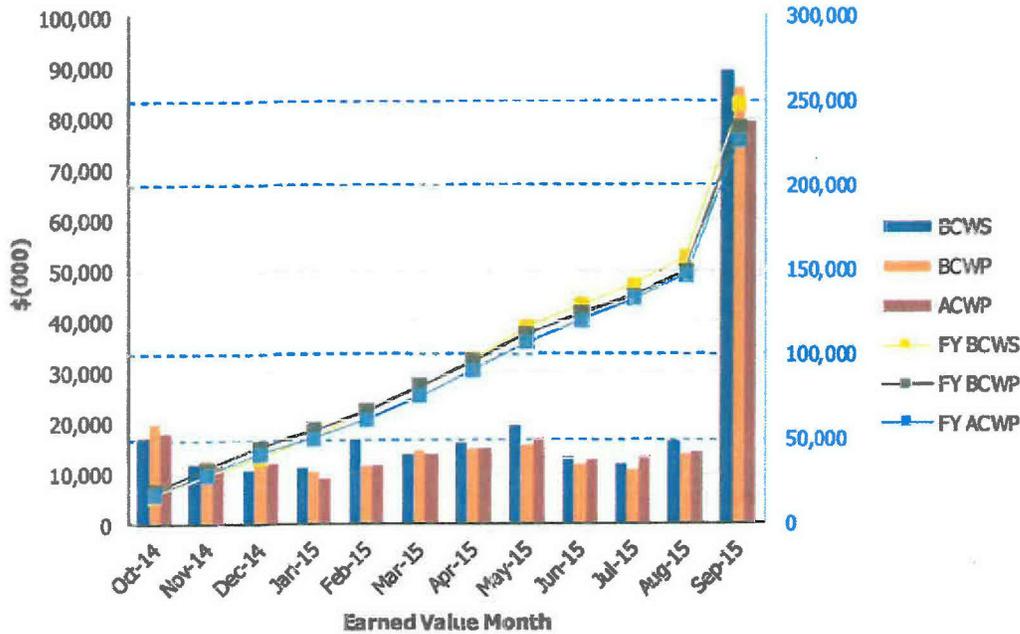
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$89,562	\$86,107	\$79,465	0.96	1.08	\$247,414	\$234,665	\$226,456	0.95	1.04

PTD \$1,218,199 \$1,208,256 \$1,201,489 0.99 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.

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 September 2015, BOF was 55 percent complete overall, with engineering design 80 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 multi-discipline review of EMF design
- Continued excavation and drilling activities to install cathodic protection system upgrades
- Issued the DFLAW Basis of Design Change Notice (BODCN)
- Continued switchgear testing in support of site energization

Significant Planned Actions in the Next Six Months:

- Complete EMF PDSA
- Begin excavation for EMF
- Complete site energization from permanent power supply

Issues:

No major issues at this time.

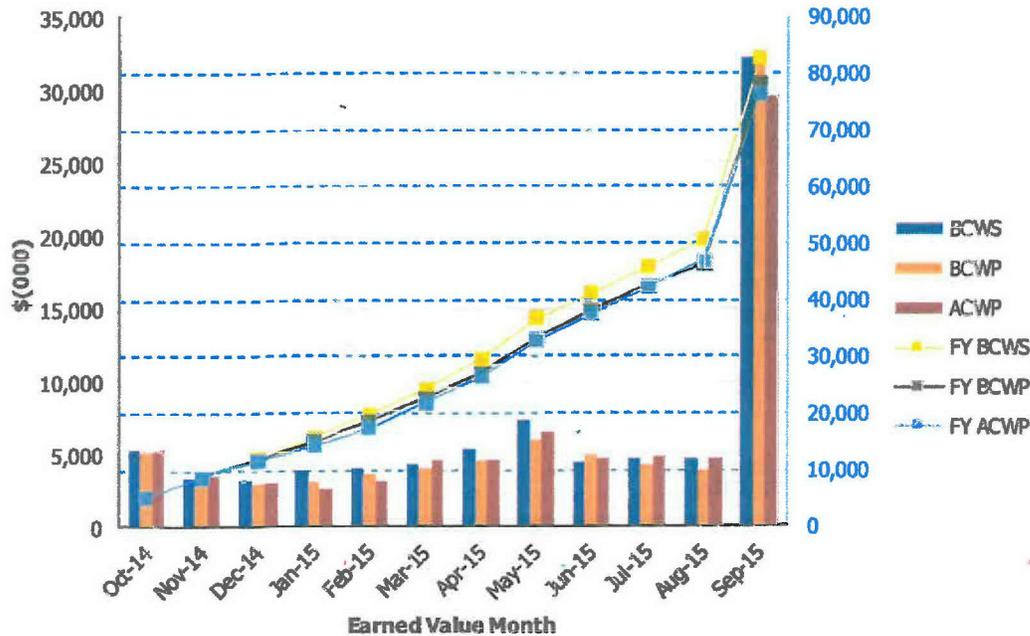
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$32,167	\$31,837	\$29,588	0.99	1.08	\$82,828	\$78,103	\$76,493	0.94	1.02
PTD	\$429,495	\$425,201	\$423,623	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 September 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:

- Continued development of the test engineers workstation
- Continued development of procedures for the WTP analytical methods development process

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.

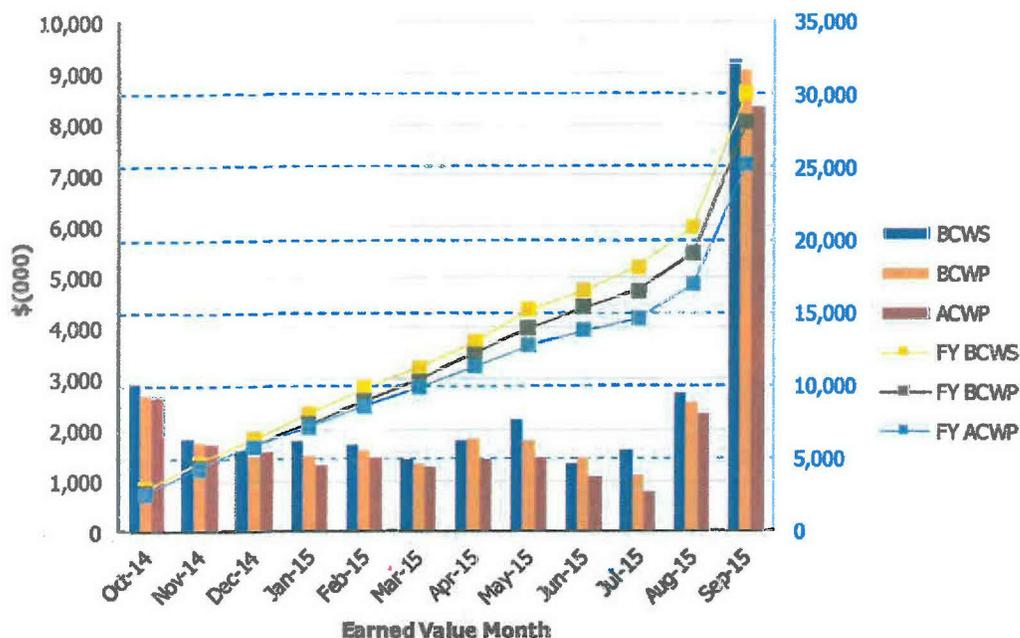
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$9,230	\$9,036	\$8,343	0.98	1.08	\$30,152	\$28,090	\$25,295	0.93	1.11
PTD	\$312,565	\$310,919	\$308,349	0.99	1.01					

ACWP = actual cost of work performed.
 BCWS = budgeted cost of work scheduled.
 BCWP = budgeted cost of work performed.
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 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 September 2015

Facilities	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 Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Low-Activity Waste	2,124.0	1,133.3	53%	473.6	364.3	77%	341.3	254.4	75%	627.4	482.3	77%	677.6	28.2	4%	4.0	4.0	100%
Balance of Facilities	720.3	397.5	55%	132.8	106.7	80%	75.9	53.8	71%	248.4	199.3	80%	262.7	37.2	14%	0.5	0.5	100%
Analytical Lab	507.2	303.0	60%	94.5	77.8	82%	65.7	56.8	86%	155.8	149.1	96%	190.7	18.8	10%	0.5	0.5	100%
LBL Facility Services	436.3	57.8	13%	0.0	0.0	0%	42.6	10.2	24%	31.4	5.3	17%	241.7	20.3	8%	122.6	22.12	18%
Total LBL	3,789.8	1,891.5	50%	700.9	548.8	78%	525.6	375.2	71%	1,063.1	835.9	79%	1,372.7	104.5	8%	127.6	27.1	21%
Direct Feed LAW	69.3	18.0	26%	8.18	16.5	20%	7.48	0.00	0%	15.6	0.5	3%	0.0	0.0	0%	4.6	0.93	20%
Project Services	383.5	208.6	57%	54.0	26.7	49%	34.9	18.4	53%	71.0	54.0	76%	1.7	1.7	100%	201.8	105.9	52%
Total DFLAW & P.S	452.7	224.6	50%	115.6	43.2	37%	42.4	18.4	43%	86.6	54.5	63%	1.7	1.7	100%	206.4	106.8	52%
Total LBL, DFLAW & Project Services	4,242.6	2,116.1	50%	816.6	592.1	73%	568.0	393.6	69%	1,149.6	890.4	77%	1,374.4	106.2	8%	334.0	133.9	40%
PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)																		
High-Level Waste	1,476.0	922.1	62%	354.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%	n/a	n/a	n/a
Pre-treatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%	n/a	n/a	n/a
Shared Services	4,726.8	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%	1,338.1	983.5	73%
Total HLW/PT/SS	8,722.8	5,965.2	68%	2,173.1	1,948.9	90%	1,565.5	1,124.8	72%	2,887.6	1,764.8	61%	768.5	143.2	19%	1,338.1	983.5	73%
Unallocated 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	12,965.4	8,081.3	62%	2,969.7	2,541.0	85%	2,133.5	1,518.4	71%	4,037.2	2,665.2	66%	2,132.9	249.4	12%	1,672.1	1,117.4	67%

Sources: Pwllimbsay WTP Control Performance Report, January 1, Data for September 2015

Note: In September 2012, the LBL Region was incorporated into the project OTE baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility function in-use percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTE baseline resulting in decreases to the PT/HLW/SS facility budgets, the work was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and Budgets being moved into the UB values for the project for PT/HLW/SS to \$2.14M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLW/PT/SS 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 shown under Project Management and Project Services. The Shared Services PMB value has not been changed to reflect this change due to the freeze on HLW/PT and SS and the budgets remaining in UB. October 2014 data reflects the incorporation of Shared Services into LBL Facility Services and Project Services. July 2016 LBL percent complete data is a total of LAW-804-LAB and LBL Facility Services. The Project Services Allocation amount (P-84), as shown on the CPM Format 1, is not added to LBL for percent complete purposes.

FINAL

Office of River Protection

Tri-Party Agreement
Monthly Summary Report
November 2015



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

Project Earned Value Management System reflects September 2015 information

Page	Topic	Leads
1	Administrative Items/Milestone Status	Bryan Trimberger/Dan McDonald/Jeff Lyon
3	System Plan	Kaylin Burnett/Jeff Lyon/Dan McDonald
4	Acquisition of New Facilities	Janet Diediker/Jeff Lyon/Dan McDonald
5	Supplemental Treatment and Part B Permit Applications	Steve Pfaff/Jeff Lyon/Dan McDonald
6	242-A Evaporator Status	Paul Hernandez/Jeff Lyon
7	Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility	Richard Valle/ Stephanie Schleif
8	Tank System Update	Jeremy Johnson/Jeff Lyon
8	Single-Shell Tank Integrity Assurance	Jeremy Johnson/ Jim Alzheimer
10	In Tank Characterization and Summary	Billie Mauss/Michael Barnes
12	Tank Operations Contract Overview	ORP TPA Program Managers/Jeff Lyon
22	Single-Shell Tank Closure Program	Ryan Beach/Jeff Lyon
24	Single-Shell Tank Retrieval Program	Jeremy Johnson/ Jeff Lyon
25	Tank Waste Retrieval Work Plan Status	Jeremy Johnson /Jeff Lyon
26	Tank in Appendix H, "Status - Single Shell Waste Retrieval Criteria"	Jeremy Johnson /Jeff Lyon
26	Tank Retrievals with Individual Milestones	Jeremy Johnson/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-045-92	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
M-045-61A	Submit to Ecology a primary doc. Phase 2 CMS and Rev. O update to the RFI Report for WMA C	12/31/2016		On Schedule
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA-C	Six months after CMS approval (M-045-61A)		On Schedule
M-045-84	Comp Neg's of HFFACO Interim Milestones for Closure of 2 nd SST WMA	01/31/2017		On Schedule

Milestone	Title	Due Date	Completion Date	Status
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.

