

**ORP TPA Project Managers' Monthly (PMM) Meeting  
October 23, 2014**

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

CT15  
Chris Kemp, DOE-ORP

Date: 12-2-2014

for [Signature]  
Wahed Abdul, DOE-ORP

Date: 12/2/14

[Signature]  
Jason Young, DOE-ORP

Date: 12/3/14

[Signature]  
Jeff Bruggeman, DOE-ORP

Date: 12/2/14

[Signature]  
J. Lyon, Project Manager,  
Washington State Department of Ecology

Date: 12/11/14

[Signature] for Dan McDonald  
J. D. McDonald, Project Manager,  
Washington State Department of Ecology

Date: 12/18/14



## **1.0 Administrative Items/Milestone Status**

### Recent Items Entered/To Be Entered into the TPA Administrative Record

ORP stated that milestone M-045-22 was completed on September 25, 2014, based on discussions with Ecology that occurred during last month's project managers meeting (PMM). ORP commented that there have been related discussions with Ecology regarding the M-045-92 barriers, and that Ecology sent an e-mail response to the discussions to pursue the SX barriers 1 and 2. ORP stated that the path forward is to pursue the M-045-92 SX barriers 1 and 2, and Ecology's September 2014 e-mail will be submitted to the Administrative Record.

## **2.0 Agreements, Issues, Actions**

ORP noted that the updates to the agreements, issues and actions are highlighted in blue (see handout). ORP referred to issue No. 2, noting that a settlement agreement was reached between ORP and Ecology for AY-102 on October 2, 2014 resulting in a mutually agreed upon path forward for the removal of waste from AY-102.

The following actions were updated:

Action No. 1 (TF-14-08-01) – This action remains open.

Action No. 2 (TF-14-08-01) – ORP stated that during the last biweekly meeting, Ecology mentioned setting up a briefing for its team on the direct feed low activity waste (DFLAW) program and the LAW Pretreatment system. ORP suggested getting together with Ecology after today's meeting to schedule the briefing. This action remains open.

Action No. 3 (TF-14-07-02) – A meeting was held 10/9/14 on the deferred use lines. This action was closed.

Action No. 4 (TF-14-06-02) – ORP stated that a meeting is scheduled with Ecology on October 29, 2014 to continue the oversight opportunities on the WMA-C modeling. It was noted that today's action list indicates the meeting was tentatively scheduled for October 30, 2014, and it has been moved back one day. This action remains open.

Action No. 5 (TF-14-02-02) – ORP noted that this action is still open.

Action No. 6 (TF-14-01-01) – A meeting was held regarding the hose-in-hose transfer line management plan, and meeting notes were provided to Ecology. Another meeting has been scheduled for 11/17/14. This action remains open.

Action No. 7 (TF-13-12-01) – ORP stated that it would be helpful to have Ecology's list of team members in terms of scheduling meetings for the LAW Pretreatment system (see action No. 2). ORP added that there have been a couple of briefings with Ecology to discuss permitting schedules. ORP stated that the conceptual design documents are in DOE Headquarters' review and WRPS corporate review, but the Consent Decree efforts complicate sharing the information with Ecology. This action remains open.

Action No. 8 (TF-13-02-03) – ORP provided a draft change package to Ecology during the September 25, 2014 PMM. ORP stated that Ecology has communicated that it will respond on the next step regarding the change package. This action remains open.

### 3.0 Review of the ORP Summary

#### Tank Farms

System Plan – ORP stated that the system plan representative was not available today. Ecology provided an update on the system plan, stating that system plan 7 is at DOE-Headquarters under the Department of Justice (DOJ). *Ecology requested an action for ORP to indicate whether or not system plan 7 is going to be released, and if it is to be released, to provide the date. If system plan 7 is not going to be released, then ORP needs to indicate that the October 31, 2014 milestone due date is to be missed.*

#### Acquisition of New Facilities; M-90-00; M-47-00:

ORP noted that M-090-13 was amended in July 2014 to move the due date out to March 31, 2016 for the critical decision 1 (CD-1) package that contains the conceptual design. ORP also noted that M-047-07 was moved out to March 31, 2016 for the secondary liquid waste treatment CD-1 package. Ecology requested that ORP provide a status on the milestones sooner than 30 or 60 days, and that six months' notification regarding any issues would be helpful. ORP stated that an encouraging aspect with regard to the Secondary Liquid Waste Treatment milestone (M-047-07) is that ORP will be taking ownership of the Effluent Treatment Facility (ETF) in fiscal year 2015, which will enable it to better plan necessary upgrades to ETF. Ecology asked if the ETF upgrades will be a separate line item for rebaselining or if it will be incorporated into the current baseline. ORP responded that in FY12, it was a separate capital project to do the ETF upgrades, and it was based on upgrading ETF for the life of the Waste Treatment Plant (WTP) operations. ORP noted that the upgrades don't all have to be done immediately to initiate the DFLAW effort. ORP stated that when it takes ownership of ETF, the planning for the upgrades will need to be done again in terms of what has to be done sooner than later for DFLAW. Ecology stated that in terms of upgrades for ETF, FY15 will be a planning year. ORP concurred that it will be a planning year, along with some maintenance.

#### Supplemental Treatment and Part B Permit Applications; M-62-00, -20, -30, -45:

ORP noted that a change package was processed to delete M-062-40ZZ for submittal of the one-time tank waste supplemental treatment technologies report. ORP added that M-062-45ZZ to negotiate a one-time supplemental treatment selection is due April 30, 2015, and there are currently no negotiations under way. ORP stated that it anticipates the timing for a decision regarding supplemental treatment is also part of the Consent Decree and TPA negotiation or court efforts that are in progress. Ecology noted that there are depositions scheduled in December 2014, and the milestone is due in April 2015, and that ORP could anticipate whether the April 2015 due date will be met. ORP responded that there have been discussions but no agreements to move the milestone, and that ORP will be forced to take some action regarding the milestone.

242-A Evaporator Status – ORP reported the first evaporator campaign was completed, with a total waste volume reduction of 790,000 gallons by October 9, 2014. ORP noted that the performance

goal was 750,000 gallons. ORP stated that efforts are under way to make waste transfers to prepare waste for the next evaporator campaign. ORP stated that there are three or four waste transfers that need to be done to prepare for the November 2014 campaign, and that the retrieval team has indicated that it is on schedule for the November 2014 campaign. *Ecology asked for a follow-up about whether the November 2014 evaporator campaign is on schedule.* It was noted the November 2014 campaign is designated as 14-01. Ecology asked why the following campaigns are designated differently as EC-02, EC-03 and EC-04. ORP responded that the campaigns are now being labeled as evaporator campaign 2, 3 and 4 instead of being labeled for the fiscal year.

Double-Shell Tank System Update – ORP stated that the DST representative was not available today, and it would ensure that a representative would be available next month.

M-045-91, SST Integrity Assurance - ORP stated that the SST representative was not available today, and it would ensure that a representative would be available next month. ORP noted that samples are being taken for SST integrity.

In Tank Characterization and Summary - ORP reported that a core sample was taken from SY-102 last month, and preparations are under way to take another core sample from another riser in SY-102. ORP stated that the plan is to take two core samples out of the riser so there is enough material to work with. ORP noted that the core samples are in support of criticality specifications for WTP, and there is the concern is about the large particle size for plutonium in the tank. Ecology asked for more clarification regarding the sample in support of WTP. ORP responded that the sample is in support of technical issue 2 (T-2) for criticality, and it is believed that the tank has the largest particle size for plutonium. Ecology stated that the issue is when the SY-102 waste goes through WTP and is mixed, the larger plutonium particles will be separated from the other metals, creating a potential criticality issue. Ecology added that the other metals such as cadmium, which would control the plutonium, would go to a separate area.

ORP reported that samples are being taken out of C-107, and a problem has been encountered with getting enough of a sample from the residuals in the bottom of the tank. ORP stated that the sampling and analysis plan has a quadrant set up for taking six or seven inches of material, and the drag sampler is being used to obtain the samples. ORP indicated that enough material was obtained for a sample 1 and 1A, and they are the retrieval data report samples for C-107. ORP stated that some modifications were made and efforts will continue to obtain the samples at C-107. ORP noted that it will be meeting with Ecology following this meeting to ensure Ecology has all the information needed in terms of the sampling events. Ecology added that C-107 and C-112 are unique sampling events, and it anticipates that tank C-101 will be the only ordinary sampling event for the remaining tanks. ORP noted that Ecology requested the parties do a lessons learned when the unique sampling is completed since there will likely be more unique sampling events in the future.

Ecology asked why SST best basis inventory (BBI) updates are being done on the BY, BX and S-111 tanks. ORP responded that there is a set schedule to recalculate the tanks, based on decay

and new information.

Tank Operations Contract (TOC) Overview - ORP stated that the project performance has been transitioned from project controls to the federal project directors (FPDs). ORP noted that for the month of August 2014, there was a schedule variance of almost \$4.9 million, which is reflected in the following work breakdown structures (WBS) in the TOC overview. ORP reported that for base operations, a large portion of the negative schedule variance was driven by the 242-A Evaporator campaign, updating the documented safety analysis (DSA), and getting the equipment aligned.

ORP reported on WBS 5.02 for the SST retrieval and closure, noting that August 2014 was a challenging month due to several issues. ORP stated that the C-105 retrieval was started and it has been very difficult. The MARS vacuum was deployed, running over 2 million gallons of supernatant, and the slurry distributor at receiver tank AN-106 became plugged. ORP stated that the AN-106 slurry distributor is being replaced during the C Farm maintenance period in October 2014, and a systems engineering evaluation is being done to view the path forward on C-105. ORP indicated that retrieval will be started up at C-105 with high pressure water and a vacuum. ORP added that there have been discussions with Ecology regarding the path forward for C-105, and included in the path forward will be a potential for sluicing out C-105. ORP noted that there are several sluicing options.

ORP reported that there were also delays in August with the pre-retrieval construction activities, logging the dry wells, placing high resistivity probes, and starting a form removal at the pits in AX Farm. ORP noted that the crews are getting mask trained due to vapor concerns, allowing the schedule to recover in September 2014. ORP reported that a decision was made to use two exhausters at AX Farm, and the exhausters are being retrofitted. ORP noted that 210,000 gallons of waste have been retrieved from C-102, and 110,000 gallons remain in the tank. ORP stated that what it calls a waste berg is located under the slurry pump in C-102, and it is preventing the pump from reaching the tank bottom. ORP stated that retrieval in C-102 is planned for startup early next week with a new enhanced reach sluicer in riser 2, and high pressure water will be used. ORP expressed confidence with reducing the waste berg and getting the pump closer to the bottom of the tank.

ORP stated that waste feed delivery/treatment/DST retrieval closure has lagged behind for most of FY14 in terms of coordinating between tank farms and WTP, but overall FY14 is ending with reasonable compliance to the planned activities. ORP noted that the statement under the favorable cost variance should read "PNNL glass formulation support" instead of gall formulation. ORP stated that testing is being done on glass samples to determine the long-term performance in an effort to better predict how the glass will perform in the Integrated Disposal Facility (IDF), and the testing cost less than anticipated this year. ORP reported that very little was spent on supplemental treatment in FY14. ORP noted that there had been some early spending when there was uncertainty about whether the one-time Hanford tanks supplemental treatment technologies report would be produced, but that effort has been shut off and the spending dropped.

ORP noted that the bullets for the current month unfavorable cost variance for the WBS 5.5 treat waste were left off the TPA monthly summary report. ORP reported that the low activity waste pretreatment system (LAWPS) unfavorable schedule variance for August was because some of the activities planned for August were done earlier that resulted in earlier positive schedule variances and the unfavorable cost variance was due to more money spent to finalize the documents. ORP added that the funding for LAWPS. will not be what was anticipated in terms of getting capital funding supplied to the project as early as planned due to the continuing resolution (CR). ORP stated that as a result, the contractor has had to do additional work planning, and the work is being called an advance conceptual design work plan phase where the more challenging comments from the design review are resolved. ORP indicated that the goal is to get CD-1 approval by the end of February 2015, and that the CR has ended at that point so that capital funding can be applied to start preliminary design.