WTP = Waste Treatment and Immobilization Plant

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-1400313 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) 2015 through third quarter of FY 2016 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 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 third quarter FY 2016.

FY = fiscal year.

Significant Planned Actions in the Next Six Months:

- Future campaign and outage scheduling
- 242-A Evaporator instrument calibrations and preventive maintenance
- 242-A Evaporator oil filled window maintenance

Issues:

None.

Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility

The 200 Area Effluent Treatment Facility (ETF) is currently in shutdown mode and is undergoing maintenance in preparation of an anticipated spring 2016 startup. The heat exchanger unit replacement was completed in summer 2015.

The Liquid Effluent Retention Facility (LERF) liquid levels, inventory, and received waste is shown in the table below for the time period of October 1 – 31, 2015.

Note: 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 10/31/15)	~4.66 Mgal	~5.83 Mgal	~6.34 Mgal
AZ-301 Tanker Shipments	~6,500 gal	-	-
MWBT-31 & MWVT 34 Leachate	-	-	~14,000 gal
Perched Water Tanker Shipments	-	-	-
ERDF Leachate Transfers	-	-	-
Other (325 Building Totes)	-	~1,320 gal	-

ERDF Environmental Restoration Disposal Facility
Gal gallon
Mgal million gallons
MWBT mixed waste burial trench

Significant Planned Actions in the Next Six Months:

- Staff training, component and system testing, and readiness activities will be performed before restart approval can be granted.
- Pressure safety valve 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.
- Class 1 Modifications are under development for the quarter ending December 31, 2015.

Issues:

None.

Tank System Update

Significant Planned Actions in FY 2016:

Double Shell Tank (DST) Integrity

- Enhanced annulus video inspection:
 - 241-AN-101
 - 241-AN-103
 - 241-AN-104
 - 241-AN-105
 - 241-AN-106
 - 241-AW-103
 - 241-AW-106
 - 241-SY-101
 - 241-SY-102
 - 241-SY-103.
- Ultrasonic testing (UT) inspections (two risers for primary wall/welds, one riser for secondary floor):
 - 241-AN-105
 - 241-AW-103.
- Continuing bi-weekly inspections of AY-102 waste accumulation site
- Continuing bi-monthly comprehensive inspection of AY-102 annulus
- Revise and update RPP-7574, *Double-Shell Tank Integrity Project Plan*
- Corrosion probe data evaluation and quarterly reports (4 reports)
- Development of primary tank bottom nondestructive examination (NDE) tool
- Release DST integrity assessment report

Single Shell Tanks (SST) Integrity

- In-Tank video inspections:
 - 241-T-107
 - 241-T-110
 - 241-TX-103
 - 241-TX-111
 - 241-TX-113
 - 241-TX-116
 - 241-B-101
 - 241-B-201
 - 241-BY-105
 - 241-U-102
 - 241-U-105
 - 241-U-107.

- Intrusions mitigation:
 - Complete 241-T-111
 - Subsequent tank to be determined.

Current Status

- 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.

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-045-91E1 on September 21, 2015 with issuance of RPP-RPT-55202, *Dome Survey Report for Hanford Single-Shell Tanks, Revision 1*. The report was discussed with Ecology on October 13, 2015, and both parties expressed interest in continuing this work but not requiring formal transmittal as a Tri-Party Agreement (TPA) milestone requirement.

Significant Planned Actions in the Next Six Months:

Begin planning for the SST integrity assessment by an independent, qualified, registered professional engineer (IQRPE) (M-045-91I).

Issues: None.

In Tank Characterization and Summary

For the period from October 1 through October 31, 2015:

Accomplishments:

- Completed RPP-RPT-58767, *Derivation of Best-Basis Inventory for Tank 241-SX-111 as of October 1, 2015*, Rev 0.
- Completed RPP-RPT-58768, *Derivation of Best-Basis Inventory for Tank 241-SX-112 as of October 1, 2015*, Rev 0.
- Completed RPP-RPT-43979, *Derivation of Best-Basis Inventory for Tank 241-AY-101 as of October 1, 2015*, Rev 15.
- Completed RPP-RPT-58700, *Derivation of Best-Basis Inventory for Tank 241-TX-110 as of October 1, 2015*, Rev 0.
- Completed RPP-RPT-57458, *Derivation of Best-Basis Inventory for Tank 241-C-102 as of October 1, 2015*, Rev 4.
- Completed RPP-RPT-58769, *Derivation of Best-Basis Inventory for Tank 241-SX-113 as of October 1, 2015*, Rev 0.
- Completed RPP-RPT-58696, *Derivation of Best-Basis Inventory for Tank 241-TX-103 as of October 1, 2015*, Rev 0.
- Completed RPP-PLAN-60585, *Software Management Plan for Utility Calculation Software Tank Waste Volume Calculator*, Rev 0.
- Completed RPP-PLAN-60589, *Sampling and Analysis of 241-AY/AZ Combined Ventilation System Stack Chemical Emissions*, Rev 0.
- Completed RPP-PLAN-60550, *Sampling and Analysis Plan for Residual Waste Solids in Tank 241-C-102*, Rev 0.
- Completed RPP-PLAN-60011, *Tank Sampling and Analysis Plan for Tank 241-C-105 Solids*, Rev 3.
- Completed RPP-PLAN-60523, *Tank 241-AN-106 Grab Sampling and Analysis Plan in Support of Corrosion Mitigation Midway through Tank 241-C-105 Retrieval*, Rev 0.
- Completed HNF-EP-0182, *Waste Tank Summary Report for Month Ending August 31, 2015*, Rev 322.
- Completed 241-C-105 sampling on October 28, 2015. Three samples were received at the lab.

Planned Action within the Next Six Months:

Tank sampling:

- Tank 241-AN-106 grab sampling at 50 percent C-105 retrieval is planned for November 2015.
- Tank 241-C-102 clamshell closure sampling is planned to begin November 2015.
- Tank 241-C-111 hard heel retrieval in-process grab sampling is planned for December 2015.
- Tank 241-SY-101 grab sampling is planned for December 2015.
- Tank 241-AN-101 grab sampling is planned for January 2016.

- Tank 241-AP-107 grab sampling is planned for March 2016.
- Tank 241-C-111 Off-Riser Sampling System (ORSS) closure sampling is planned for April 2016.
- Tank 241-AW-102 grab sampling (242-A Evaporator campaign EC-05) is planned for April 2016.
- Tank 241-AW-106 grab sampling (242-A Evaporator campaign EC-06) is planned for May 2016.
- Tank 241-AP-102 grab sampling at AY-102 50 percent retrieval is planned for May 2016.

Best-Basis Inventory (BBI) updates:

BBI updates for the following tanks were completed in October:

- | | |
|--------------|--------------|
| • 241-AY-101 | • 241-SX-112 |
| • 241-C-102 | • 241-SX-113 |
| • 241-C-105 | • 241-TX-110 |
| • 241-SX-111 | • 241-TX-103 |

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

- | | |
|--------------|--------------|
| • 241-AN-101 | • 241-AW-102 |
| • 241-AN-106 | • 241-AY-102 |
| • 241-AP-103 | • 241-AZ-102 |

Data Quality Objectives (DQO):

- Completed HNF-SD-WM-DQO-001, *Data Quality Objectives for Tank Farm Waste Compatibility Program*, Rev 21 in October.
- 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 and is planned to be released in November.
- RPP-8532, *Double-Shell Tanks Chemistry Control Data Quality Objectives*, Rev 15, is in-process to identify additional analyses for corrosion mitigation and to simplify quality control parameters is planned to be released in November.

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 September 30, 2015 WRPS TOC has worked 4,697,917 hours or 345 days without a lost time workday injury, and has worked 455,697 hours or 34 days since the last recordable case.

September-15										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	61,051	65,454	52,364	4,403	13,090	1.07	1.23			
FYTD	506,935	512,773	523,732	5,838	(10,959)	1.01	1.00	506,935		
CTD	2,850,840	2,831,253	2,824,677	(19,587)	6,576	1.00	1.00	3,395,276	3,391,694	3,582

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.

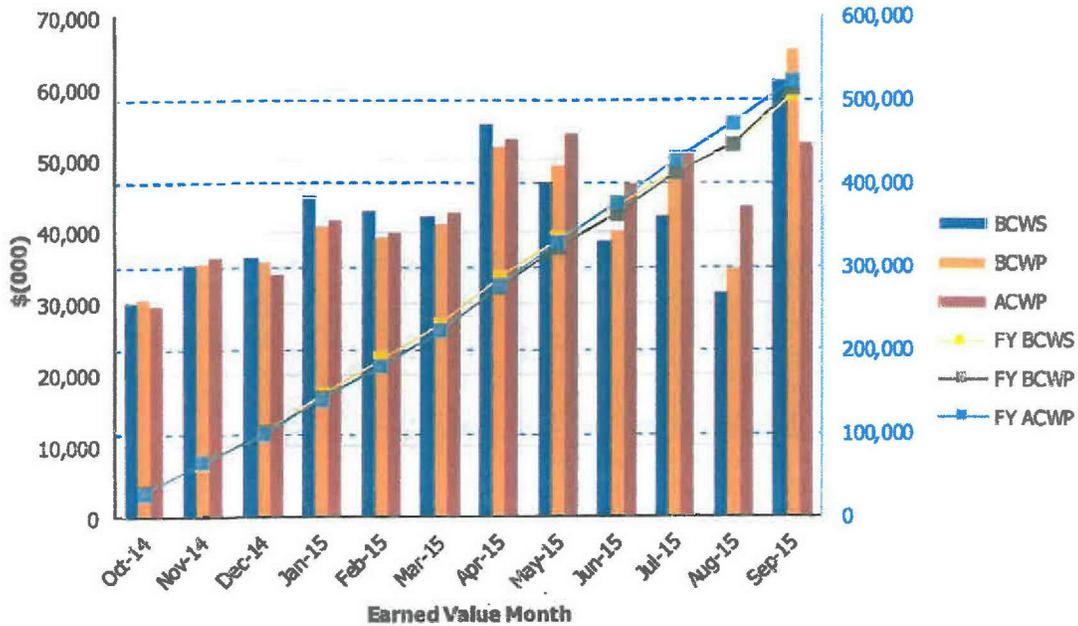
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-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	\$61,051	\$65,454	\$52,364	1.07	1.25	\$506,935	\$512,773	\$523,731	1.01	0.98
CTD	\$2,850,840	\$2,831,253	\$2,824,677	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

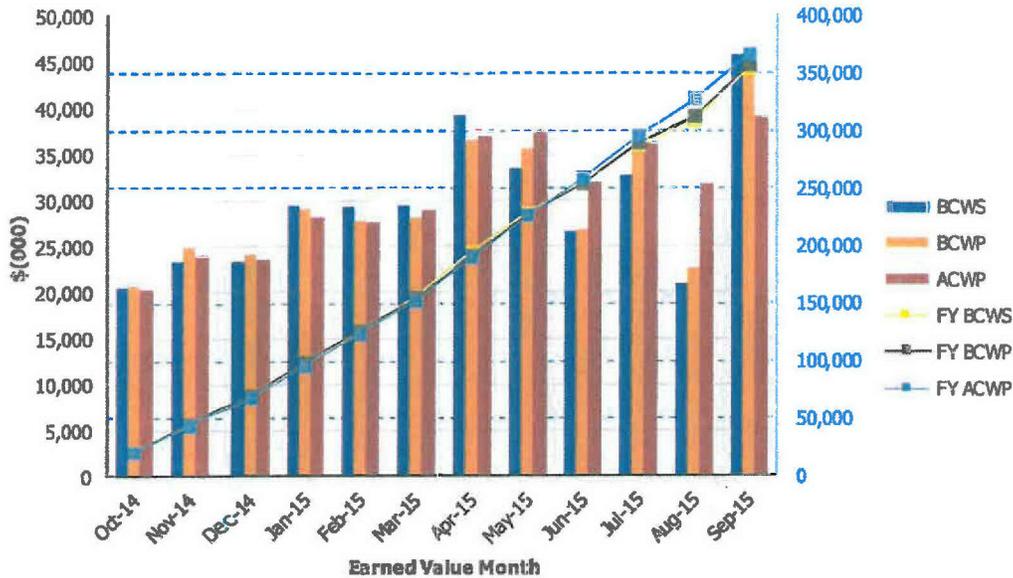
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-15

Tank Farms ORP-0014
Base Operations 5.01

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 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	\$45,657	\$44,220	\$39,025	0.97	1.13	\$354,456	\$356,370	\$366,145	1.01	1.03
CTD	\$1,891,884	\$1,882,213	\$1,873,829	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

Base Operations and Tank Farm Projects

The current month unfavorable schedule variance (SV) of **(\$1,437K)** is due to the following:

- AP-102 Equipment Removal and Installation: Slower progress made regarding field activities pump removal, standard sluicer installation, electrical installation, and splitter box installation due to lack of critical resources and crane availability.

The current month favorable cost variance (CV) of \$5,195K is due to the following:

- Overhead pass back (end of year alignment)
- 242-A Evaporator Campaigns - Efficiencies achieved during the operation of the 242-A Evaporator Campaign EC-03 due to conditions (cooler water temperatures) and waste composition.

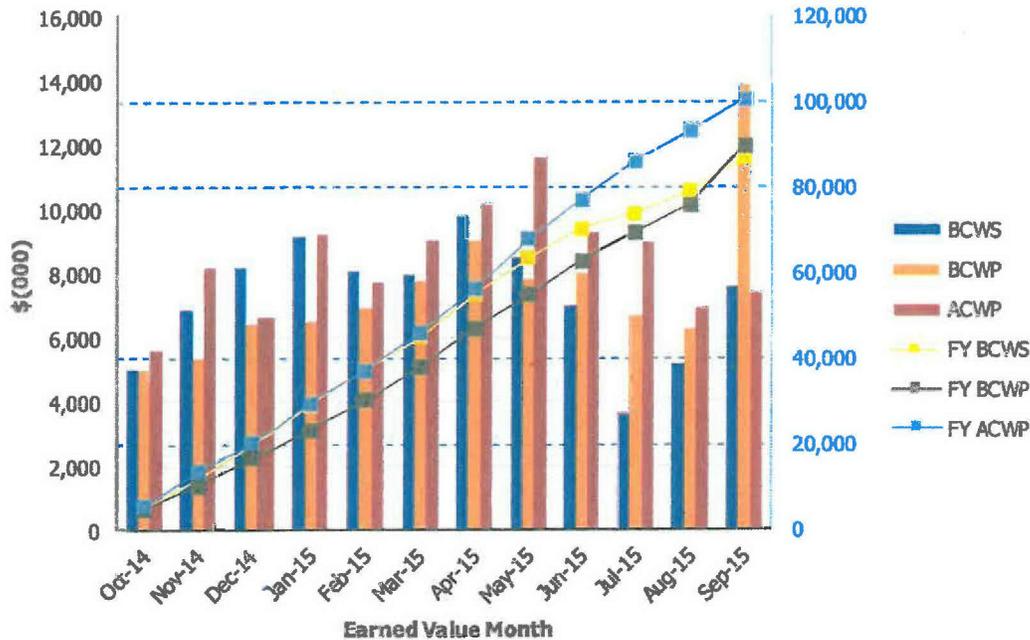
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-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	\$7,578	\$13,863	\$7,404	1.83	1.87	\$86,979	\$89,809	\$100,629	1.03	0.89
CTD	\$592,478	\$585,227	\$609,972	0.99	0.96					

Retrieve and Close Single Shell Tanks

The current month favorable schedule variance (SV) of \$6,285K is due to:

- The remaining performance taken on the Mobile Arm Retrieval System-Vacuum (MARS-V) due to an end effector hose leak that permanently shut down this retrieval system for Tank-241-C-105.

The current month favorable cost variance (CV) of \$6,477K is due to:

- Performance was claimed with minimal costs due to the permanent shut down of the MARS-V due to an end effector hose leak.

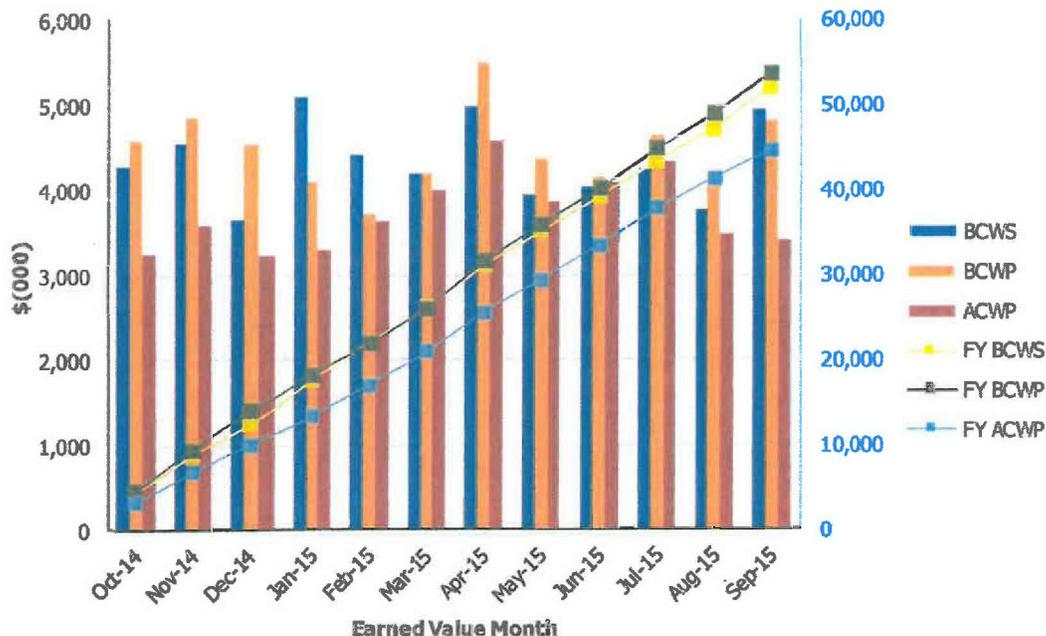
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-15

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 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	\$4,938	\$4,831	\$3,401	0.98	1.42	\$52,103	\$53,712	\$44,738	1.03	1.20
CTD	\$328,672	\$326,276	\$305,083	0.99	1.07					

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

The current month unfavorable schedule variance (SV) of (\$107K) is due to:

- Budget recovery for Best Basis Inventory (BBI) updates performed during the third quarter, but were originally scheduled for September (fourth quarter).

The current month favorable cost variance (CV) of \$1,429K is due to:

- Reflection of under-stated performance in previous months, resulting in a positive cost variance this month for secondary waste form development.
- Labor and Subcontractor usage efficiencies in support of waste feed delivery baseline studies. Efficiencies were realized due to utilizing labor resources with historical experience.
- Effluent Management Facility disposition evaluations being performed by WRPS labor rather than the planned subcontractor resources. Usage efficiencies were realized due to utilizing labor resources with historical experience.

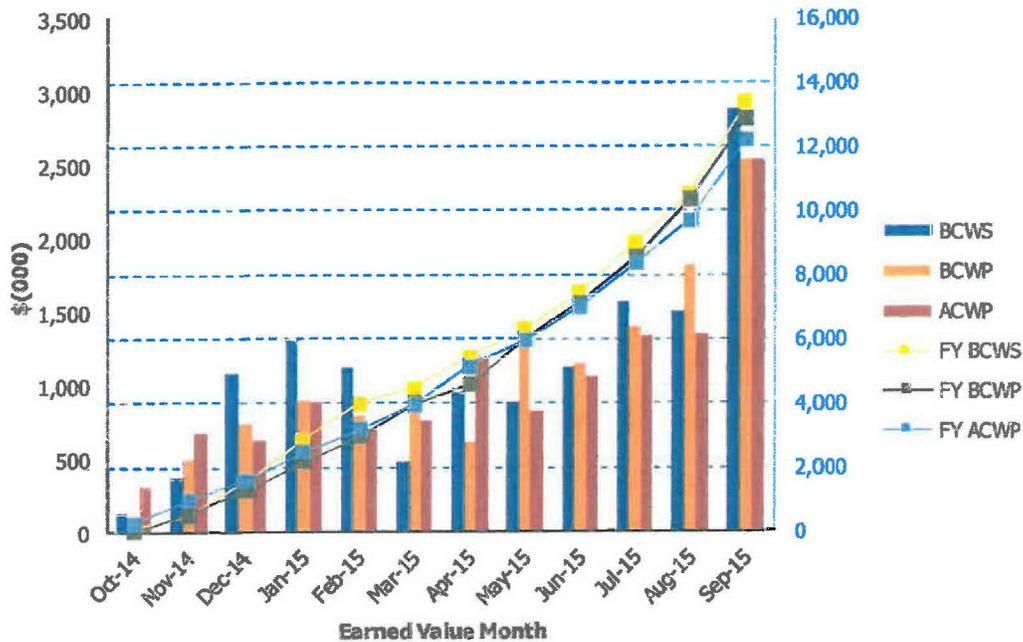
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-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	\$2,878	\$2,540	\$2,533	0.88	1.00	\$13,397	\$12,881	\$12,226	0.96	1.05
CTD	\$17,697	\$17,427	\$16,622	0.98	1.05					

Treat Waste

The current month unfavorable schedule variance (SV) of **(\$338K)** is due to:

- The delay in the procurement of resin for the Low-Activity Waste Pretreatment System (LAWPS) engineering scale integrated test. The micro-bead resin manufacture was unable to produce the needed resin due to previously scheduled production runs. The

project team developed a revised strategy to transfer excess resin from Bechtel National, Inc. (BNI) (WTP), which is currently stored onsite. This delay will not impact the overall schedule for testing.

The current month favorable cost variance (CV) of \$7K is within threshold.

Single-Shell Tank 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: On schedule. TPA Change Control form M-45-15-02 approved on April 14, 2015.

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-045-83, Complete the closure of WMA-C, Due: June 30, 2019, Status: To be missed. Please see issues.

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

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

M-045-92 (N, O, P, Q, R) Complete Installation of Four (4) Additional Interim Barriers, Due: October 31, 2017, Status: In Dispute. Please see issues.

Significant Past Accomplishments:

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

- Completed the annual interim barrier monitoring report for data collected in 2014, RPP-ENV-58420.
- Documentation of the Waste Management Area C (WMA-C) Phase 2 Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report was completed, and RPP-RPT-58339 was transmitted to Ecology on December 23, 2014, completing M-045-61.
- Completed TPA/RCRA Tier I Closure Plan.
- Finalized Integrated Disposal Facility (IDF) 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 and develop the annual interim barrier monitoring report for 2015.
- Complete TPA/RCRA Tier 3 closure plan templates for C-200 Tanks
- Finalize/Issue for IDF PA Summary Analysis.