Ecology asked if the schedule for LAWPS is reflected in any other documents than the TPA monthly summary, such as the integrated schedule. ORP responded that the project schedules are used, and the integrated schedule that Ecology was referring to are not reviewed. ORP indicated that it would look at the integrated schedule that is sent out weekly. Ecology asked if ORP has a schedule that is tracked. ORP responded that it does have a schedule that is tracked. Ecology asked if it could look at the schedule that ORP tracks. ORP responded that Ecology probably could not look at that schedule, but that it would look at the integrated schedule to determine if there are some activities that could be loaded in for Ecology's benefit.

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

M-045-22 – ORP noted that this milestone was discussed at the beginning of today's meeting.

M-045-22-TO3 - ORP stated it was determined that a larger well or borehole would be needed if soil desiccation and contaminant removal are done.

M-045-59 – ORP stated that this milestone for the infiltration pathways control is on schedule.

M-045-61 - ORP stated that the intent is to submit the RCRA facility investigation (RFI) report by the end of December 2014. ORP added that it is waiting for a response from Ecology regarding the negotiation path for moving forward on the corrective measures study (CMS) work. ORP indicated that a proposal is being submitted to Ecology that the CMS could be done by the end of December 2016.

M-045-92 – ORP stated that the intent of the parties is to continue with the construction of barriers 1 and 2 at SX Farm.

M-045-62 – ORP noted that this milestone is to be missed.

#### TPA-SST Retrieval and Closure Program:

M-045-82 – ORP noted that this milestone is to be missed.

Significant Pas Accomplishments – ORP noted that dry well logging of C-110, C-104, and C-109 had been completed and they have received some of the retrieval data reports.

Significant Planned Activities in the Next 6 Months - ORP stated that efforts continue with the Waste Management C Performance Assessment (WMA-C PA) and a draft of the Tier 1 closure plan for WMA-C. ORP noted that these efforts are part of the M-045-82 milestone. ORP reported that the Waste Management A/AX PA is kicking off next month, with a meeting scheduled November 18, 2014. The ORP Project Manager for the WMA C and A/AX PA effort will be Ryan Beach. ORP added that the IDF PA is also kicking off on November 18, 2014 and the ORP Project Manager for that effort will be Gary Pyles.

Tank Waste Retrieval Work Plan (TWRWP) Status - ORP stated that there are no TWRWP modifications in the queue at this time.

Tank in Appendix H. Status (tank 241-C-106) - There was no change in status to report.

Tank Retrievals with Individual Milestones (tanks 241-A-103 and 241-S-112) - There was no change in status.

CD-SST Retrieval and Closure - ORP stated that notification has been made that tanks C-102, C-105 and C-111 are at very serious risk of missing milestone D-00B-01 (due September 30, 2014). C-102 will begin starting up retrieval early next week. Retrieval for C-111 is expected to begin in the May 2015 time frame and is anticipated to finish in July. Ecology asked if the milestone is still at serious risk or if the milestone will be missed, or if milestones are missed in the CD. ORP responded that Ecology's questions need to be discussed through the attorney regarding the terminology that is used. ORP reported that milestone D-00B-02 to advise Ecology of the nine retrievals following C Farm has been completed, and the tanks will be in A/AX Farm, excluding tank A-103. ORP noted that a status is provided to Ecology every two weeks out in the field on the work in AX Farm.

Significant Past Accomplishments - ORP noted that the enhanced reach sluicer has been replaced in C-102, and it is anticipated that retrieval will start again early next week. ORP stated that the plugged slurry distributor will be pulled out of AN-106, which is the receiver tank for C-105 retrieval. ORP also noted that they anticipate starting up C-111 retrieval in May of 2015 and finish in July 2015. Ecology asked if this was the first slurry distributor that had plugged. ORP responded that it was the first plugged slurry distributor in retrieval, but that slurry distributors had been plugged in the past for other work. Ecology asked how long it would take to remove, fabricate and replace the slurry distributor. ORP responded that it would take about two months, and that a slurry distributor is on hand and minor modifications are being made. ORP noted that the work packages are being prepared for pulling the slurry distributor out, which is about 43 feet long, and it is considered high-risk work to pull the distributor.

ORP reported that Ecology's letter 14-NWP-210, in response to the ORP request to forego a third retrieval technology at C-112, had six concerns. Ecology has requested a response within 30 days for discussions. ORP suggested getting together with Ecology following today's PMM to schedule a meeting. ORP noted that it could not meet Ecology's request to respond to the six concerns within 30 days. Ecology agreed to meet with ORP following the PMM meeting to schedule a meeting to discuss Ecology's concerns.

CD TWRWP Status - ORP stated that the CD TWRWP table is the same table that is in the TPA monthly summary report.

Two actions were taken, one formal and informal. 1) ORP to formalize Ecology's desire to know about the release of the system plan, and 2) ORP to confirm the next evaporator campaign is on schedule informally by email.

### **Waste Treatment Plant**

The WTP actions were updated as follows:

Action No. 1 (WTP-14-06-01) - ORP sent Ecology a schedule for the full-scale vessel testing on October 1, 2014. This action was closed.

Action No. 2 (WTP-14-06-02) - This action remains open.

Action No. 3 (WTP-14-06-03) - This action remains open.

Action No. 4 (WTP-14-04-01) - This action remains open.

ORP identified that WTP currently has 615 craft, 402 non-manual and 184 subcontractor. It was also noted that as of August, LBL is 70 percent complete. ORP stated that the significant past accomplishments and planned actions would be covered today under the individual areas.

### **Pretreatment (PT) Facility**

ORP reported that Phase 1 of the full-scale vessel testing was completed, and testing with the stimulant is under way at the full-scale testing facility. Testing with the pulse jet mixer (PJM) array has been started in the acrylic test vessel. ORP stated that Bechtel has submitted four technical issue plans for review, but did not indicate which four technical issue plans were submitted. ORP added that Bechtel submitted a resumption plan, similar to what was done for the High Level Waste (HLW) Facility, and ORP is providing comments to Bechtel on the resumption plan. Ecology requested an update on all of the technical issue activities and an update on all of the resumption plans for all of the facilities. Two actions were established: *1) ORP to provide Ecology the integrated flow for all of the resumption plans; 2) ORP to provide Ecology an update status on the eight technical issues. The Oregon Department of Energy will be included in the update. The update status will be provided separately by the eight technical issue teams. Ecology requested schedule updates to be included in the status provided by the technical teams.*

Ecology asked about the resumption plan for PT. ORP responded that the same process is being applied to the PT resumption plan as was done for HLW. Ecology asked if the PT resumption plan includes the design and operability review. Ecology cautioned ORP that given the scope of PT and its complex issues, a comprehensive design and operability review should be done, similar to what was done for HLW. ORP responded that the plan is to conduct a design and operability review. Ecology formally requested early involvement in the PT design and operability review. Ecology noted that it was involved early in the HLW design and operability review process, but it has not been involved early in the Low Activity Waste (LAW) facility design and operability review. ORP acknowledged that Ecology's request for involvement in the processes has been made during previous meetings. ORP stated that the LAW design and operability review is still scheduled to be completed in December 2014, and offered to discuss it with Ecology following

today's meeting.

Ecology asked if the same group that is conducting the LAW design and operability review will be doing the PT review. ORP responded that the current design and operability team won't progress over to the PT design and operability review because there will be a lapse between the LAW review and the PT review. Ecology asked when the PT design and operability review will kick off. ORP responded that the two-year work plan for PT and HLW has not been released, and a start time for the PT design and operability review was not available. *Ecology requested a status on the details of the two-year work plan for PT and HLW.*

### **High Level Waste**

ORP stated that BNI was given authorization on August 19, 2014, to resume all engineering work necessary to finalize the design of HLW. ORP noted that this update was provided during the September 2014 project managers meeting. ORP added that limited construction and procurement authorization was given to Bechtel. Ecology asked about the meaning of limited and if there was a definition for limited release of procurement. ORP referred Ecology to the HLW project lead to understand how the authorization letter was written. Ecology requested a copy of the letter, if it was available. *An action was taken to provide Ecology a copy of the ORP letter to Bechtel, if it is available to release, that authorized limited construction and procurement.* ORP reported that Bechtel has completed three studies, in response to the design operability review, that are related to the HVAC and the secondary waste handling system. ORP is in the process of reviewing and providing comments on the three studies. ORP stated that as part of the authorization to proceed with engineering, Bechtel will be incorporating the design operability review and the technical team issues and moving forward with resolution of the technical issues, and then the design will be modified, if needed.

Ecology noted that there had been previous discussions with ORP, and it is reflected on the action item list, regarding its concern about the various venues from the reliability validation process, design and operations, the 2010-2, and all of the technical issues. Ecology reiterated the concern about whether all of the above-stated topics are being considered and included when an issue comes to closure or a design is transmitted to Ecology for review. Ecology stated that the question needs to be answered; otherwise Ecology would have no way of knowing that what it is receiving for review is complete. ORP acknowledged Ecology's concern and the related action item. Ecology stated that the concern has been expressed for several months, and if the answer has not been provided when documents are submitted for review, the question will be asked at that time. Ecology pointed out that it would be very late in the process to be asking the question.

### **Low Activity Waste Facility (LAW)**

ORP stated that LAW is 70 percent complete overall. ORP reported that Bechtel submitted a contract modification proposal on September 30, 2014, and the proposal is divided into two parts. The first part (CLIN 1) is the rebaselining of LAW, BOF and LAB (LBL), and the second part (CLIN 2.1) is for the design of direct feed LAW (DFLAW). ORP noted that there wasn't much of a revision to the DFLAW proposal, but the LBL proposal contained quite a bit of revision to the

commissioning area. ORP stated that it will be a lengthy process to complete the technical and cost evaluations on Bechtel's contract proposal and completing the negotiation process and going through Headquarters' approval.

ORP stated that the installation of the castable refractory in melters 1 and 2 is on schedule to be completed by the end of December 2014. ORP noted that the workers are on as-needed overtime on Saturdays in an effort to meet the December 2014 schedule. Ecology asked when the lids will be completed for the two melters. ORP responded that the lids are not scheduled until after the melters are completed. ORP noted that the third bay is needed to work on the melters, and the third bay will also be used for the melter lids. ORP added that lifting frame for the melter lids is in place and everything is set up for the melter lids. ORP indicated that it would be mid-2015 before starting on the melter lids.

Ecology asked about the schedule for the castable refractory in the two melters, noting that it has been almost two years. ORP responded that the installation is on schedule, and it is a long process. ORP noted that hydrotesting will be another main activity associated with completion of the melters. Ecology inquired about the status of the replacement melter. ORP responded that the replacement melter was discussed during the last project managers meeting, and the status is the same. ORP added that there is a spare refractory, and the spare melter shell is within Bechtel's contract, but the assembly is not within the contract. Ecology asked if the spare melter shell has been manufactured yet. ORP responded that the spare melter shell has not been manufactured and that Bechtel is not currently working towards the spare melter. Ecology noted that the melter life is only five years, and it is taking two years to install the refractory in the melters. Ecology added that once the direct feed process starts, it is unknown when a spare melter will be needed. ORP stated that the issue was discussed during the last meeting, and the response is the same, that the spare melter is part of the One System integration efforts.

Ecology asked if the One System team has been thinking about the spare melter. ORP responded that the One System team has been thinking about the spare melter, but there have been no decisions yet. Ecology asked if the spare melter is on the schedule for one to be available. ORP responded that there is a schedule, and the scope for dealing with the melter and how it is built needs to be addressed, and the best path forward needs to be finalized. Ecology asked where the spare melter falls on the schedule. ORP indicated that it would have to review the schedule, and stated that there is some time for the spare melter on the schedule. Ecology asked if ORP was free to discuss these topics at this time. ORP responded that the topics could be discussed to some degree. ORP stated that the scope of DFLAW could be discussed, which includes the integrated schedule that is in review. ORP added that the program is assessing DFLAW and the tank farm project associated with DFLAW and how all the parts fit together and what trade studies are needed. ORP indicated that all of those aspects are being identified, and some of them are being worked. ORP stated that a spare melter will be available and the program needs to be able to address that.

## **Balance of Facilities (BOF)**

ORP noted that the significant planned actions in the next six months comprise the important activities for BOF. Ecology referred to the potential for staggered execution of facilities, and that there will be a significant amount in BOF and LAB that will have to be tailored to running operations at the LAW facility. Ecology expressed concern that the parties are not aware of what all that entails and how long it will take to accomplish. Ecology expressed the follow-on concern about how the facilities will recover and get back to full operation when the WTP system is ready to run. Ecology requested information as soon as possible regarding the plans, citing the examples of truncating pipes, truncating steam and essentially downscaling for DFLAW, and then the recovery process to maintain full operations. Ecology specifically asked for what the operations and maintenance plan might look like.