Issues:

- **M-045-82, Submit complete permit mod requests for Tiers 1, 2, and 3 of the SST**
Change Control Form M-45-15-03 was submitted by ORP via letter 15-TF-0065 to Ecology for approval on June 30, 2015.
Ecology disapproved M-45-15-03 via letter 15-NWP-128 on July 14, 2015
ORP initiated dispute resolution via letter 15-TF-0069 on July 16, 2015
This dispute has been extended to February 18, 2016. ORP agreed to submit an integrated closure schedule to Ecology by December 31, 2015.
- **M-045-92 (N, O, P, Q, R), Complete Installation of Four (4) Additional Interim Barriers**
(N) Construct SX ISB 1 and 2 by October 31, 2015
(O) Design ISB 3 by June 30, 2015
(P) Construct ISB 3 by October 31, 2016
(Q) Design ISB 4 by June 30, 2016
(R) Construct ISB 4 by October 31, 2017
Change control form M-45-15-01 was submitted by ORP via letter 15-TF-0027 to Ecology for approval on March 31, 2015.
Ecology disapproved M-45-15-01 via letter 15-NWP-075 on April 17, 2015.
ORP initiated dispute resolution via letter 15-TF-0042 on April 20, 2015.
This dispute has been extended to November 20, 2015, with a proposed draft settlement proposed by Ecology. Currently ORP is reviewing the proposal.

Single-Shell Tank Retrieval Program

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

Significant Past Accomplishments:

- Ecology approved practicability evaluation request to forego a third retrieval technology in Tank 241-C-102.
- Retrieved an additional 11,000 gallons for a total of 54.8K gallons retrieved of waste from Tank-C-105 MARS-V.
- Completed extended reach sluicing system (ERSS) installation and operational testing for Tank 241-C-111.
- Completed C-101, C-107, and C-112 retrieval data reports (RDR).

Significant Planned Activities in the Next Six Months:

- Complete C-102 retrieval completion certificate and report
- Complete C-105 second and third retrieval technologies.
- Complete C-111 ERSS complete retrieval operations (second and third technologies).
- Complete A/AX infrastructure (water and utilities) design – FY 2015 Phase 4A and Phase 5.
- 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 safety instrument system (SIS) design modifications.

- Complete equipment removal/disposal at AX-101 pit and riser.
- Complete AX-2707 fencing and gate upgrades.

Issues:

None

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	-
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.

FINAL

Office of River Protection

Tri-Party Agreement
Monthly Summary Report
November 2015



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

Project Earned Value Management System reflects September 2015 information

Page	Topic	Leads
1	Administrative Items/Milestone Status	Bryan Trimberger/Dan McDonald/Jeff Lyon
3	System Plan	Kaylin Burnett/Jeff Lyon/Dan McDonald
4	Acquisition of New Facilities	Janet Diediker/Jeff Lyon/Dan McDonald
5	Supplemental Treatment and Part B Permit Applications	Steve Pfaff/Jeff Lyon/Dan McDonald
6	242-A Evaporator Status	Paul Hernandez/Jeff Lyon
7	Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility	Richard Valle/ Stephanie Schleif
8	Tank System Update	Jeremy Johnson/Jeff Lyon
8	Single-Shell Tank Integrity Assurance	Jeremy Johnson/ Jim Alzheimer
10	In Tank Characterization and Summary	Billie Mauss/Michael Barnes
12	Tank Operations Contract Overview	ORP TPA Program Managers/Jeff Lyon
22	Single-Shell Tank Closure Program	Ryan Beach/Jeff Lyon
24	Single-Shell Tank Retrieval Program	Jeremy Johnson/ Jeff Lyon
25	Tank Waste Retrieval Work Plan Status	Jeremy Johnson /Jeff Lyon
26	Tank in Appendix H, "Status - Single Shell Waste Retrieval Criteria"	Jeremy Johnson /Jeff Lyon
26	Tank Retrievals with Individual Milestones	Jeremy Johnson/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

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-045-92	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
M-045-61A	Submit to Ecology a primary doc. Phase 2 CMS and Rev. O update to the RFI Report for WMA C	12/31/2016		On Schedule
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA-C	Six months after CMS approval (M-045-61A)		On Schedule
M-045-84	Comp Neg's of HFFACO Interim Milestones for Closure of 2 nd SST WMA	01/31/2017		On Schedule

Milestone	Title	Due Date	Completion Date	Status
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.

WTP = Waste Treatment and Immobilization Plant

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) 2015 through third quarter of FY 2016 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 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 third quarter FY 2016.

FY = fiscal year.

Significant Planned Actions in the Next Six Months:

- Future campaign and outage scheduling
- 242-A Evaporator instrument calibrations and preventive maintenance
- 242-A Evaporator oil filled window maintenance

Issues:

None.

Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility

The 200 Area Effluent Treatment Facility (ETF) is currently in shutdown mode and is undergoing maintenance in preparation of an anticipated spring 2016 startup. The heat exchanger unit replacement was completed in summer 2015.

The Liquid Effluent Retention Facility (LERF) liquid levels, inventory, and received waste is shown in the table below for the time period of October 1 – 31, 2015.

Note: 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 10/31/15)	~4.66 Mgal	~5.83 Mgal	~6.34 Mgal
AZ-301 Tanker Shipments	~6,500 gal	-	-
MWBT-31 & MWVT 34 Leachate	-	-	~14,000 gal
Perched Water Tanker Shipments	-	-	-
ERDF Leachate Transfers	-	-	-
Other (325 Building Totes)	-	~1,320 gal	-

ERDF Environmental Restoration Disposal Facility
Gal gallon
Mgal million gallons
MWBT mixed waste burial trench

Significant Planned Actions in the Next Six Months:

- Staff training, component and system testing, and readiness activities will be performed before restart approval can be granted.
- Pressure safety valve 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.
- Class 1 Modifications are under development for the quarter ending December 31, 2015.

Issues:
None.

Tank System Update

Significant Planned Actions in FY 2016:

Double Shell Tank (DST) Integrity

- Enhanced annulus video inspection:
 - 241-AN-101
 - 241-AN-103
 - 241-AN-104
 - 241-AN-105
 - 241-AN-106
 - 241-AW-103
 - 241-AW-106
 - 241-SY-101
 - 241-SY-102
 - 241-SY-103.
- Ultrasonic testing (UT) inspections (two risers for primary wall/welds, one riser for secondary floor):
 - 241-AN-105
 - 241-AW-103.
- Continuing bi-weekly inspections of AY-102 waste accumulation site
- Continuing bi-monthly comprehensive inspection of AY-102 annulus
- Revise and update RPP-7574, *Double-Shell Tank Integrity Project Plan*
- Corrosion probe data evaluation and quarterly reports (4 reports)
- Development of primary tank bottom nondestructive examination (NDE) tool
- Release DST integrity assessment report

Single Shell Tanks (SST) Integrity

- In-Tank video inspections:
 - 241-T-107
 - 241-T-110
 - 241-TX-103
 - 241-TX-111
 - 241-TX-113
 - 241-TX-116
 - 241-B-101
 - 241-B-201
 - 241-BY-105
 - 241-U-102
 - 241-U-105
 - 241-U-107.

- Intrusions mitigation:
 - Complete 241-T-111
 - Subsequent tank to be determined.

Current Status

- 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.

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-045-91E1 on September 21, 2015 with issuance of RPP-RPT-55202, *Dome Survey Report for Hanford Single-Shell Tanks, Revision 1*. The report was discussed with Ecology on October 13, 2015, and both parties expressed interest in continuing this work but not requiring formal transmittal as a Tri-Party Agreement (TPA) milestone requirement.

Significant Planned Actions in the Next Six Months:

Begin planning for the SST integrity assessment by an independent, qualified, registered professional engineer (IQRPE) (M-045-91I).

Issues: None.

In Tank Characterization and Summary

For the period from October 1 through October 31, 2015:

Accomplishments:

- Completed RPP-RPT-58767, *Derivation of Best-Basis Inventory for Tank 241-SX-111 as of October 1, 2015*, Rev 0.
- Completed RPP-RPT-58768, *Derivation of Best-Basis Inventory for Tank 241-SX-112 as of October 1, 2015*, Rev 0.
- Completed RPP-RPT-43979, *Derivation of Best-Basis Inventory for Tank 241-AY-101 as of October 1, 2015*, Rev 15.
- Completed RPP-RPT-58700, *Derivation of Best-Basis Inventory for Tank 241-TX-110 as of October 1, 2015*, Rev 0.
- Completed RPP-RPT-57458, *Derivation of Best-Basis Inventory for Tank 241-C-102 as of October 1, 2015*, Rev 4.
- Completed RPP-RPT-58769, *Derivation of Best-Basis Inventory for Tank 241-SX-113 as of October 1, 2015*, Rev 0.
- Completed RPP-RPT-58696, *Derivation of Best-Basis Inventory for Tank 241-TX-103 as of October 1, 2015*, Rev 0.
- Completed RPP-PLAN-60585, *Software Management Plan for Utility Calculation Software Tank Waste Volume Calculator*, Rev 0.
- Completed RPP-PLAN-60589, *Sampling and Analysis of 241-AY/AZ Combined Ventilation System Stack Chemical Emissions*, Rev 0.
- Completed RPP-PLAN-60550, *Sampling and Analysis Plan for Residual Waste Solids in Tank 241-C-102*, Rev 0.
- Completed RPP-PLAN-60011, *Tank Sampling and Analysis Plan for Tank 241-C-105 Solids*, Rev 3.
- Completed RPP-PLAN-60523, *Tank 241-AN-106 Grab Sampling and Analysis Plan in Support of Corrosion Mitigation Midway through Tank 241-C-105 Retrieval*, Rev 0.
- Completed HNF-EP-0182, *Waste Tank Summary Report for Month Ending August 31, 2015*, Rev 322.
- Completed 241-C-105 sampling on October 28, 2015. Three samples were received at the lab.

Planned Action within the Next Six Months:

Tank sampling:

- Tank 241-AN-106 grab sampling at 50 percent C-105 retrieval is planned for November 2015.
- Tank 241-C-102 clamshell closure sampling is planned to begin November 2015.
- Tank 241-C-111 hard heel retrieval in-process grab sampling is planned for December 2015.
- Tank 241-SY-101 grab sampling is planned for December 2015.
- Tank 241-AN-101 grab sampling is planned for January 2016.

- Tank 241-AP-107 grab sampling is planned for March 2016.
- Tank 241-C-111 Off-Riser Sampling System (ORSS) closure sampling is planned for April 2016.
- Tank 241-AW-102 grab sampling (242-A Evaporator campaign EC-05) is planned for April 2016.
- Tank 241-AW-106 grab sampling (242-A Evaporator campaign EC-06) is planned for May 2016.
- Tank 241-AP-102 grab sampling at AY-102 50 percent retrieval is planned for May 2016.

Best-Basis Inventory (BBI) updates:

BBI updates for the following tanks were completed in October:

- 241-AY-101
- 241-C-102
- 241-C-105
- 241-SX-111
- 241-SX-112
- 241-SX-113
- 241-TX-110
- 241-TX-103

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

- 241-AN-101
- 241-AN-106
- 241-AP-103
- 241-AW-102
- 241-AY-102
- 241-AZ-102

Data Quality Objectives (DQO):

- Completed HNF-SD-WM-DQO-001, *Data Quality Objectives for Tank Farm Waste Compatibility Program*, Rev 21 in October.
- 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 and is planned to be released in November.
- RPP-8532, *Double-Shell Tanks Chemistry Control Data Quality Objectives*, Rev 15, is in-process to identify additional analyses for corrosion mitigation and to simplify quality control parameters is planned to be released in November.

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 September 30, 2015 WRPS TOC has worked 4,697,917 hours or 345 days without a lost time workday injury, and has worked 455,697 hours or 34 days since the last recordable case.

September-15										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	61,051	65,454	52,364	4,403	13,090	1.07	1.25			
FYTD	506,935	512,773	523,732	5,838	(10,959)	1.01	1.25	506,935		
CTD	2,850,840	2,831,253	2,824,677	(19,587)	6,576	0.99	1.25	3,395,276	3,391,694	3,582

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.

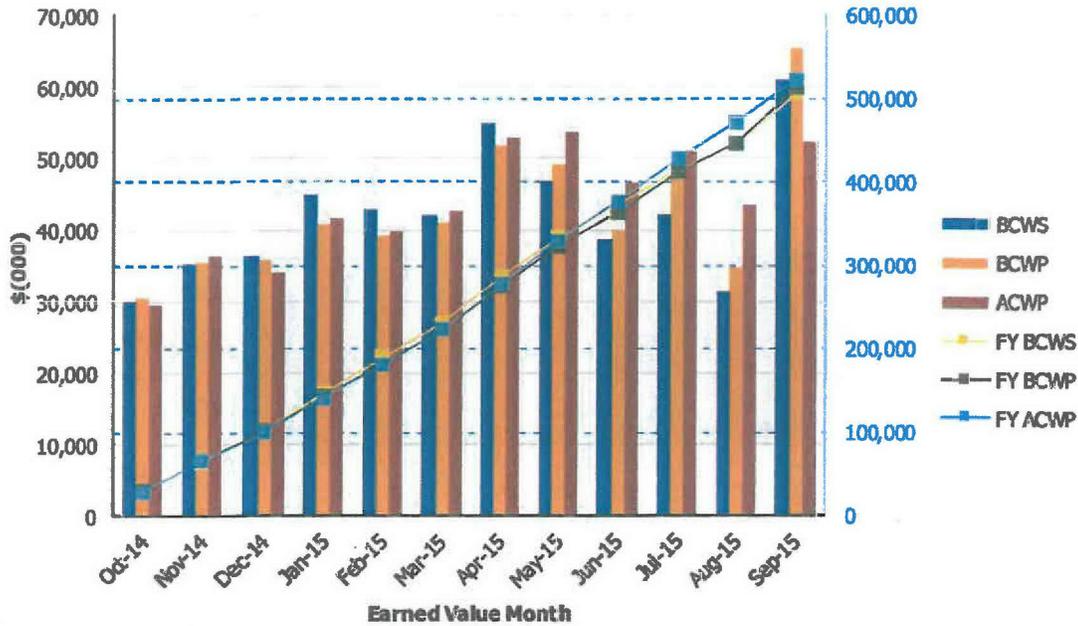
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-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	\$61,051	\$65,454	\$52,364	1.07	1.25	\$506,935	\$512,773	\$523,731	1.01	0.98
CTD	\$2,850,840	\$2,831,253	\$2,824,677	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

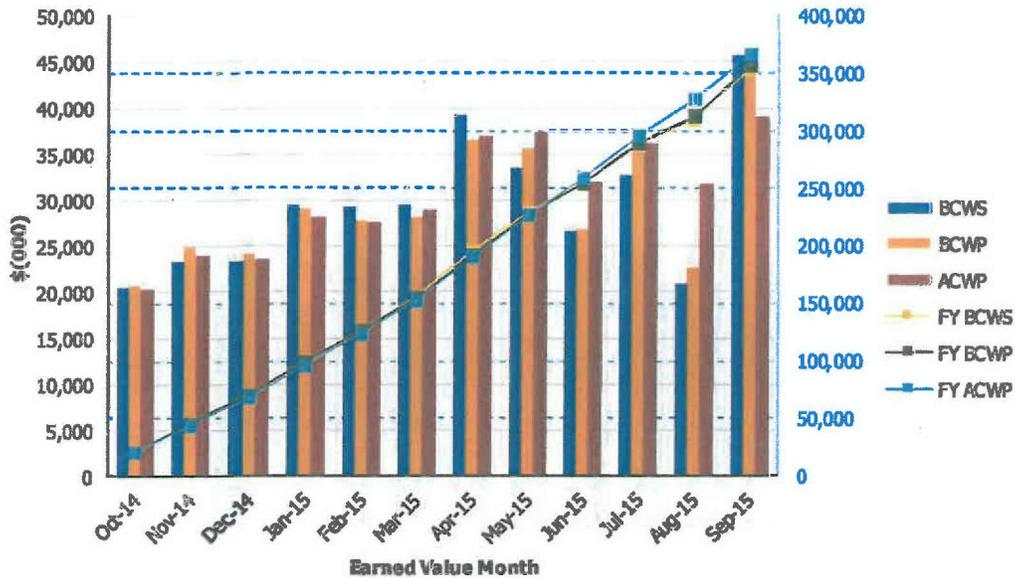
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-15

Tank Farms ORP-0014
Base Operations 5.01

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 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	\$45,657	\$44,220	\$39,025	0.97	1.13	\$354,456	\$356,370	\$366,145	1.01	1.03
CTD	\$1,891,884	\$1,882,213	\$1,873,829	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

Base Operations and Tank Farm Projects

The current month unfavorable schedule variance (SV) of **(\$1,437K)** is due to the following:

- AP-102 Equipment Removal and Installation: Slower progress made regarding field activities pump removal, standard sluicer installation, electrical installation, and splitter box installation due to lack of critical resources and crane availability.

The current month favorable cost variance (CV) of \$5,195K is due to the following:

- Overhead pass back (end of year alignment)
- 242-A Evaporator Campaigns - Efficiencies achieved during the operation of the 242-A Evaporator Campaign EC-03 due to conditions (cooler water temperatures) and waste composition.

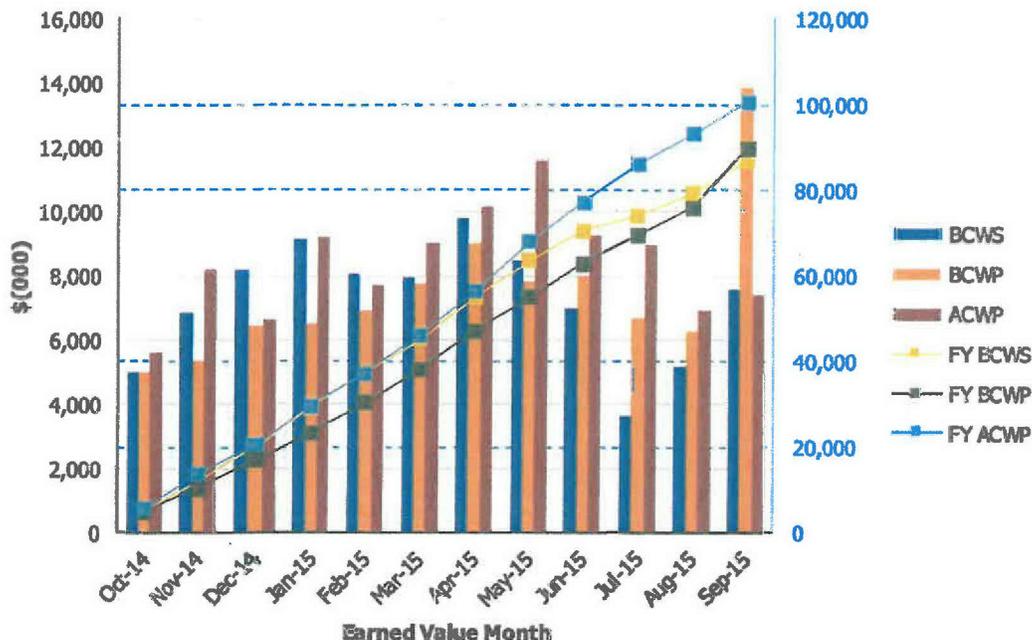
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-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	\$7,578	\$13,863	\$7,404	1.83	1.87	\$86,979	\$89,809	\$100,629	1.03	0.89
CTD	\$592,478	\$585,227	\$609,972	0.99	0.96					

Retrieve and Close Single Shell Tanks

The current month favorable schedule variance (SV) of \$6,285K is due to:

- The remaining performance taken on the Mobile Arm Retrieval System-Vacuum (MARS-V) due to an end effector hose leak that permanently shut down this retrieval system for Tank-241-C-105.

The current month favorable cost variance (CV) of \$6,477K is due to:

- Performance was claimed with minimal costs due to the permanent shut down of the MARS-V due to an end effector hose leak.

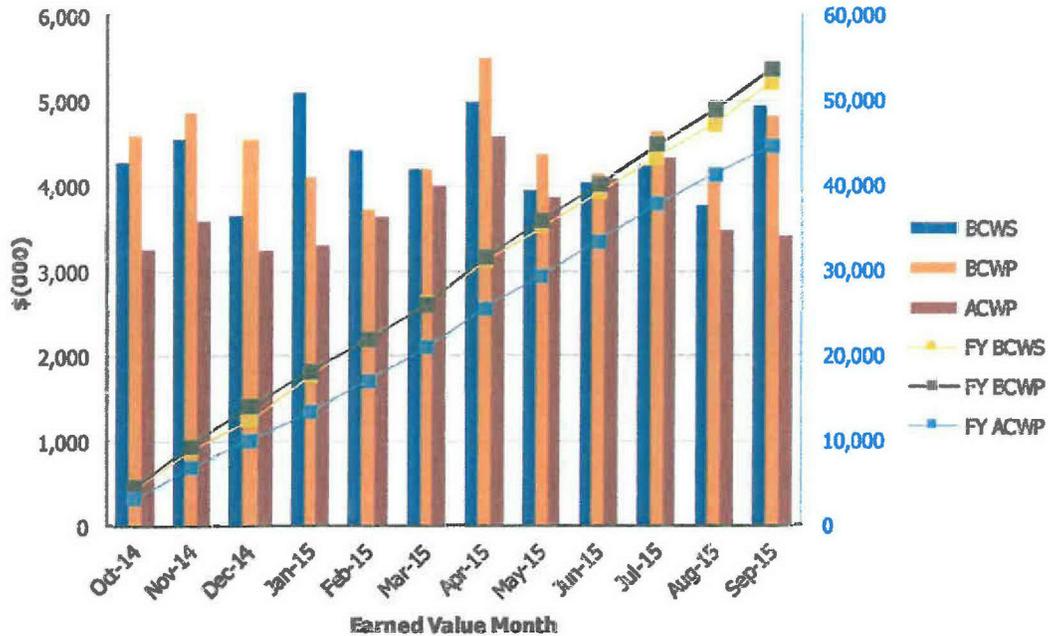
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-15

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 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	\$4,938	\$4,831	\$3,401	0.98	1.42	\$52,103	\$53,712	\$44,738	1.03	1.20
CTD	\$328,672	\$326,276	\$305,083	0.99	1.07					

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

The current month unfavorable schedule variance (SV) of **(\$107K)** is due to:

- Budget recovery for Best Basis Inventory (BBI) updates performed during the third quarter, but were originally scheduled for September (fourth quarter).

The current month favorable cost variance (CV) of \$1,429K is due to:

- Reflection of under-stated performance in previous months, resulting in a positive cost variance this month for secondary waste form development.
- Labor and Subcontractor usage efficiencies in support of waste feed delivery baseline studies. Efficiencies were realized due to utilizing labor resources with historical experience.
- Effluent Management Facility disposition evaluations being performed by WRPS labor rather than the planned subcontractor resources. Usage efficiencies were realized due to utilizing labor resources with historical experience.