ORP responded that Ecology's questions and concerns fall under the second part of Bechtel's contract modification proposal for LAW (CLIN 2.1), and will be addressed in the detailed design of the BOF isolations. ORP cited the boiler isolation, where only two of the six boilers will be needed, and reducing the capability with the chiller compressor plant. ORP stated that once the design is completed for reduced capability and the direction is provided to the specific operation, there will be the capability of going back to PT. Ecology asked if accommodation for static maintenance of the parts that will not be used is part of 2.1. ORP responded that that it will be included, and as the design matures there will be more information available on that maintenance aspect. ORP added that the detailed design for the BOF isolation and the effluent management facility have been authorized while negotiations on Bechtel's contract modification proposal are under way. *ORP asked if Ecology was requesting an action item regarding the plans for operating DFLAW at reduced capability and then transitioning to full capacity for WTP operations. Ecology responded that it should be a formal action item.*

## **Analytical Laboratory (LAB)**

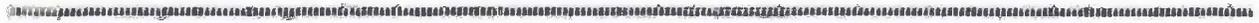
Ecology stated the understanding that ORP and the contractor believe that all of the work has been completed on RLD vessels 163, 164 and 165. ORP concurred with Ecology's statement. *Ecology stated that from its perspective, there is still an open item for ORP and Ecology to meet for a review on the final certification and/or closure package on RLD vessels 163, 164 and 165.* ORP asked if that was an action item. Ecology stated that it was now an action that a closure or certification package is needed for the RLD vessels to ensure that all the actions are closed related to the NCRs, the IQRPE and hydrotesting. Ecology added that when the action is completed, the parties could agree that the LAB substantially complete milestone has been met.

## **4.0 Key Documents List**

ORP stated that the only change to the key documents list was on the first line.

## **Upcoming Meetings**

The November 2014 ORP quarterly milestone review is scheduled for Thursday, November 20, 2014, from 8:30 a.m. to 11:30 a.m. at the Ecology office.



**Final**

Office of River Protection  
Tri-Party Agreement  
Monthly Summary Report  
October 2014



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

**October 2014 (Monthly Summary Report/Project Earned Value Management System reflects August 2014 information)**

Page	Topic	Leads
1	Administrative Items/Milestone Status	Bryan Trimberger/Dan McDonald/Jeff Lyon
2	System Plan; M-062-40	DaBrisha Smith/Jeff Lyon/Dan McDonald
3	Acquisition of New Facilities; M-090-00 and M-047-00	Janet Diediker/Jeff Lyon/Dan McDonald
4	Supplemental Treatment and Part B Permit Applications; M-062-00, M-062-21, M-062-30, and M-062-45	Steve Pfaff/Jeff Lyon/Dan McDonald
5	242-A Evaporator Status	Ron Koll/Jeff Lyon
6	Double-Shell Tank System Update	Jeremy Johnson/Jeff Lyon
6	Single-Shell Tank Integrity Assurance; M-045-91	Jeremy Johnson/ Jim Alzheimer
7	In Tank Characterization and Summary	Billie Mauss/Michael Barnes
9	Tank Operations Contract Overview	ORP TPA PMs/Jeff Lyon
16	Single-Shell Tank Corrective Action; M-045-22, M-045-50 series, M-045-60 series, and M-045-92	Chris Kemp/Jeff Lyon
17	Single-Shell Retrieval and Closure Program Tri-Party Agreement (TPA) Milestones Status; M-045-00 series	Chris Kemp/Jeff Lyon
19	Tank Waste Retrieval Work Plan Status	Chris Kemp/Jeff Lyon
20	Tank in TPA Appendix H, Status Tank Retrievals with Individual Milestones	Chris Kemp/Jeff Lyon
CD	Waste Treatment and Immobilization Plant (WTP) Overall TPA Summary and Milestone Status; see the U.S. Department of Energy, Office of River Protection Consent Decree 08-5085-FVS Monthly Summary Report for WTP Facility-specific information	Delmar Noyes/Dan McDonald

CD = Consent Decree 08-5085-FVS

Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2014</b>				
M-062-40C	Select a Minimum of Three Scenario's for the System Plan	12/15/2013	12/12/2013	Completed
M-062-01AB	Submit Semi-Annual TPA Project Compliance Report	01/31/2014	01/31/2014	Completed
M-045-86C	Submit Retrieval Data Report to Ecology for C-104	03/21/2014	02/18/2014	Completed
M-045-22-T02	Submit Results of Vadose Zone Characterization of 241-U to Ecology	04/30/2014	02/20/2014	Completed
M-045-86F	Submit Retrieval Data Report to Ecology for C-108	05/01/2014	11/27/2013	Completed
M-045-86G	Submit Retrieval Data Report to Ecology for C-109	06/04/2014	03/13/2014	Completed
M-045-22-T03	Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology	07/31/2014	05/15/2014	Completed
M-045-56J	Ecology and DOE Agree, at a Minimum, to Meet Yearly (by July)	07/31/2014	07/22/2014	Completed
M-062-01AC	Submit Semi-Annual TPA Project Compliance Report	07/31/2014	07/31/2014	Completed
M-045-22-T01	Submit Results of Vadose Zone Characterization of 241-TX to Ecology	09/30/2014	09/17/2014	Completed
M-045-22	Review M-045-22-T03 Report and Determine Path Forward	09/30/2014	9/25/2014	Completed
<b>Fiscal Year 2015</b>				
M-062-40D	Submit System Plan	10/31/2014		On Schedule
M-062-40ZZ	Submit One Time Tank Waste Supp Treatment Technologies Report	10/31/2014	Deleted on 08/12/2014	Deleted
M-045-91G-T03	Provide AOR Final Doc. for SSTs on 1,000,000 Gallon Tanks	10/31/2014	07/07/2014	Completed
M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	12/26/2014		On Schedule
M-045-61	Phase 2 RCRA Facility Investigation/Corrective Measures Study	12/31/2014		To Be Missed
M-045-86H	Submit Retrieval Data Report to Ecology for C-110	01/29/2015	08/06/2014	Completed
M-045-91G-T04	Provide AOR Final Doc. for SSTs on 55,000 Gallon Tanks	01/30/2015		On Schedule
M-045-91B-T01	Provide Ecology report on the Concrete Core from Tank A-106 or alt	01/31/2015		On Schedule
M-045-91F-T02	Provide Report of Liner Failures for SSTs	03/31/2015		On Schedule
M-062-45-T01	Comp. Neg's 6-Mo After Last Issuance of System Plan	04/30/2015		On Schedule
M-062-45-ZZ	Negotiate a One Time Supplemental Treatment Selection	04/30/2015		On Schedule
M-062-45-ZZ-A	Convert M-062-31-T01 Thru M-062-34-T01 to Interim Milestones	04/30/2015		On Schedule
M-045-91F	Provide Summary Conclusions Report on Leak Integrity	06/30/2015		On Schedule
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA-C	06/30/2015		To Be Missed
M-045-92O	Barrier 3 Design/Monitoring Approval From Ecology	06/30/2015		On Schedule
M-045-91G	Provide Summary Conclusions Report of AOR for SSTs	07/28/2015		On Schedule
M-045-56K	Ecology and DOE Agree, at a Minimum, to Meet Yearly (By July)	07/31/2015		On Schedule
M-045-91H	Submit Change Pkg (if necessary) to est. Additional Milestones	07/31/2015		On Schedule
M-045-82	Submit Comp. Permit Modification Request for Tiers 1,2,3	09/30/2015		To Be Missed

AOR = Analyses of Record.

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

CR = change request.

DOE = U.S. Department of Energy.

Ecology = Washington State Department of Ecology.

RCRA = Resource Conservation and Recovery Act.

SST = single-shell tank.

TPA = Tri-Party Agreement.

WMA-C = Waste Management Area C.

## System Plan

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

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

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

### Significant Past Accomplishments:

1. On October 24, 2013, Washington State Department of Ecology (Ecology) and U.S. Department of Energy (DOE), Office of River Protection (ORP) signed the Tri-Party Agreement (TPA) Change Control Form M-62-13-02, moving out the due date for this embedded milestone from October 31, 2013 to December 15, 2013, for selection of three, or more, scenarios to be modeled in the System Plan.
2. Ecology has defined five scenarios to be analyzed in System Plan 7. Washington River Protection Solutions LLC (WRPS) has included a description of each scenario in the Selected Scenarios for the River Protection Project System Plan, Rev. 7 document released to ORP on December 4, 2013. See joint ORP and Ecology letter 13-TPD-0070, dated December 12, 2013, for completion and description of M-062-40C scenarios.
3. Detailed assumption review was completed, and has been approved by Ecology.
4. On February 11, 2014, DOE-ORP transmitted a letter (14-TPD-0003) to Washington River Protection Solutions LLC in response to letter (WRPS-1400313) to approve the use of Ecology's Appendix B, "Key Assumptions and Success Criteria," for the ORP 11242, River Protection Project System Plan, Rev. 7.
5. On February 13, 2014 Washington State Department of Ecology presented the five selected scenarios to the Hanford Advisory Board Tank Waste Committee.
6. Ecology, DOE-ORP and WRPS reviewed and provided comments for sections 1 and 2 of the System Plan 7 during the week of February 17, 2014.
7. Ecology, DOE-ORP and WRPS reviewed and provided comments for section 3 of the System Plan 7 during the week of March 21, 2014.
8. Ecology, DOE-ORP and WRPS reviewed and provided comments for Appendix C of the System Plan 7 during the week of April 1, 2014.
9. During the week of April 28, 2014, WRPS and DOE-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 DOE-ORP.
11. System Plan 7 was reviewed, all comments resolved and incorporated into the document.

### Significant Planned Actions in the Next 6 Months:

- Issue System Plan Rev. 7

### 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: On Schedule.** 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: On Schedule.** 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 6 Months:**

None.

#### **Issues:**

None.

**Supplemental Treatment and Part B Permit Applications**

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

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

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

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

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

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

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

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

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

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

**Significant Past Accomplishments:**

\*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 6 Months: None.**

**Issues: None.**

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

**242-A Evaporator Status:**

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

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY 2010	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and completing in early October 2010. Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY 2010	10-02	AW-106	AW-106	
FY 2011	NA	NA	NA	No campaign conducted in FY 2011 due to ongoing 242-A and tank farm facility life extension and <i>American Recovery and Reinvestment Act</i> funded upgrades.
FY 2012	NA	NA	NA	No campaign conducted in FY 2012 due to ongoing 242-A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis.
FY 2013	NA	NA	NA	No campaigns to be conducted in FY 2013 due to ongoing 242-A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis.
FY 2014	13-01	AP-107	AP-107	Campaign started September 9, 2014. Requires two passes to achieve waste volume reduction. First pass complete on September 20, 2014.
FY 2014	14-01	AW-106	AP-107	Estimated start November 2014.
FY 2015	EC-02	AZ-102	AP-103	Estimated start February 2015.
FY 2015	EC-03	AW-106	AP-103	Estimated start March 2015.
FY 2015	EC-04	AZ-102	AP-103	Estimated start April 2015.

FY = fiscal year.

NA = not applicable.

## Double-Shell Tank System Update

### Ultrasonic Testing

- The UT report for AP-106 was approved.
- UT is in progress on AP-102, with, tank wall cleaning, weld inspection, and secondary liner floor inspection.

Performance demonstration of Electro Magnet Acoustic Transducer (EMAT) testing was completed by PNNL and AREVA inspectors are qualified for its use. The first field application will be in AP-102. Visual Inspection

- Continuing weekly inspections of AY-102 Risers 77, 83, and 87.
- Continuing monthly comprehensive inspection of AY-102 annulus.
- 

## Single-Shell Tank Integrity Assurance

**M-045-91F-T04, Provide to Ecology, as a Hanford Federal Facility Agreement and Consent Order secondary document, a report on the 100-series SSTs, which have been or will be identified as having leaked in RPP-32681, Rev. 0, Due: December 26, 2014, Status: On schedule. RPP-RPT-54909, Hanford Single-Shell Tanks Leak Causes, Locations, and Rates: Summary Report was cleared, released and transmitted to ORP on 10/8/2014 under letter WRPS-1404160.**

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

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

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

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

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

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

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

**Significant Past Accomplishments:**

- RPP-RPT-54909, *Hanford Single-Shell Tanks Leak Causes, Locations, and Rates: Summary Report* was transmitted to ORP for submittal to Ecology to meet target the 91F-T04 target. This reflects about 30 months total of collaborative effort between WRPS, ORP and Ecology effort, involving 10 individual reports with over 2250 pages of text.
- 
- In support of M-045-91G, the change package was approved to remove the IQRPE requirement from the AOR Summary Conclusion Report on the basis of the rigorous independent expert reviews of each AOR by Dr. Bob Kennedy and Dr. Andy Veletetos.
- In support of M-045-91G-T04, Drs Kennedy and Veletetos completed the independent review of the Type I tank AOR. Their comments were incorporated and the Type I tank AOR, RPP-RPT-49993 in undergoing final review prior to issuance.
- The Tank A-106 sidewall coring test report, RPP-RPT-58254 is prepared and undergoing WRPS internal review.

**Significant Planned Actions in the Next 6 Months:**

- Issue report on testing of the Tank A-106 sidewall core (M-045-91B-T01).
- Issue the Type I Analysis of Record(M-045-91G-T04).
- Issue the SST Common Factors Report (M-045-91F-T02)

**Issues:**

Planning and discussion for M-045-91H to submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones for Phase II of the Single-Shell Tank Integrity Project needs to begin.

**In Tank Characterization and Summary**

For the period from September 1 through September 30, 2014:

**Accomplishments:**

- Completed RPP-RPT-58176, *Derivation of Best-Basis Inventory for Tank 241-TY-102 as of July 1, 2014, Rev 0.*

- Completed RPP-RPT-58186, *Derivation of Best-Basis Inventory for Tank 241-T-101 as of July 1, 2014*, Rev 0.
- Completed RPP-RPT-57458, *Derivation of Best-Basis Inventory for Tank 241-C-102 as of July 16, 2014*, Rev 0.
- Completed RPP-RPT-44630, *Derivation of Best-Basis Inventory for Tank 241-AY-102 as of July 1, 2014*, Rev 8.
- Completed RPP-PLAN-59975, *Sampling and Analysis Plan for Post-Retrieval Waste Solids in Tank 241-C-101*, Rev 0.
- Completed RPP-PLAN-59955, *Tank 241-AW-106 Grab Sampling and Analysis Plan in Support of Waste Compatibility and Evaporator Campaign 15-02*, Rev 0.
- RPP-RPT-58218, *Final Report for Tank 241-AY-102A Leak-Detection Pit Liquid Grab Samples, August 2014*, Rev 0, was released September 11, 2014.
- Completed 241-AZ-102 grab sampling on occurred from September 3, 2014 through September 5, 2014. Thirteen samples were received at the lab.
- Completed 241-AY-102A Leak-Detection Pit liquid grab sampling on September 9, 2014. Ten samples were received at the lab.
- Completed 241-SY-102 core sampling from September 11, 2014 through September 16, 2014. Seven segments (segments #8, #9, #10, #11, #11R1, #11R2, and #11R3) were received at the lab.
- Completed 241-AN-101 grab sampling on September 17, 2014. Eleven samples were received at the lab.

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

- 241-AY-102A LDP grab sample (#13) is planned for October 2014.
- Tank 241-SY-102, core sample (Riser #04) is planned for October 2014.
- Tank 241-C-107 closure drag sample is planned for October 2014.
- Tank 241-C-101 ORSS closure sampling is planned for November 2014.
- 241-AY-102A LDP grab sample (#14) is planned for November 2014.
- 241-AY-102A LDP grab sample (#15) is planned for December 2014.
- Tank 241-C-112 clamshell or fingertrap sampling is planned for December 2014.
- Tank 241-AW-106 (Evaporator campaign EC-03) sampling is planned for December 2014.
- Tank 241-AN-106 sample at C-105 100% retrieval is planned for January 2015.
- Tank 241-AZ-102 (EC-04) sampling is planned for February 2015.

***Best-Basis Inventory (BBI) updates:***

The following tanks were identified for BBI updates in FY 2014 Quarter 4 and are planned to be released in October.

- 241-AN-101
- 241-AN-106
- 241-AP-104
- 241-BX-101
- 241-BX-110
- 241-BY-102
- 241-C-105
- 241-S-111

BBI updates for the following tanks were completed in September.

- 241-AY-102
- 241-C-102
- 241-T-101
- 241-TY-102

**Data Quality Objectives (DQO):**

A screening DQO is in-process to obtain data on odorous tank stack emissions in support of dispersion modeling.

**Issues:**

None.

## TANK OPERATIONS CONTRACT OVERVIEW

**Project Performance**

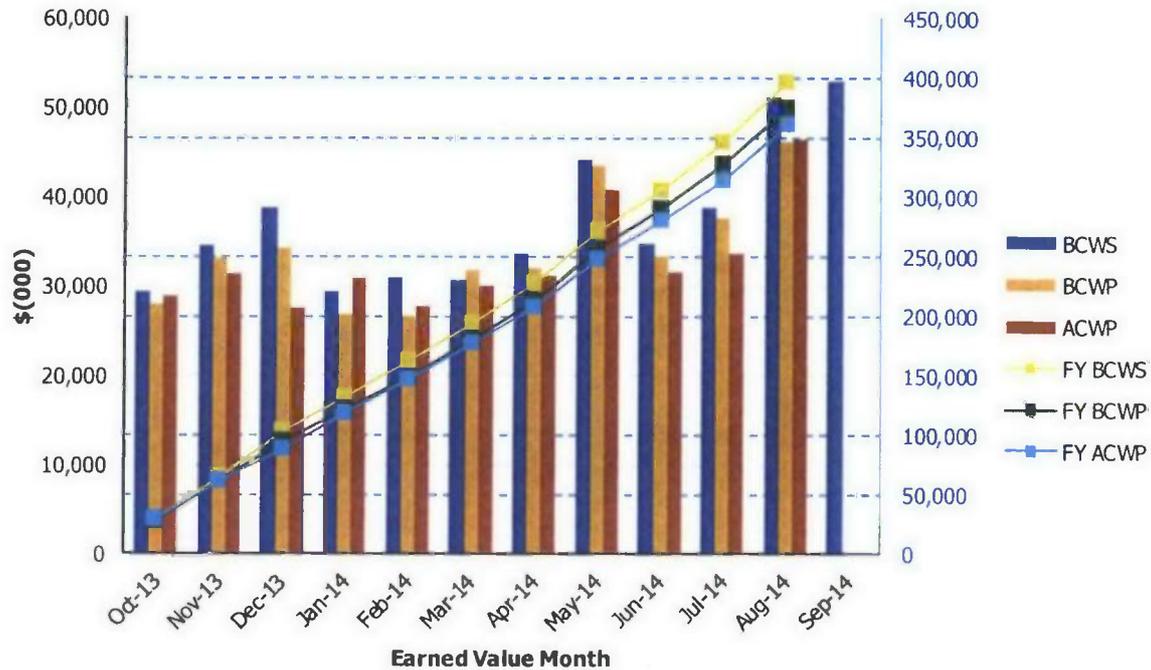
The earned value performance reporting reflects the format, work breakdown structure reporting levels, and variance thresholds as agreed to with the tank operations contractor for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing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

Through August 31, 2014, Washington River Protection Solutions LLC, the Tank Operations Contractor, has worked 166 days without a lost time workday injury and 44 days since the last recordable case. There were no recordable case in August, and no Days Away, Restricted, or Transferred (DART) cases.

August-14										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	51,132.2	46,243.7	46,431.4	(4,888.5)	(187.7)	0.90	1.00			
FYTD	396,190.1	373,980.8	360,597.5	(22,209.3)	13,383.3	0.93	1.04	450,043.2	410,186.4	39,856.8
CTD	2,287,934.0	2,265,724.0	2,252,341.0	(22,210.0)	13,383.0	0.99	1.01	3,264,111.1	3,244,321.4	19,789.7

**Tank Farms ORP-0014**

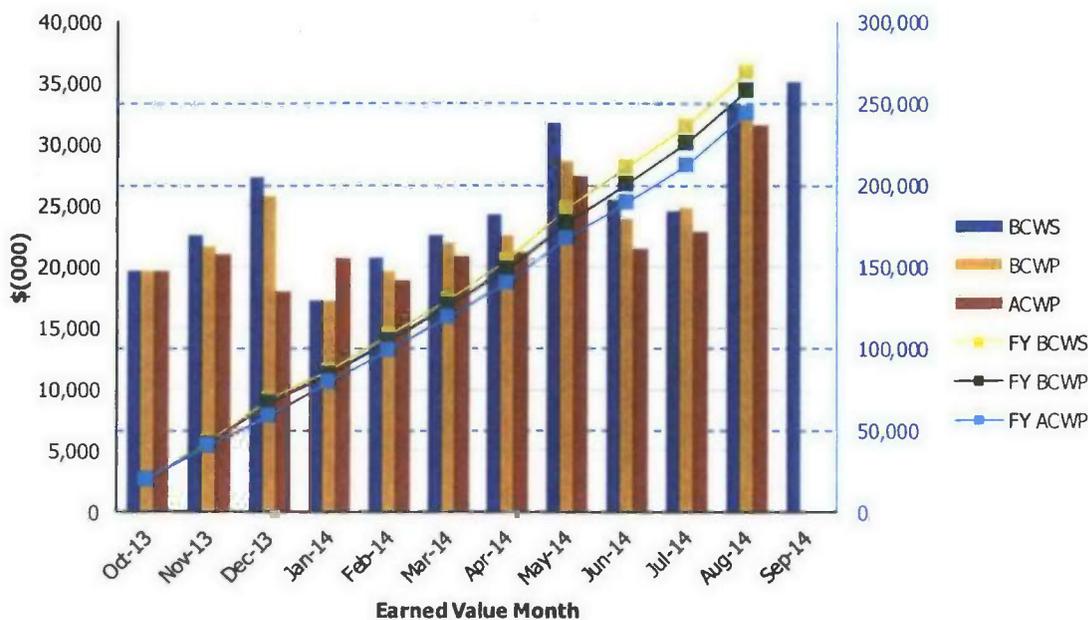
EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$29,474	\$27,946	\$29,015	0.95	0.96	\$29,474	\$27,946	\$29,015	0.95	0.96
Nov 2013	\$34,535	\$33,081	\$31,448	0.96	1.05	\$64,009	\$61,027	\$60,463	0.95	1.01
Dec 2013	\$38,698	\$34,362	\$27,634	0.89	1.24	\$102,706	\$95,389	\$88,096	0.93	1.08
Jan 2014	\$29,325	\$26,999	\$30,991	0.92	0.87	\$132,032	\$122,388	\$119,087	0.93	1.03
Feb 2014	\$30,875	\$26,774	\$27,782	0.87	0.96	\$162,907	\$149,162	\$146,869	0.92	1.02
Mar 2014	\$30,709	\$31,870	\$30,045	1.04	1.06	\$193,616	\$181,032	\$176,914	0.94	1.02
Apr 2014	\$33,608	\$32,120	\$31,172	0.96	1.03	\$227,224	\$213,152	\$208,086	0.94	1.02
May 2014	\$44,269	\$43,538	\$40,799	0.98	1.07	\$271,492	\$256,690	\$248,885	0.95	1.03
Jun 2014	\$34,706	\$33,424	\$31,595	0.96	1.06	\$306,198	\$290,114	\$280,480	0.95	1.03
Jul 2014	\$38,860	\$37,623	\$33,686	0.97	1.12	\$345,058	\$327,737	\$314,166	0.95	1.04
Aug 2014	\$51,132	\$46,244	\$46,431	0.90	1.00	\$396,190	\$373,981	\$360,598	0.94	1.04
Sep 2014	\$52,860									
CTD	\$2,287,934	\$2,265,725	\$2,252,341	0.99	1.01					