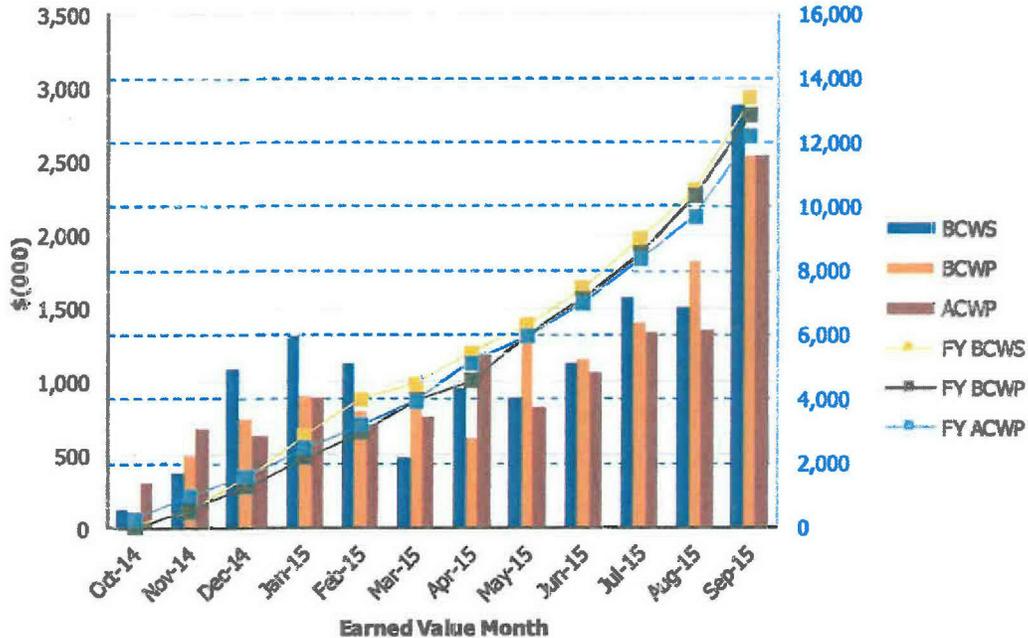
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-15

Tank Farms ORP-0014 Treat Waste 5.5
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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	\$2,878	\$2,540	\$2,533	0.88	1.00	\$13,397	\$12,881	\$12,226	0.96	1.05
CTD	\$17,697	\$17,427	\$16,622	0.98	1.05					

Treat Waste

The current month unfavorable schedule variance (SV) of **(\$338K)** is due to:

- The delay in the procurement of resin for the Low-Activity Waste Pretreatment System (LAWPS) engineering scale integrated test. The micro-bead resin manufacture was unable to produce the needed resin due to previously scheduled production runs. The

project team developed a revised strategy to transfer excess resin from Bechtel National, Inc. (BNI) (WTP), which is currently stored onsite. This delay will not impact the overall schedule for testing.

The current month favorable cost variance (CV) of \$7K is within threshold.

Single-Shell Tank 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: On schedule. TPA Change Control form M-45-15-02 approved on April 14, 2015.

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-045-83, Complete the closure of WMA-C, Due: June 30, 2019, Status: To be missed. Please see issues.

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

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

M-045-92 (N, O, P, Q, R) Complete Installation of Four (4) Additional Interim Barriers, Due: October 31, 2017, Status: In Dispute. Please see issues.

Significant Past Accomplishments:

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

- Completed the annual interim barrier monitoring report for data collected in 2014, RPP-ENV-58420.
- Documentation of the Waste Management Area C (WMA-C) Phase 2 Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report was completed, and RPP-RPT-58339 was transmitted to Ecology on December 23, 2014, completing M-045-61.
- Completed TPA/RCRA Tier I Closure Plan.
- Finalized Integrated Disposal Facility (IDF) 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 and develop the annual interim barrier monitoring report for 2015.
- Complete TPA/RCRA Tier 3 closure plan templates for C-200 Tanks
- Finalize/Issue for IDF PA Summary Analysis.

Issues:

- **M-045-82, Submit complete permit mod requests for Tiers 1, 2, and 3 of the SST Change Control Form M-45-15-03** was submitted by ORP via letter 15-TF-0065 to Ecology for approval on June 30, 2015.
Ecology disapproved M-45-15-03 via letter 15-NWP-128 on July 14, 2015
ORP initiated dispute resolution via letter 15-TF-0069 on July 16, 2015
This dispute has been extended to February 18, 2016. ORP agreed to submit an integrated closure schedule to Ecology by December 31, 2015.
- **M-045-92 (N, O, P, Q, R), Complete Installation of Four (4) Additional Interim Barriers**
(N) Construct SX ISB 1 and 2 by October 31, 2015
(O) Design ISB 3 by June 30, 2015
(P) Construct ISB 3 by October 31, 2016
(Q) Design ISB 4 by June 30, 2016
(R) Construct ISB 4 by October 31, 2017
Change control form M-45-15-01 was submitted by ORP via letter 15-TF-0027 to Ecology for approval on March 31, 2015.
Ecology disapproved M-45-15-01 via letter 15-NWP-075 on April 17, 2015.
ORP initiated dispute resolution via letter 15-TF-0042 on April 20, 2015.
This dispute has been extended to November 20, 2015, with a proposed draft settlement proposed by Ecology. Currently ORP is reviewing the proposal.

Single-Shell Tank Retrieval Program

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

Significant Past Accomplishments:

- Ecology approved practicability evaluation request to forego a third retrieval technology in Tank 241-C-102.
- Retrieved an additional 11,000 gallons for a total of 54.8K gallons retrieved of waste from Tank-C-105 MARS-V.
- Completed extended reach sluicing system (ERSS) installation and operational testing for Tank 241-C-111.
- Completed C-101, C-107, and C-112 retrieval data reports (RDR).

Significant Planned Activities in the Next Six Months:

- Complete C-102 retrieval completion certificate and report
- Complete C-105 second and third retrieval technologies.
- Complete C-111 ERSS complete retrieval operations (second and third technologies).
- Complete A/AX infrastructure (water and utilities) design – FY 2015 Phase 4A and Phase 5.
- 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 safety instrument system (SIS) design modifications.

- Complete equipment removal/disposal at AX-101 pit and riser.
- Complete AX-2707 fencing and gate upgrades.

Issues:

None

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	-
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.

FINAL

Office of River Protection
Consent Decree 08-5085-FVS

Monthly Summary Report

November 2015

Office of River Protection

Consent Decree 08-5085-FVS
Monthly Summary Report

November 2015 (Monthly Summary Report/Project Earned Value Management System
reflects September 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	Jeremy Johnson/Jeff Lyon
5	Tank Waste Retrieval Work Plan Status • Consent Decree Appendix C	Jeremy Johnson/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:

- Received approval to forego a third retrieval technology in Tank 241-C-102 from the Washington State Department of Ecology (Ecology).
- 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 extended reach sluicers system (ERSS) installation and operational testing in preparation for restarting retrieval operations at Tank 241-C-111.

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 due to recent MARS-V failure.
- 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	-
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

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
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:

- Finalize AX-Farm TWRWP.

Issues:

None.

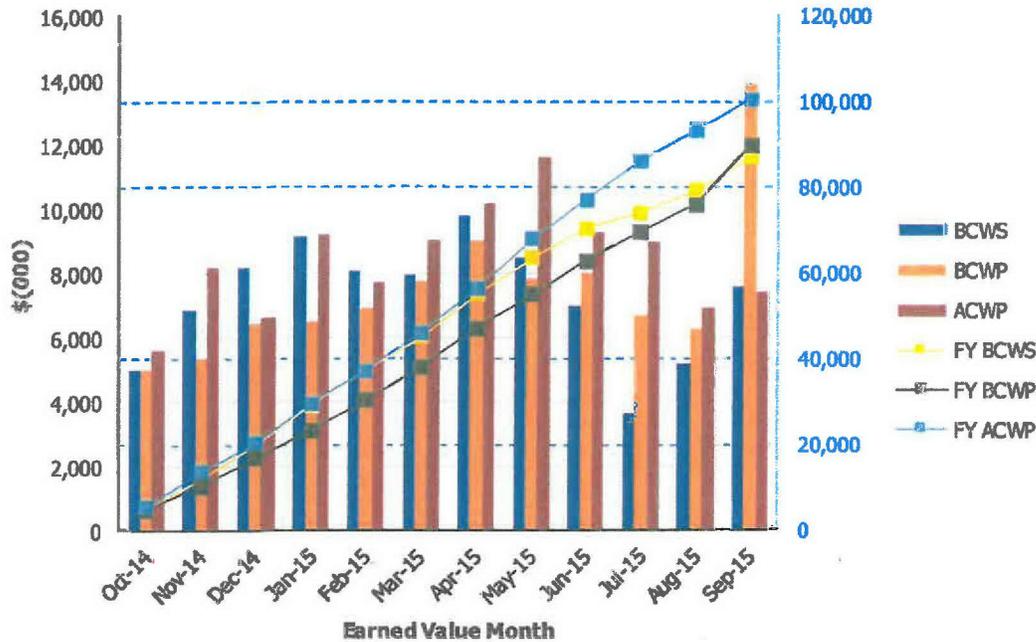
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

September-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	\$7,578	\$13,863	\$7,404	1.83	1.87	\$86,979	\$89,809	\$100,629	1.03	0.89
CTD	\$592,478	\$585,227	\$609,972	0.99	0.96					

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 \$6,285K is due to:

- The remaining performance taken on the MARS-V due to an end effector hose leak that permanently shut down this retrieval system for Tank-241-C-105.

The current month favorable cost variance (CV) of \$6,477K is due to:

- Performance was claimed with minimal costs due to the permanent shut down of the MARS-V due to an end effector hose leak.

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 2,874 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 627 craft, 419 non-manual, and 146 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 PTF and significantly slowed down for HLW. In August 2014, the U.S. Department of Energy (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 September 2015, LBL facilities were 50 percent complete, design and engineering was 78 percent complete, procurement was 71 percent complete, construction was 79 percent complete, and startup and commissioning was 8 percent complete.

In September 2015, the cumulative to-date WTP Project schedule variance was a negative \$20.2 million, and the cumulative to-date WTP Project cost variance was a positive \$61.7 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 September 2015.

Significant Past Accomplishments:

- Completed multi-discipline review of Effluent Management Facility (EMF) design (BOF)
- Issued the direct-feed LAW (DFLAW) Basis of Design Change Notice (BOF)
- Completed melter 1 internal structural reinforcement welding (LAW)
- Completed one concrete placement (wall 4104) (HLW)
- Installed 17.2 tons of structural steel (HLW)
- Issued PT T2 Criticality Calculation Report (PT)

Significant Planned Actions in the Next Six Months:

- Receive caustic scrubber (LAW)
- Assemble and install wet electrostatic precipitator internals (LAW)
- Receive the thermal catalytic oxidizer (TCO) and ammonia skid
- Complete EMF Preliminary Documented Safety Analysis (PDSA) (BOF)
- Begin excavation for EMF (BOF)
- Complete site energization from permanent power supply (BOF)
- Begin LAB system walk downs in support of DFLAW modifications (LAB)
- Begin full scale high-efficiency particulate air (HEPA) filter testing in accordance with the HEPA Filter Test Plan at the Mississippi State University facility (HLW)
- Initiate HLW melter off-gas treatment process/process vessel vent (HOP/PVV) design study (HLW)
- Complete criticality safety evaluation engineering study for ultrafiltration process system (UFP)/HLW lag storage and feed blending process (HLP)/plant wash and disposal system (PWD) with controls (PT)
- Complete hydrogen control strategy gap analysis (engineering study includes gap analysis and post design basis event [DBE] ventilation and air requirements) (PT).