**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 2013	\$19,628	\$19,630	\$19,598	1.00	1.00	\$19,628	\$19,630	\$19,598	1.00	1.00
Nov 2013	\$22,525	\$21,675	\$21,051	0.96	1.03	\$42,153	\$41,305	\$40,649	0.98	1.02
Dec 2013	\$27,266	\$25,724	\$18,016	0.94	1.43	\$69,419	\$67,029	\$58,664	0.97	1.14
Jan 2014	\$17,246	\$17,269	\$20,778	1.00	0.83	\$86,664	\$84,298	\$79,443	0.97	1.06
Feb 2014	\$20,732	\$19,631	\$18,894	0.95	1.04	\$107,396	\$103,929	\$98,337	0.97	1.06
Mar 2014	\$22,587	\$21,924	\$20,834	0.97	1.05	\$129,983	\$125,853	\$119,170	0.97	1.06
Apr 2014	\$24,256	\$22,528	\$21,164	0.93	1.06	\$154,238	\$148,381	\$140,334	0.96	1.06
May 2014	\$31,690	\$28,630	\$27,412	0.90	1.04	\$185,929	\$177,011	\$167,777	0.95	1.06
Jun 2014	\$25,451	\$23,901	\$21,476	0.94	1.11	\$211,380	\$200,912	\$189,252	0.95	1.06
Jul 2014	\$24,492	\$24,914	\$22,791	1.02	1.09	\$235,872	\$225,826	\$212,043	0.96	1.07
Aug 2014	\$33,299	\$31,946	\$31,575	0.96	1.01	\$269,171	\$257,771	\$243,618	0.96	1.06
Sep 2014	\$34,991									

CTD \$1,500,237    \$1,488,837    \$1,474,684    0.99    1.01

**Base Operations and Tank Farm Projects**

The current month unfavorable schedule variance (SV) of (\$1,353K) is due to the following:

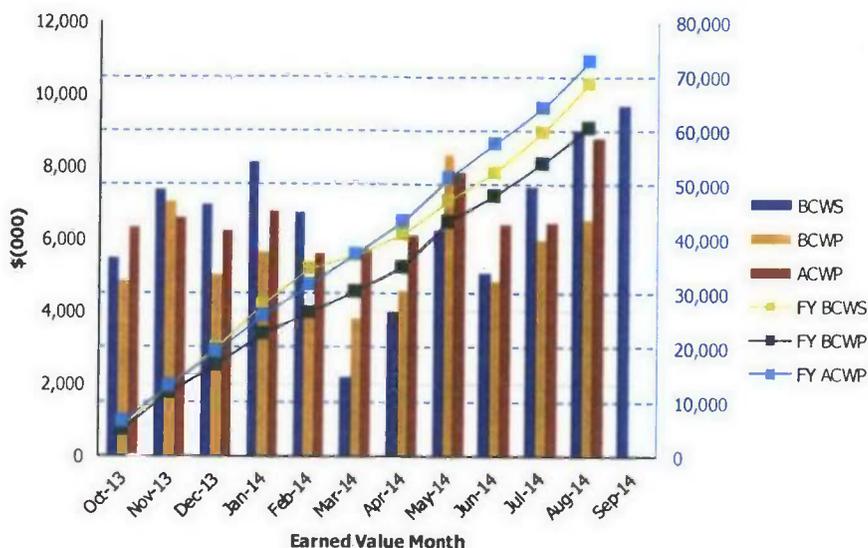
- Material procurement required to address the chemical vapor issues and delay in the review of sampling results and vapor event reports study.
- Delay of the room renovation at the 222-S lab.
- Delay of the 242-A Evaporator campaign.

The current month favorable cost variance (CV) of \$371K is primarily due to the following:

- Contractor resources were lower than planned.

**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 2013	\$5,483	\$4,823	\$6,336	0.88	0.76	\$5,483	\$4,823	\$6,336	0.88	0.76
Nov 2013	\$7,366	\$7,054	\$6,609	0.96	1.07	\$12,849	\$11,876	\$12,945	0.92	0.92
Dec 2013	\$6,970	\$5,002	\$6,231	0.72	0.80	\$19,820	\$16,878	\$19,176	0.85	0.88
Jan 2014	\$8,102	\$5,661	\$6,765	0.70	0.84	\$27,922	\$22,539	\$25,941	0.81	0.87
Feb 2014	\$6,726	\$3,914	\$5,602	0.58	0.70	\$34,647	\$26,453	\$31,543	0.76	0.84
Mar 2014	\$2,201	\$3,805	\$5,729	1.73	0.66	\$36,849	\$30,258	\$37,273	0.82	0.81
Apr 2014	\$4,000	\$4,558	\$6,079	1.14	0.75	\$40,848	\$34,816	\$43,352	0.85	0.80
May 2014	\$6,255	\$8,331	\$7,855	1.33	1.06	\$47,103	\$43,146	\$51,207	0.92	0.84
Jun 2014	\$5,055	\$4,826	\$6,413	0.95	0.75	\$52,158	\$47,972	\$57,621	0.92	0.83
Jul 2014	\$7,437	\$5,954	\$6,461	0.80	0.92	\$59,595	\$53,926	\$64,082	0.90	0.84
Aug 2014	\$9,039	\$6,563	\$8,792	0.73	0.75	\$68,634	\$60,489	\$72,874	0.88	0.83
Sep 2014	\$9,711									
CTD	\$495,473	\$487,329	\$499,713	0.98	0.98					

**Retrieval and Close Single-Shell Tanks**

The current month unfavorable schedule variance (SV) of **(\$2,476k)** is due to

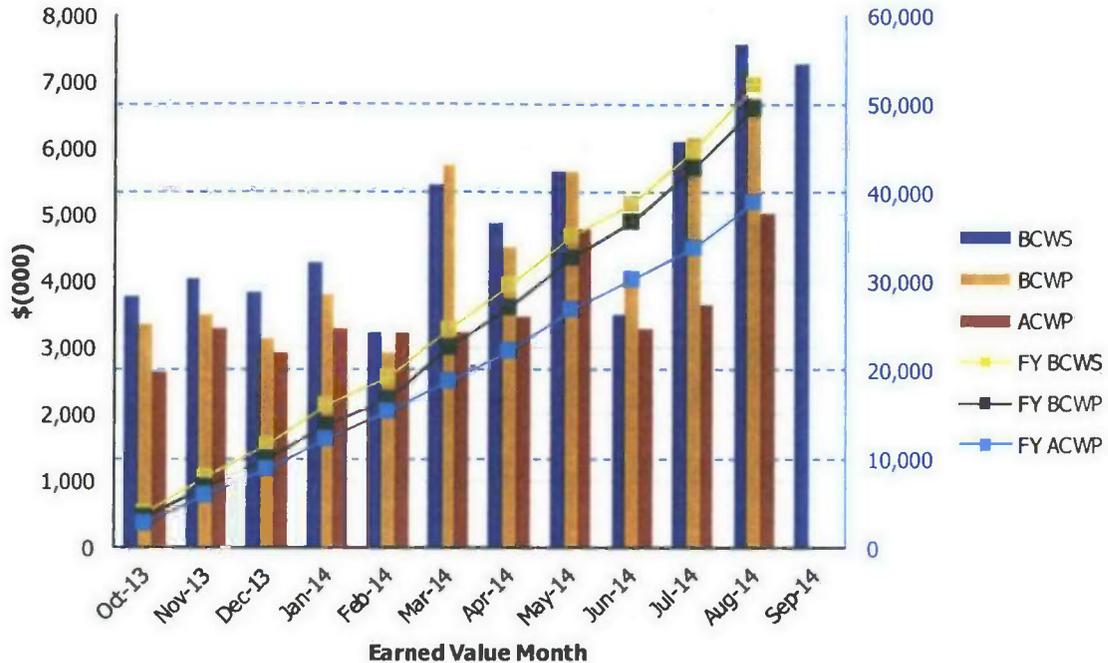
- C-105 Retrieval due to plugging of the MARS-V end effector and the AN-106 Slurry distributor in the receiver tank during operations.
- Delays with the direct push activities at A and AX Farm due to vapor concerns.
- A and AX Ventilation design delays due to engineering resources being reassigned to address C-105 MARS issues.

The current month unfavorable cost variance (CV) of **(\$2,229k)** is due to:

- C-105 Retrieval due to slower than anticipated retrieval rates caused by plugging of the MARS-V end effector and Slurry distributor which has created additional costs.
- C-102 Retrieval due to a foreign object discovered at the bottom of the tank that prevented the pump from accessing the remaining waste, the project is replacing the sluicer with a longer one.

**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 2013	\$3,766	\$3,335	\$2,640	0.89	1.26	\$3,766	\$3,335	\$2,640	0.89	1.26
Nov 2013	\$4,041	\$3,488	\$3,295	0.86	1.06	\$7,807	\$6,824	\$5,934	0.87	1.15
Dec 2013	\$3,813	\$3,150	\$2,941	0.83	1.07	\$11,620	\$9,973	\$8,875	0.86	1.12
Jan 2014	\$4,282	\$3,803	\$3,277	0.89	1.16	\$15,902	\$13,776	\$12,152	0.87	1.13
Feb 2014	\$3,225	\$2,926	\$3,239	0.91	0.90	\$19,126	\$16,702	\$15,391	0.87	1.09
Mar 2014	\$5,438	\$5,757	\$3,240	1.06	1.78	\$24,565	\$22,459	\$18,631	0.91	1.21
Apr 2014	\$4,876	\$4,507	\$3,480	0.92	1.30	\$29,441	\$26,966	\$22,112	0.92	1.22
May 2014	\$5,651	\$5,649	\$4,780	1.00	1.18	\$35,092	\$32,626	\$26,892	0.93	1.21
Jun 2014	\$3,497	\$3,991	\$3,300	1.14	1.21	\$38,588	\$36,617	\$30,192	0.95	1.21
Jul 2014	\$6,091	\$6,151	\$3,656	1.01	1.68	\$44,679	\$42,768	\$33,848	0.96	1.26
Aug 2014	\$7,564	\$6,762	\$5,033	0.89	1.34	\$52,243	\$49,530	\$38,882	0.95	1.27
Sep 2014	\$7,264									
CTD	\$268,488	\$265,774	\$255,126	0.99	1.04					

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

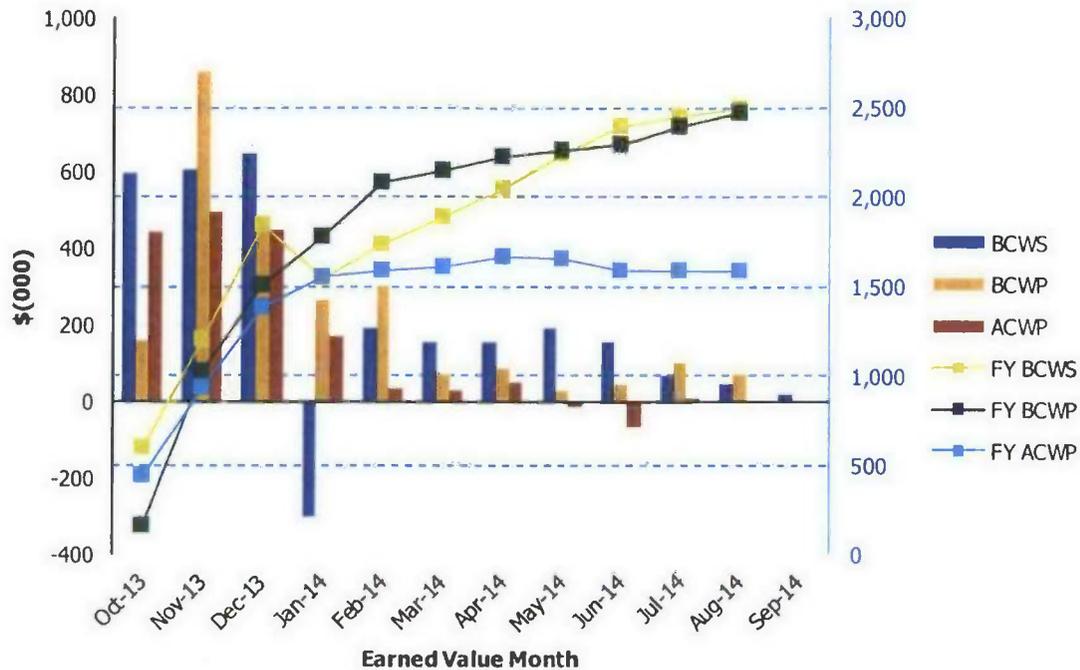
The current month unfavorable schedule variance (SV) of **(\$802K)** is within threshold

The current month favorable cost variance (CV) of \$1,729K is due to:

- Labor efficiencies of PNNL <sup>GLASS</sup> formulation support for the annual report/glass corrosion approach, modeling & waste form qualification strategy and preparation activities for IDF Glass Testing and Secondary Waste and Cast Stone experts.

**Tank Farms ORP-0014  
Supplement Treatment 5.04**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$597	\$158	\$441	0.26	0.36	\$597	\$158	\$441	0.26	0.36
Nov 2013	\$603	\$864	\$494	1.43	1.75	\$1,200	\$1,022	\$934	0.85	1.09
Dec 2013	\$648	\$486	\$446	0.75	1.09	\$1,848	\$1,508	\$1,380	0.82	1.09
Jan 2014	(\$304)	\$266	\$171	-0.88	1.56	\$1,544	\$1,775	\$1,551	1.15	1.14
Feb 2014	\$194	\$302	\$34	1.56	8.91	\$1,737	\$2,077	\$1,585	1.20	1.31
Mar 2014	\$153	\$68	\$29	0.45	2.36	\$1,890	\$2,145	\$1,614	1.14	1.33
Apr 2014	\$153	\$85	\$51	0.56	1.67	\$2,043	\$2,230	\$1,665	1.09	1.34
May 2014	\$191	\$26	-\$13	0.14	-1.98	\$2,234	\$2,256	\$1,652	1.01	1.37
Jun 2014	\$156	\$43	-\$67	0.28	-0.64	\$2,390	\$2,299	\$1,585	0.96	1.45
Jul 2014	\$66	\$102	\$1	1.54	92.36	\$2,456	\$2,401	\$1,586	0.98	1.51
Aug 2014	\$42	\$69	\$0	1.63	0.00	\$2,498	\$2,469	\$1,586	0.99	1.56
Sep 2014	\$18									
CTD	\$20,092	\$20,063	\$19,180	1.00	1.05					

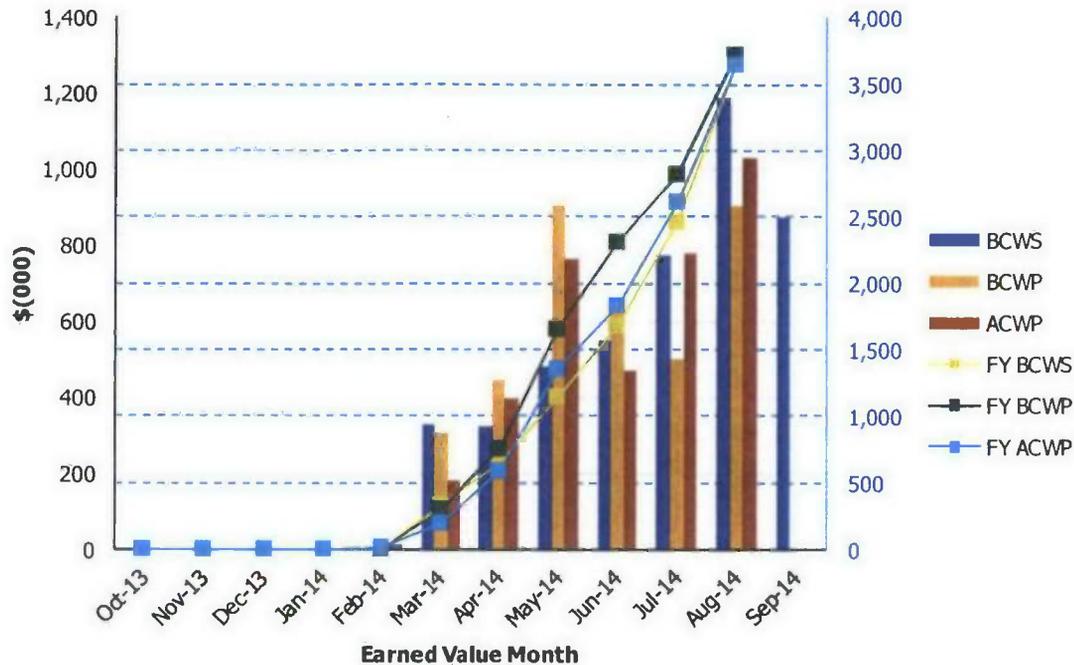
**Supplemental Treatment**

The current month favorable schedule variance (SV) of \$27K is within the reporting threshold.

The current month favorable cost variance (CV) of \$69K is within the reporting threshold.

**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 2013	\$0	\$0	\$0	0.00	0.00	\$0	\$0	\$0	0.00	0.00
Nov 2013	\$0	\$0	\$0	0.00	0.00	\$0	\$0	\$0	0.00	0.00
Dec 2013	\$0	\$0	\$0	0.00	0.00	\$0	\$0	\$0	0.00	0.00
Jan 2014	\$0	\$0	\$0	0.00	0.00	\$0	\$0	\$0	0.00	0.00
Feb 2014	\$0	\$0	\$13	0.00	0.00	\$0	\$0	\$13	0.00	0.00
Mar 2014	\$330	\$306	\$183	0.93	1.67	\$330	\$306	\$196	0.93	1.56
Apr 2014	\$324	\$443	\$397	1.37	1.11	\$653	\$748	\$593	1.15	1.26
May 2014	\$482	\$903	\$765	1.88	1.18	\$1,135	\$1,651	\$1,358	1.45	1.22
Jun 2014	\$547	\$664	\$472	1.21	1.41	\$1,682	\$2,315	\$1,830	1.38	1.27
Jul 2014	\$775	\$503	\$777	0.65	0.65	\$2,457	\$2,818	\$2,607	1.15	1.08
Aug 2014	\$1,188	\$904	\$1,031	0.76	0.88	\$3,645	\$3,722	\$3,639	1.02	1.02
Sep 2014	\$874									
CTD	\$3,644	\$3,722	\$3,638	1.02	1.02					

**Treat Waste**

The current month unfavorable schedule variance (SV) of **(\$284K)** is due to:

- The LAWPS Design activities completed earlier than planned.

The current month unfavorable cost variance (CV) of **(\$127K)** is due to:

## **Work Breakdown Structure 5.2 Retrieve and Close Single-Shell Tanks**

**M-045-22, Review M-045-22-T03 Report and Determine Path Forward, Due:** September 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: Complete. Ecology and ORP agreed at the September 25, 2014 TPA Project Managers' meeting that this milestone was closed, though M-045-92 remains open.

**M-045-22-T01, Submit Results of Vadose Zone Characterization of 241-TX to Ecology, Due:** September 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: Complete. ORP submitted this deliverable to ECY on September 17, 2014, via letter 14-TF-0100.

**M-045-22-T02, Submit Results of Vadose Zone Characterization of 241-U to Ecology, Due:** April 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: Complete. ORP submitted this deliverable to ECY on February 20, 2014, via letter 14-TF-0015.

**M-045-22-T03, Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology, Due:** July 31, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: Complete. ORP submitted this deliverable to ECY on May 15, 2014, via letter 14-TF-0054.

**M-045-56J, Complete Implementation of Agreed to Interim Measures, Due:** July 31, 2014, Status: Complete. The M-045-56 annual meeting was held on July 22, 2014 and meeting minutes have been entered into the Administrative Record.

**M-045-59, Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST Waste Management Areas (WMA) (pending the Corrective Measures Study report, Milestone M-45-58, and implementation of other interim corrective measures), Due:** To be determined, Status: On schedule.

**M-045-61, Submit to Ecology in accordance with the HFFACO Secondary document review process a Phase 2 RCRA Facility Investigation (RFI) Report Draft A for WMA Area C (WMA-C), Due:** December 31, 2014, Status: This milestone was modified by HFFACO change package M-45-14-03, signed October 1, 2014.

**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. This milestone was created by 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:** June 30, 2015, Status: To be missed. Please see issues.

**M-045-92, Complete Installation of Four (4) Additional Interim Barriers** (see interim milestones below), Due: October 31, 2017, Status: On schedule.

**M-045-92N, Construct Barriers 1 and 2 in 241-SX Farm**, Due: October 31, 2015, Status: On schedule.

**M-045-92O, Submit a Final Design and Monitoring Plan for Interim Barrier 3**, Due: June 30, 2015, Status: On schedule.

**Significant Past Accomplishments:**

- Automated data collection systems for T Farm and TY Farm interim barrier monitoring continue gathering data
- 
- The report on the results of soil characterization in TX farm was transmitted in September to meet TPA Target M-045-22-T01.
- Documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act Facility Investigation Report continues.

**Significant Planned Actions in the Next 6 Months:**

- 
- Complete documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act Facility Investigation Report. Draft to complete M-045-61.

**SST Retrieval and Closure Program**

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

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

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

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

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

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

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

- M-045-86C: Retrieval Data Report for C-104 was due March 21, 2014. Completed on February 18, 2014 with letter 14-TF-0013
- M-045-86F: Retrieval Data Report for C-108 was due May 1, 2014. Completed on November 27, 2013 with letter 13-TF-0120
- M-045-86G: Retrieval Data Report for C-109 was due June 4, 2014. Completed on March 13, 2014 with letter 14-TF-0020
- M-045-86H: Retrieval Data Report for C-110 was due January 29, 2015. Completed on August 6, 2014 with letter 14-TF-0086.

**Significant Past Accomplishments:**

- Submitted the Retrieval Data Report for C-110
- Completed post-retrieval logging of the drywells near C-104, C-109, and C-110 to support the retrieval data reports
- See discussions above and related discussions in Consent Decree report.

**Significant Planned Activities in the Next 6 Months:**

- Continue developing the WMA-C performance assessment
- Develop a draft of the Tier 1 (framework) closure plan for WMA C as required by the TPA
- See discussions above and related discussions in Consent Decree report.

**Issues:**

A new deliverable date for the Corrective Measures Implementation Plan, M-045-62, will need to be established based on the modification to milestone M-045-61 and M-045-61A. ORP and Ecology continue to meet to develop an integrated path forward that addresses all the deliverables associated with Milestone M-045-82.

### 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	In Process	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 6 Months:**

None.

**Issues:**

None.

**Tank in Appendix H, "Status - Single Shell Waste Retrieval Criteria"****Tank 241-C-106****Significant Past Accomplishments:**

None.

**Significant Planned Activities in the Next 6 Months:**

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

**Issues:**

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

**Tank Retrievals with Individual Milestones****Tank 241-A-103**

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

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

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

**Significant Past Accomplishments:**

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

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

**Tank 241-S-112**

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

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

**Significant Past Accomplishments:**

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

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

**FINAL**

Office of River Protection  
Consent Decree 08-5085-FVS

Monthly Summary Report

October 2014

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

**October 2014 (Monthly Summary Report/Project Earned Value Management System  
reflects August 2014 information)**

<b>Page</b>	<b>Topic</b>	<b>Leads</b>
3	CD Milestone Statistics/Status	Bryan Trimberger/Dan McDonald/Jeff Lyon
4	Single-Shell Tank Retrieval Program <ul style="list-style-type: none"> <li>• D-00B-01, D-00B-02, D-00B-03, D-00B-04</li> </ul>	Chris Kemp/Jeff Lyon
5	Tank Waste Retrieval Work Plan Status <ul style="list-style-type: none"> <li>• Consent Decree Appendix C</li> </ul>	Chris Kemp/Jeff Lyon
6	Single-Shell Tank Retrieval Monthly and Fiscal Year Earned Value Management System Data	Chris Kemp/Jeff Lyon
8	Waste Treatment and Immobilization Plant Project <ul style="list-style-type: none"> <li>• D-00A-06, D-00A-17, D-00A-01</li> </ul>	Delmar Noyes/Dan McDonald
11	Pretreatment Facility <ul style="list-style-type: none"> <li>• D-00A-18, D-00A-19, D-00A-13, D-00A-14, D-00A-15, D-00A-16</li> </ul>	Wahed Abdul/Dan McDonald
14	High-Level Waste Facility <ul style="list-style-type: none"> <li>• D-00A-20, D-00A-21, D-00A-02, D-00A-03</li> </ul>	Wahed Abdul/Dan McDonald
17	Low-Activity Waste Facility <ul style="list-style-type: none"> <li>• D-00A-07, D-00A-08, D-00A-09</li> </ul>	Jeff Bruggeman/Dan McDonald
19	Balance of Facilities <ul style="list-style-type: none"> <li>• D-00A-12</li> </ul>	Jason Young/Dan McDonald
21	Analytical Laboratory <ul style="list-style-type: none"> <li>• D-00A-005</li> </ul>	

## CD Milestone Statistics/Status

Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2014</b>				
D-00B-01	Complete Retrieval of Tank Waste from 10 SSTs in WMA-C	09/30/2014		Ongoing*
D-00B-02	Advise Ecology of the 9 SSTs Waste Will be Retrieved by 2022	09/30/2014	08/24/2011	Completed
<b>Fiscal Year 2015</b>				
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014		Ongoing*
D-00A-19	Complete elevation 98 feet Concrete Floor Slab Placements in PT Facility	12/31/2014		Ongoing*

\* DOE 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.