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, pulse-jet mixers (PJM), corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

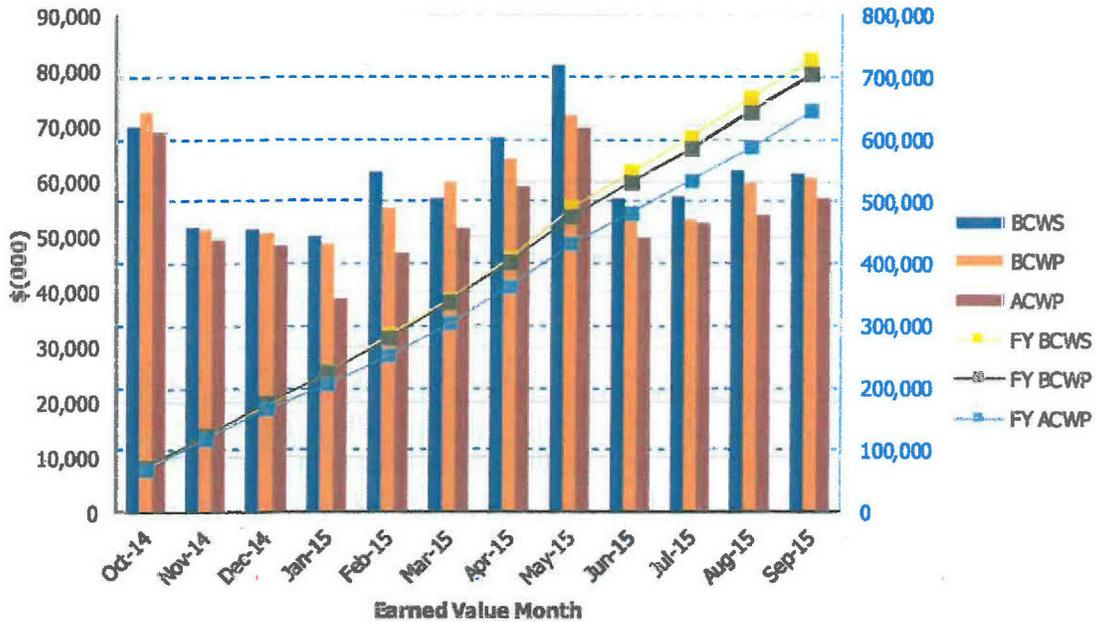
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$61,517	\$60,659	\$56,948	0.99	1.07	\$728,284	\$704,208	\$645,017	0.97	1.09

PTD \$9,099,763 \$9,079,546 \$9,017,802 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.

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:

- Issued PT T2 Criticality Calculation Report (PT)
- Completed first Phase 2 test
- Completed SHSVD info testing and identify design features
- Started PJM fabrication

Significant Planned Actions in the Next Six Months:

- Complete criticality safety evaluation engineering study for UFP/HLP/PWD with controls

- Complete hydrogen control strategy gap analysis (engineering study includes gap analysis and post DBE ventilation and air requirements)
- Receive technical issue closure work packages T1 and T3
- Issue Phase 2 PJM controls study
- Complete sliding bed evaluation report and brief DOE Office of River Protection (ORP)
- Issue SHSVD Design Verification Guide

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.

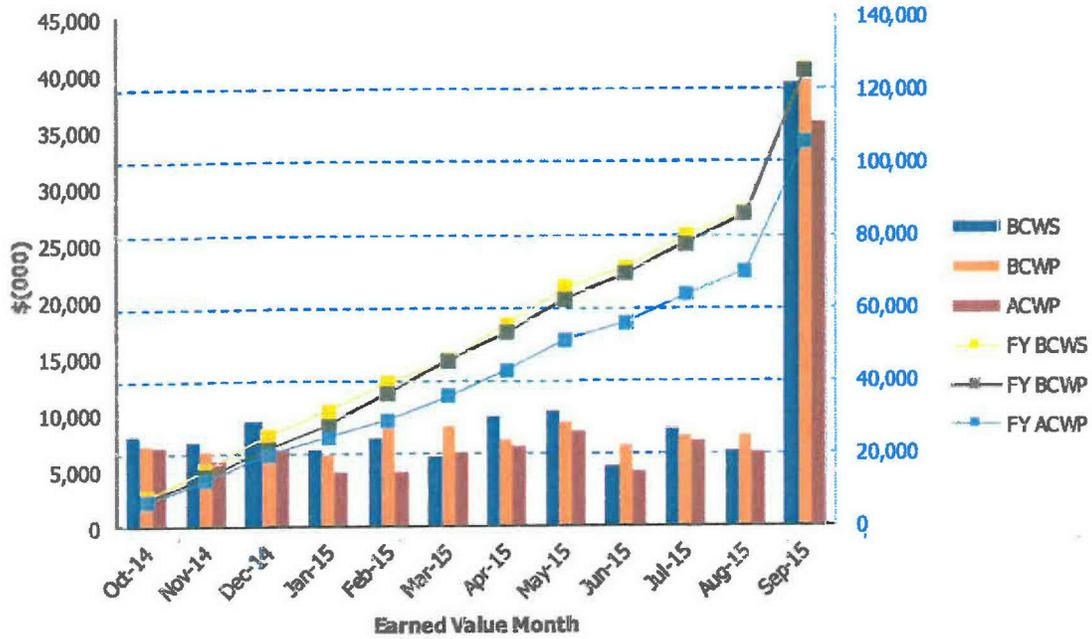
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$39,146	\$39,406	\$35,615	1.01	1.11	\$125,729	\$125,214	\$105,933	1.00	1.18

PTD \$1,732,400 \$1,731,832 \$1,712,560 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.

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 melters, 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 Work Plan. 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. Design activities are focused to support safety design strategy gap analysis, technical core team recommendations, and engineering study development to resolve design and operability reviews. Studies are being performed to determine the ventilation system capability, waste handling capability, etc. One such study, the Personnel Access Door Study, which analyzed the system's ability to maintain cascade ventilation during operations has been issued. Hazard and accident analyses are ongoing to support the Preliminary Documented Safety Analysis (PDSA) update to align design and the safety basis.

Systems Engineering continues to implement the Systems Engineering Management Plan. The development of the emergency turbine generator system (ETX) system design description continues.

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 are being

tested to ensure that the qualified filters support the needs for HLW and LBL facilities. Fabrication of full scale test filters has begun.

Design is progressing for radioactive liquid waste disposal (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:

- Continued HEPA filter testing in accordance with the HEPA Filter Test Plan at the Mississippi State University facility
- Began fabrication of full scale HEPA test filters
- Completed one concrete placement (wall 4104)
- Installed 17.2 tons of structural steel
- Issued personnel access door study

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
- Begin full scale HEPA filter testing in accordance with the HEPA Filter Test Plan at the Mississippi State University facility
- Initiate high-level waste melter off gas 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.

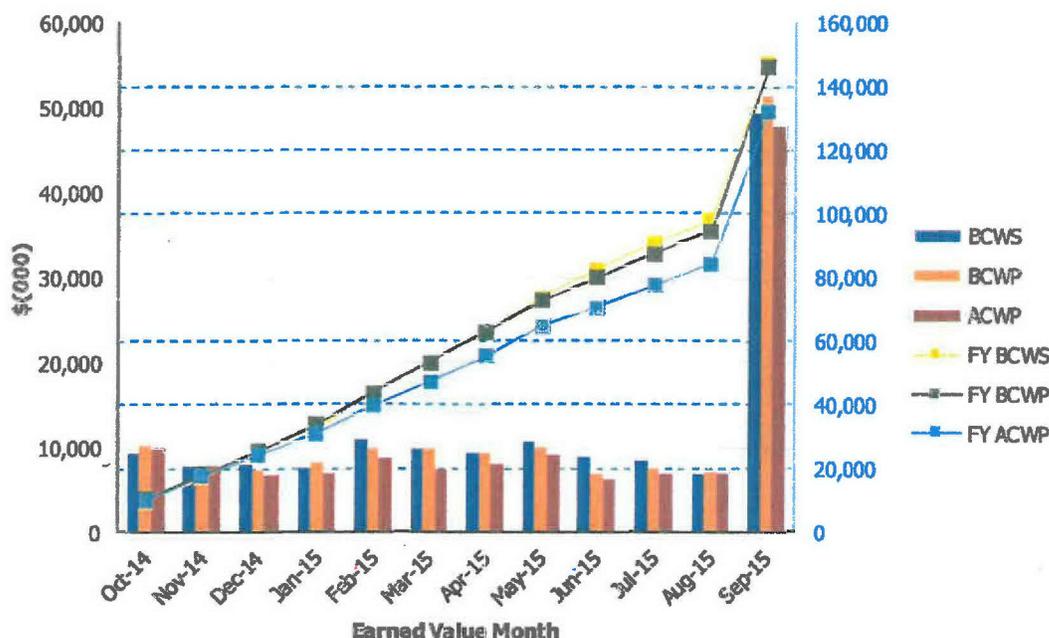
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$49,280	\$51,282	\$47,721	1.04	1.07	\$147,175	\$145,894	\$132,068	0.99	1.10
PTD	\$1,201,288	\$1,200,265	\$1,186,130	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.

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 September 2015, the LAW Facility was 53 percent complete overall, with engineering design 77 percent complete, procurement 75 percent complete, construction 77 percent complete, and startup and commissioning 4 percent complete.

Significant Past Accomplishments:

- Installed over 260 linear feet of process piping and hydro-tested 380 linear feet of piping
- Installed over 860 linear feet of conduit and pulled approximately 23,730 linear feet of cable
- Installed over 138 pen seals comprised of 29 conduit/steel, 92 spares, 16 pipe and 1 HVAC duct penetrations
- Completed melter 1 internal structural reinforcement welding
- Completed coating repairs on melter 1 structural steel

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 TCO 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.

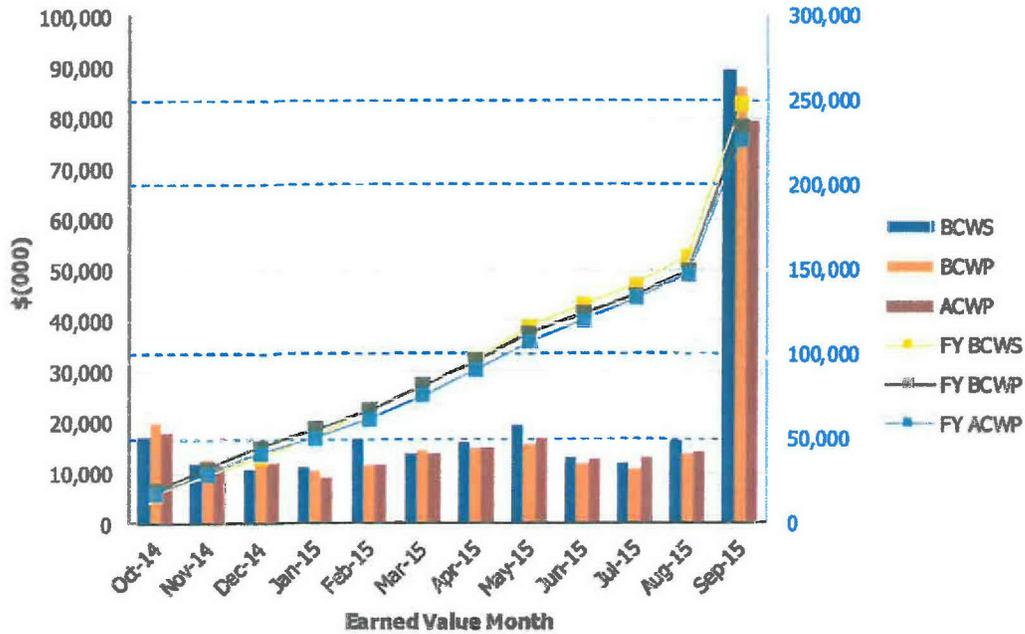
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$89,562	\$86,107	\$79,465	0.96	1.08	\$247,414	\$234,665	\$226,456	0.95	1.04
PTD	\$1,218,199	\$1,208,256	\$1,201,489	0.99	1.01					

ACWP = actual cost of work performed.
 BCWS = budgeted cost of work scheduled.
 BCWP = budgeted cost of work performed.
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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 September 2015, BOF was 55 percent complete overall, with engineering design 80 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 multi-discipline review of EMF design
- Continued excavation and drilling activities to install cathodic protection system upgrades
- Issued the DFLAW Basis of Design Change Notice (BODCN)
- Continued switchgear testing in support of site energization

Significant Planned Actions in the Next Six Months:

- Complete EMF PDSA
- Begin excavation for EMF
- Complete site energization from permanent power supply

Issues:

No major issues at this time.