DOE = U.S. Department of Energy.

Ecology = Washington State Department of Ecology.

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 2014 Semiannual Report was issued on July 31, 2014 via U.S. Department of Energy (DOE), Office of River Protection (ORP) Letter 14-ECD-0040.

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

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

## 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 2,585 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 615 craft, 402 nonmanual, and 184 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

As of August 2014, the combined Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) (collectively LBL) were 70 percent complete, design and engineering was 83 percent complete, procurement was 85 percent complete, construction was 82 percent complete, and startup and commissioning was 16 percent complete.

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

In August 2014, the cumulative to-date WTP Project schedule variance was a negative \$156.5 million, and the cumulative to-date WTP Project cost variance was a negative \$10.7 million. The major contribution to the cumulative to-date cost and schedule variance is based on the progress of the LBL replan and PT/HLW 2-Year Interim Work Plan.

The following is the project status through the end of August 2014.

### Significant Past Accomplishments:

- DOE completed review of the PT Resumption Plan to support the authorization to proceed with production engineering (PT)
- DOE received the PT SDS Plan for review (PT)
- Installed 8 tons of structural steel – mostly steel to support slabs 4019 and 4020 over the canister handling cave (HLW)
- Completed installation of auto-sampling system (LAW)
- Completed repair work for fire service water tanks (BOF).

**Significant Planned Actions in the Next 6 Months:**

- Complete modification at Full-Scale Vessel Testing (FSVT) Facility to support Phase 2 testing for the pulse jet mixer (PJM) controls (PT)
- DOE approval of PT Resumption Plan to support DOE authorization to proceed with production engineering (PT)
- Complete the LAW Facility design and operability review (LAW)
- Complete construction of the Analytical Laboratory (LAB)
- Complete construction of the Glass Former Storage Facility (BOF).

**Issues:**

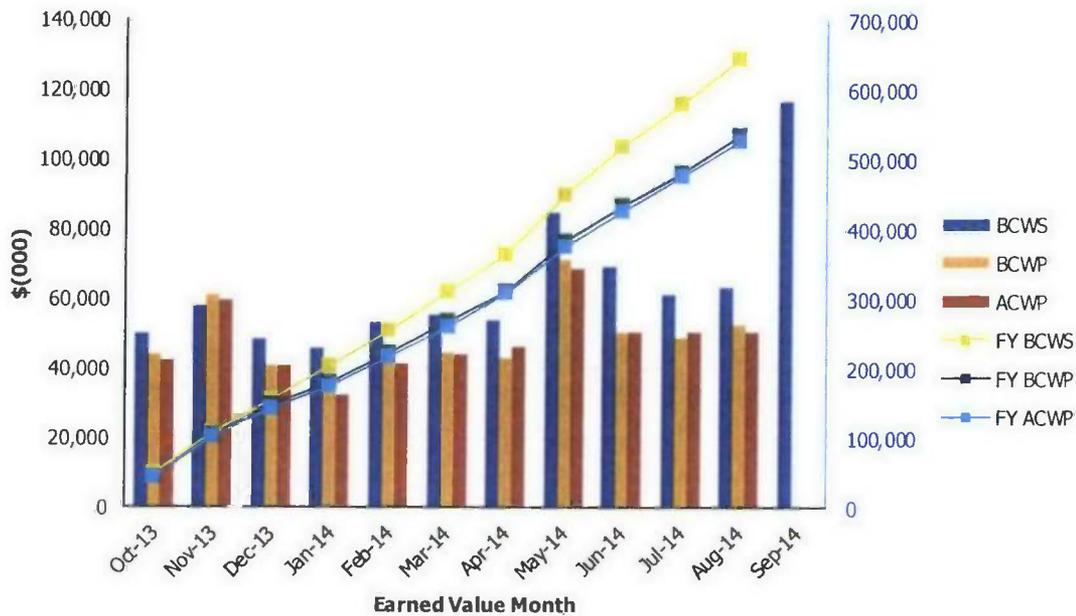
\*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

Data Set: FY 2014 Earned Value Data

Data as of: August 2014

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$49,959	\$43,981	\$42,448	0.88	1.04	\$49,959	\$43,981	\$42,448	0.88	1.04
Nov 2013	\$58,047	\$61,276	\$59,935	1.06	1.02	\$108,006	\$105,257	\$102,383	0.97	1.03
Dec 2013	\$48,739	\$41,149	\$40,881	0.84	1.01	\$156,745	\$146,406	\$143,264	0.93	1.02
Jan 2014	\$45,633	\$34,448	\$32,185	0.75	1.07	\$202,378	\$180,854	\$175,449	0.89	1.03
Feb 2014	\$53,315	\$42,491	\$41,349	0.80	1.03	\$255,693	\$223,345	\$216,798	0.87	1.03
Mar 2014	\$55,327	\$44,937	\$44,053	0.81	1.02	\$311,020	\$268,282	\$260,851	0.86	1.03
Apr 2014	\$53,695	\$43,232	\$46,086	0.81	0.94	\$364,715	\$311,514	\$306,937	0.85	1.01
May 2014	\$84,691	\$71,474	\$68,633	0.84	1.04	\$449,406	\$382,988	\$375,570	0.85	1.02
Jun 2014	\$69,440	\$50,571	\$50,680	0.73	1.00	\$518,846	\$433,559	\$426,250	0.84	1.02
Jul 2014	\$61,232	\$49,176	\$50,487	0.80	0.97	\$580,078	\$482,735	\$476,737	0.83	1.01
Aug 2014	\$63,198	\$52,764	\$50,376	0.83	1.05	\$643,276	\$535,499	\$527,113	0.83	1.02
Sep 2014	\$116,961									
PTD	\$8,433,489	\$8,276,974	\$8,287,723	0.98	1.00					

## Pretreatment Facility

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

PT = pretreatment.

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

Phase 1 of the FSVT 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. BNI has submitted resolution plans for eight technical issues, which are undergoing DOE review. The eight technical issues are the T1 Hydrogen in Vessels, T2 Criticality, T3 HPAV, T4 Mixing, T5 Erosion Corrosion, T6 PTF Optimization, T7 Vessel Analysis, and T8 Ventilation.

BNI has submitted a fiscal year (FY) 2015–FY 2016 two-year work plan, which is being reviewed by DOE. BNI has transmitted the PT SDS Plan to DOE for review.

### Significant Past Accomplishments:

- DOE completed review of the PT Resumption Plan to support the authorization to proceed with production engineering
- DOE received the PT SDS Plan for review
- Continued testing of the PJM controls at the FSVT Facility
- Continued conceptual design for a standardized high-solids vessel.

### Significant Planned Actions in the Next 6 Months:

- Complete modification at FSVT Facility to support Phase 2 testing for the PJM controls
- Evaluate potential savings relative to storing procured commodities onsite compared to storing at vendor facilities during suspensions of procurements

- Finalize technical team strategic plans
- Finalize test plan, simulant composition, and test instrument list for full-scale vessel mixing tests
- Define standardized vessel selection criteria in support of vessel mixing resolution
- Complete critical dimensions for PJM array
- Start informational testing in 8-ft test vessel for down selection of features pertaining to standardized high-solids vessel design.

**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.

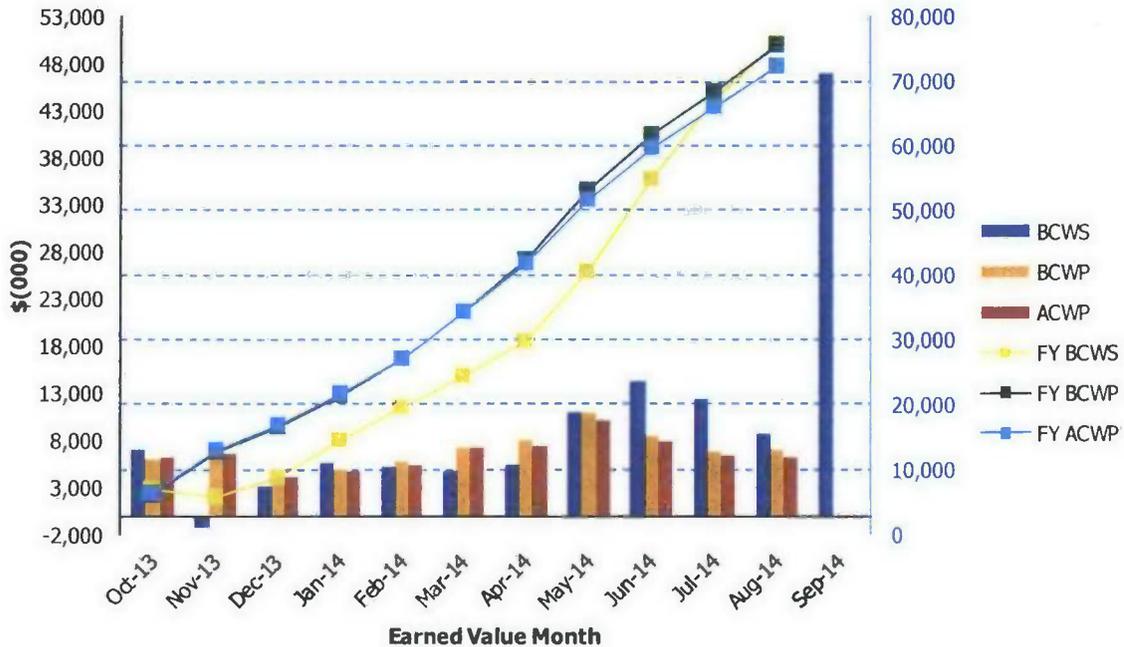
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2014 Earned Value Data

Data as of: August 2014

**River Protection Project  
Pretreatment Facility**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$6,954	\$5,927	\$6,224	0.85	0.95	\$6,954	\$5,927	\$6,224	0.85	0.95
Nov 2013	(\$1,213)	\$6,673	\$6,646	-5.50	1.00	\$5,741	\$12,600	\$12,870	2.19	0.98
Dec 2013	\$3,109	\$3,957	\$4,053	1.27	0.98	\$8,850	\$16,557	\$16,923	1.87	0.98
Jan 2014	\$5,616	\$4,856	\$4,809	0.86	1.01	\$14,466	\$21,413	\$21,732	1.48	0.99
Feb 2014	\$5,155	\$5,673	\$5,261	1.10	1.08	\$19,621	\$27,086	\$26,993	1.38	1.00
Mar 2014	\$4,751	\$7,210	\$7,173	1.52	1.01	\$24,372	\$34,296	\$34,166	1.41	1.00
Apr 2014	\$5,329	\$7,957	\$7,521	1.49	1.06	\$29,701	\$42,253	\$41,687	1.42	1.01
May 2014	\$10,845	\$10,888	\$10,039	1.00	1.08	\$40,546	\$53,141	\$51,726	1.31	1.03
Jun 2014	\$14,207	\$8,532	\$7,915	0.60	1.08	\$54,753	\$61,673	\$59,641	1.13	1.03
Jul 2014	\$12,442	\$6,706	\$6,415	0.54	1.05	\$67,195	\$68,379	\$66,056	1.02	1.04
Aug 2014	\$8,704	\$7,042	\$6,112	0.81	1.15	\$75,899	\$75,421	\$72,168	0.99	1.05
Sep 2014	\$46,949									

PTD \$1,603,189 \$1,585,430 \$1,579,912 0.99 1.00

Mon - SV	Mon - CV
(\$1,662)	\$930
(\$17,759)	\$5,518

FY - SV	FY - CV
(\$478)	\$3,253

## 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 shipment to interim storage.

As of September 2012, the HLW Facility was 62 percent complete overall, with engineering design 89 percent complete, procurement 81 percent complete, construction 43 percent complete, and startup and commissioning 4 percent complete. Construction, procurement, and production engineering activities have been significantly slowed down, resulting in minimal change to the percent completion status since September.