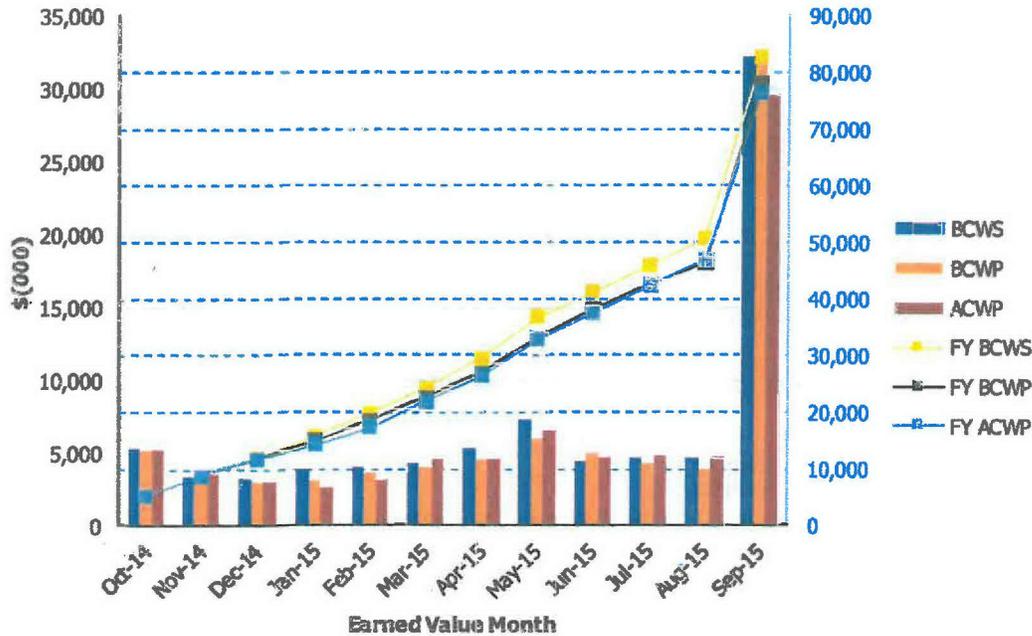
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$32,167	\$31,837	\$29,588	0.99	1.08	\$82,828	\$78,103	\$76,493	0.94	1.02
PTD	\$429,495	\$425,201	\$423,623	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.
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 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 September 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:

- Continued development of the test engineers workstation
- Continued development of procedures for the WTP analytical methods development process

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.

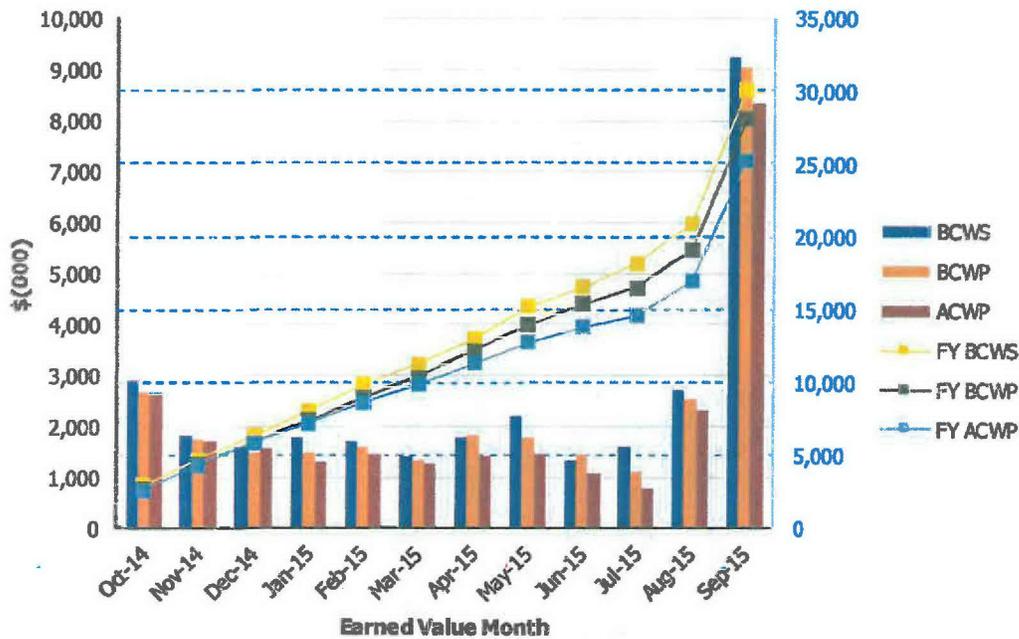
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data

Data as of: September 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	\$9,230	\$9,036	\$8,343	0.98	1.08	\$30,152	\$28,090	\$25,295	0.93	1.11
PTD	\$312,565	\$310,919	\$308,349	0.99	1.01					

ACWP = actual cost of work performed.
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 BCWP = budgeted cost of work performed.
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Waste Treatment Plant Project Percent Complete Status (Table)

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

Facilities	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars			Project Management & Start-up Services Unallocated Dollars		
	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Low-Activity Waste	2,124.0	1,133.3	53%	473.6	364.3	77%	341.3	254.4	75%	627.4	482.3	77%	677.6	28.2	4%	4.0	4.0	100%
Balance of Facilities	720.3	397.5	55%	132.8	106.7	80%	75.9	53.8	71%	248.4	199.3	80%	262.7	37.2	14%	0.5	0.5	100%
Analytical Lab	507.2	303.0	60%	94.5	77.8	82%	65.7	56.8	86%	155.8	149.1	96%	190.7	18.8	10%	0.5	0.5	100%
LBL Facility Services	438.3	57.8	13%	0.0	0.0	0%	42.6	10.2	24%	31.4	5.3	17%	241.7	20.3	8%	122.6	22.12	18%
Total LBL	3,789.8	1,891.5	50%	700.9	548.8	78%	525.6	375.2	71%	1,063.1	835.9	79%	1,372.7	104.5	8%	127.6	27.1	21%
Direct Feed LAW	89.3	18.0	20%	61.8	16.5	27%	7.48	0.00	0%	15.6	0.5	3%	6.0	0.0	0%	4.6	0.93	20%
Project Services	363.5	208.6	57%	54.0	26.7	49%	34.9	18.4	53%	71.0	54.0	76%	1.7	1.7	100%	201.8	105.9	52%
Total DFLAW & PS	452.7	224.6	50%	115.6	43.2	37%	42.4	18.4	43%	86.6	54.5	63%	1.7	1.7	100%	206.4	106.8	52%
Total LBL, DFLAW & Project Services	4,242.6	2,116.1	50%	816.6	592.1	73%	568.0	393.6	69%	1,149.6	890.4	77%	1,374.4	106.2	8%	334.0	133.9	40%
PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)																		
High-Level Waste	1,478.6	922.1	62%	384.4	325.2	85%	439.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%	n/a	n/a	n/a
Pretreatment	2,517.3	1,410.5	56%	767.7	645.8	85%	679.9	300.4	44%	890.0	378.6	43%	185.8	5.0	3%	n/a	n/a	n/a
Shared Services	4,726.9	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%	1,338.1	983.5	73%
Total HLW/PT/SS	8,722.8	5,965.2	68%	2,173.1	1,948.9	90%	1,565.5	1,124.8	72%	2,887.6	1,764.8	61%	758.5	143.2	19%	1,338.1	983.5	73%
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	12,965.4	8,081.3	62%	2,989.7	2,541.0	85%	2,133.5	1,518.4	71%	4,037.2	2,655.2	66%	2,132.9	249.4	12%	1,672.1	1,117.4	67%

Sources: Project Services WTP Contract Performance Report - Form of 4, Data for September 2015.

Note: In September 2012, the LBL Project was incorporated into the Project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/contract to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, the 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 PT/HLW/SS is \$2,948M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLW/PT/SS BCWP values. In March 2014, Project Control 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 PMB value has not been changed to reflect this change due to the freeze on HLW/PT 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 2016 LBL percent complete data is a total of LBLW/SS-LAB and LBL Facility Services. The Project Services Allocation account (PSA), as shown on the CFR Form 1, is not added to LBL for percent complete purposes.

Proposed Status:

At the Project Level, DOE and Ecology have also reached agreement on the criteria for making 200-IS-1 TSD/R-CPP waste site determinations and a path forward for resolving Change Package C-13-01. At the Project Level, DOE and Ecology have reached conceptual agreement on the TSD/R-CPP determinations for nearly all 200-IS-1 waste sites.

Current Status:

1	DOE provided change control forms to Ecology on 9/16/14.	Ecology provide comments on TPA Appendix Change Control forms C-13-01 and C-14-02 that align the waste sites for operable unit 200-IS-1.	Open	Stated at monthly IAMIT, impacts TPA M/S M-015-112 IS-1 work plan that is in dispute	Ecology AG reviewed and provided comments. Still at issue: IMUSTs as RCRA TSDs or not. Conducted final catch tank workshop with Ecology on 11/18/15; reached conceptual agreement on TSD determinations. Workshop results are being incorporated into C-13-01 for upcoming RL and ECY review and approval. The C-	
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					13-01 change package will also include a discussion regarding the TSD determination criteria used during the workshops.	
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Full text (July 2015): DOE-RL noted that a meeting was held June 4, 2015. Ecology stated the meeting was held with Ecology's and DOE-RL's attorneys, and a partial agreement was reached on the change control forms associated with 200-IS-1. Ecology added that there is an outstanding issue regarding the catch tanks. The issue is whether the catch tanks are considered RCRA TSD units or past practice units. Ecology stated that it is meeting internally in a week and a half to discuss the issue, and will involve the RCRA EPA staff in the discussion in an effort to get concurrence. Ecology indicated that once concurrence is reached, the parties can proceed with the milestone changes and also with establishing a milestone for completion of the work plan for IS-1. Ecology noted that every effort is being made to move forward. This action remains open.

WORKING ORP Key Documents List – November 2015

Milestone Title	Milestone Tie	Document	TPA Milestone Due Date (if applicable) ¹	ORP Delivery to Regulatory Date ²	Anticipated Regulatory Review Completion Date ³	Final Completion Date ⁴	DOE-ORP Lead	Contractor Lead	Ecology Lead	Comments/Issues
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-045-92O	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.
	M-045-92P	Future Barrier Design 4	06/30/16	TBD			C. Kemp	S. Eberlein	J. Lyon	• TPA Change Package M-045-15-01 is in dispute, per letter 15-TF-0042 • 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	

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

² "ORP Delivery to Regulators Dates" are those dates that support future milestones, are submittal dates for permitting activities, or miscellaneous submittals that support ORP actions and represent the dates when ORP submits documents to the regulators. ORP Delivery to Regulators Dates may be earlier than TPA Milestone Due Dates if work is completed ahead of schedule.

³ The "Anticipated Regulatory Review Completion Date" is generated based on TPA Milestone Agreements and TPA Section 9.0 documentation requirements for primary documents. This date will be changed and noted in "Comments/Issues" if extension of review is requested. If the document is a secondary document or for information only, the "Anticipated Regulatory Review Completion Date" may be listed as "N/A" for not applicable.

⁴ "Final Completion Date" is entered after the document is reviewed, comments are incorporated, and any disputes are resolved. Any comment resolution issues or disputes will be noted under "Comments/Issues."

Bold red = DOE submittal within the next 90 days **Bold green = document is under initial ECY Regulatory Review** **Bold black = document under comment/review response or other actions** **Bold blue = document is completed**

WORKING ORP Key Documents List – November 2015

Topic Areas	Document	ORP Delivery to Regulators Date ¹	Anticipated Regulatory Review Completion Date ²	Final Completion Date ³	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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² Note: The "Anticipated Regulatory Review Completion Date" is generated based on TPA Milestone Agreements and TPA Section 9.0 documentation requirements for primary documents. This date will be changed and noted in "Comments/Issues" if extension of review is requested. If the document is a secondary document or for information only, the "Anticipated Regulatory Review Completion Date" may be listed as "N/A" for not applicable.

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