Construction is continuing on concrete placements, and installation of support steel and crane rails in the canister handling cave. Testing of HEPA filters at Mississippi State University (MSU) is continuing to select the filters that would meet the design and operations requirements.

ORP authorized BNI to resume all engineering work necessary to finalize the design of the HLW Facility on August 19, 2014. BNI has submitted FY 2015–FY 2016 two-year work plan incorporating the revised processes.

Since receiving the authorization to proceed, BNI has focused on the implementation of the newly developed 2-year work plan; the gap analysis between the SDS and the PDSA; RLD system redesign and hazards analysis; engineering studies to develop path forwards for resolution of issues regarding HVAC system and Melter and other Solid waste handling system; and development of Facility Design Description (FDD) and System Design Descriptions (SDDs), as required by the newly implemented Systems Engineering Management Plan (SEMP).

### Significant Past Accomplishments:

- One concrete placement was made (Slab 4013)
- Continued testing on Porvair HEPA filter at Mississippi State University
- Installed 8 tons of structural steel – mostly steel to support slabs 4019 and 4020 over the canister handling cave
- Continued installation of the crane rails in canister handling cave
- Completed three studies in response to the design and operability review related to HVAC and secondary waste handling operability issues.

**Significant Planned Actions in the Next 6 Months:**

- Issue request for proposal for vendor design of RLD-8 vessel
- Complete glove box 29 and 42 assembly/fabrication for auto samplers
- Perform gap analysis to identify misalignments with the current Preliminary Documented Safety Analysis and to identify safety analyses necessary to incorporate the SDS into the Preliminary Documented Safety Analysis
- Complete draft analysis of single-point failures in support of failure mode analysis
- Perform HEPA filter qualification testing at Mississippi State University
- Continue activities to support the RLD system redesign.

**Issues:**

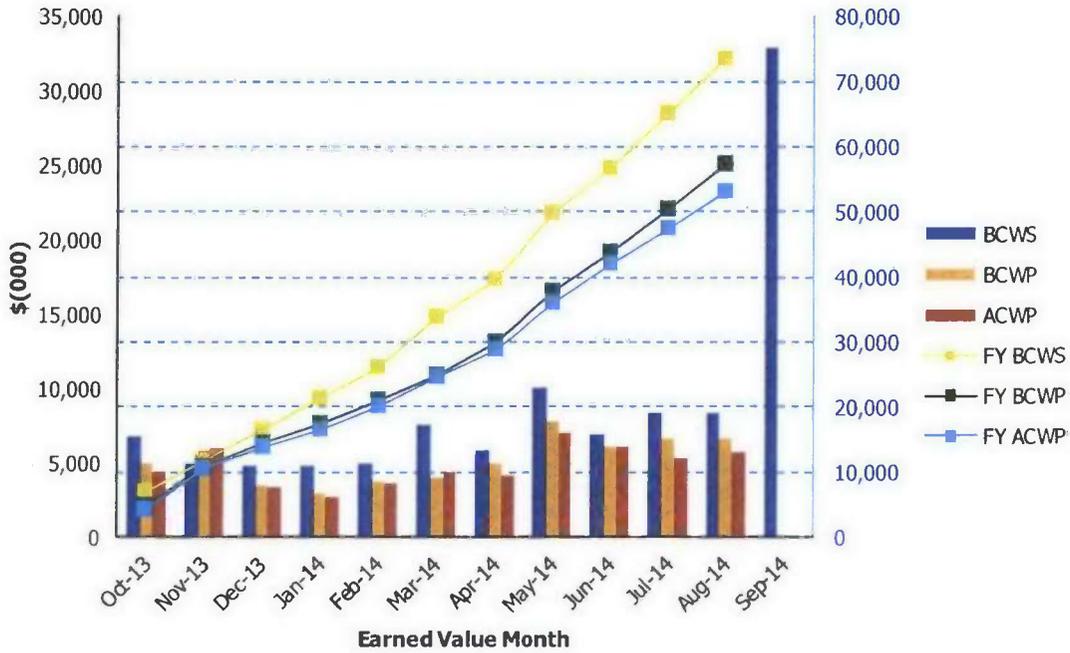
\*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to the WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

Data Set: FY 2014 Earned Value Data

Data as of: August 2014

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$6,818	\$4,914	\$4,390	0.72	1.12	\$6,818	\$4,914	\$4,390	0.72	1.12
Nov 2013	\$4,892	\$5,842	\$6,055	1.19	0.96	\$11,710	\$10,756	\$10,445	0.92	1.03
Dec 2013	\$4,811	\$3,559	\$3,420	0.74	1.04	\$16,521	\$14,315	\$13,865	0.87	1.03
Jan 2014	\$4,778	\$2,998	\$2,760	0.63	1.09	\$21,299	\$17,313	\$16,625	0.81	1.04
Feb 2014	\$4,927	\$3,736	\$3,647	0.76	1.02	\$26,226	\$21,049	\$20,272	0.80	1.04
Mar 2014	\$7,612	\$4,010	\$4,391	0.53	0.91	\$33,838	\$25,059	\$24,663	0.74	1.02
Apr 2014	\$5,867	\$4,921	\$4,203	0.84	1.17	\$39,705	\$29,980	\$28,866	0.76	1.04
May 2014	\$10,121	\$7,861	\$7,079	0.78	1.11	\$49,826	\$37,841	\$35,945	0.76	1.05
Jun 2014	\$6,975	\$6,073	\$6,097	0.87	1.00	\$56,801	\$43,914	\$42,042	0.77	1.04
Jul 2014	\$8,292	\$6,589	\$5,379	0.79	1.22	\$65,093	\$50,503	\$47,421	0.78	1.06
Aug 2014	\$8,413	\$6,664	\$5,752	0.79	1.16	\$73,506	\$57,167	\$53,173	0.78	1.08
Sep 2014	\$32,827									

PTD \$1,060,310 \$1,046,347 \$1,036,043 0.99 1.01

Mon - SV	Mon - CV
(\$1,749)	\$912
(\$13,963)	\$10,304

FY - SV	FY - CV
(\$16,339)	\$3,994

## Low-Activity Waste Facility

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

LAW = low-activity waste.

The LAW Facility will process the Low Activity Waste (LAW) that will be mixed with glass formers, vitrified into glass at a design capacity of 30 metric tons per day, and placed in stainless steel containers anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of August 2014, the LAW Facility was 71 percent complete overall, with engineering design 83 percent complete, procurement 89 percent complete, construction 78 percent complete, and startup and commissioning 8 percent complete. As requested, DOE received a Bechtel contract modification proposal on September 30, 2014, for the following:

- Completing the LBL work scope in the current contract through hot commissioning
- Completing initial planning and design for incorporating a permanent capability to accommodate a direct feed LAW option in the WTP Project.

### Significant Past Accomplishments:

- Installed castable refractory in Melters 1 and 2
- Installed over 1,000 linear feet of scheduled conduit and pulled over 23,900 linear feet of scheduled cable
- Installed over 180 linear feet of process piping and hydro-tested 800 linear feet of facility piping
- Performed an in-process review on the material, fabrication, and welding processes and welder qualifications of the caustic scrubber vendor
- Completed installation of auto-sampling system.

### Significant Planned Actions in the Next 6 Months:

- Complete subcontractor work scope in the annex
- Award the purchase order for the *active* gas analyzers
- Complete the LAW Facility design and operability review
- Complete castable refractory installation in the melters.

### Issues:

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

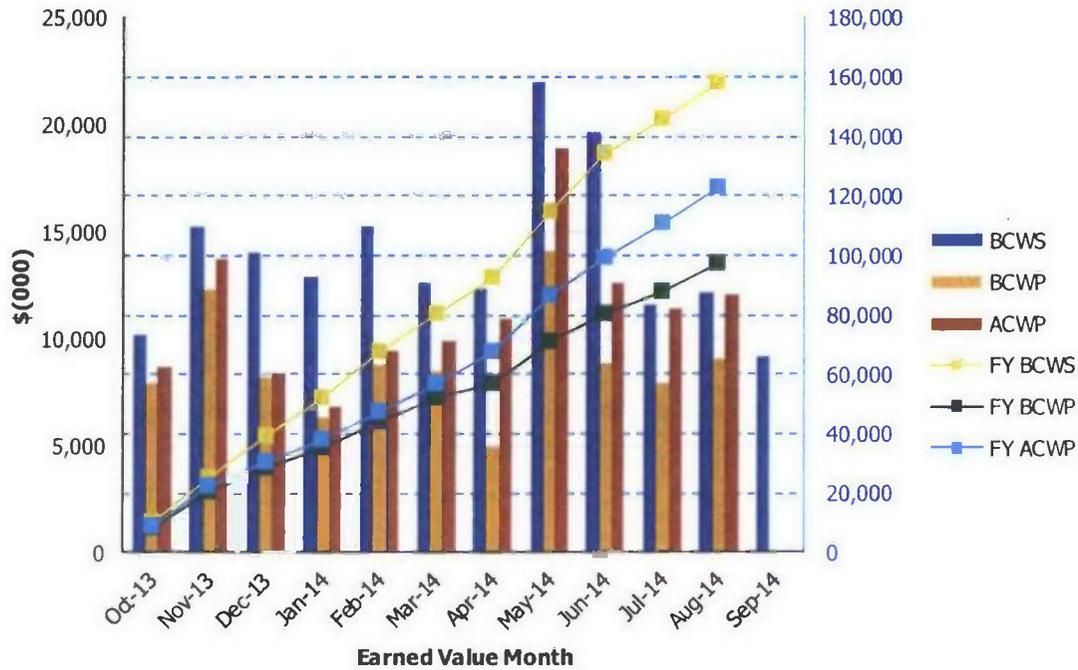
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: August 2014

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$10,160	\$7,952	\$8,677	0.78	0.92	\$10,160	\$7,952	\$8,677	0.78	0.92
Nov 2013	\$15,237	\$12,339	\$13,732	0.81	0.90	\$25,397	\$20,291	\$22,409	0.80	0.91
Dec 2013	\$14,003	\$8,214	\$8,389	0.59	0.98	\$39,400	\$28,505	\$30,798	0.72	0.93
Jan 2014	\$12,919	\$6,382	\$6,795	0.49	0.94	\$52,319	\$34,887	\$37,593	0.67	0.93
Feb 2014	\$15,254	\$8,750	\$9,433	0.57	0.93	\$67,573	\$43,637	\$47,026	0.65	0.93
Mar 2014	\$12,596	\$8,478	\$9,852	0.67	0.86	\$80,169	\$52,115	\$56,878	0.65	0.92
Apr 2014	\$12,335	\$4,958	\$10,936	0.40	0.45	\$92,504	\$57,073	\$67,814	0.62	0.84
May 2014	\$21,988	\$14,117	\$18,840	0.64	0.75	\$114,492	\$71,190	\$86,654	0.62	0.82
Jun 2014	\$19,658	\$8,885	\$12,594	0.45	0.71	\$134,150	\$80,075	\$99,248	0.60	0.81
Jul 2014	\$11,551	\$7,974	\$11,433	0.69	0.70	\$145,701	\$88,049	\$110,681	0.60	0.80
Aug 2014	\$12,107	\$9,091	\$12,097	0.75	0.75	\$157,808	\$97,140	\$122,778	0.62	0.79
Sep 2014	\$9,120									
PTD	\$962,307	\$886,630	\$966,059	0.92	0.92					

## Balance of Facilities

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

The BOF will provide services and utilities to support operation of the main production facilities: PT, HLW, LAW, and LAB. As of August 2014, BOF was 63 percent complete overall, with engineering design 85 percent complete, procurement 73 percent complete, construction 83 percent complete, and startup and commissioning 20 percent complete.

Commercial grade dedication activities in support of the emergency turbine generator procurement are the primary focus for the quality, design engineering, and procurement organizations. Construction efforts are focused on completion of the Glass Former Facility and construction of the Standby Diesel Generator Facility. The standby diesel generator has been placed along with the heat exchanger and fuel tank that support it.

### Significant Past Accomplishments:

- Completed repair work for fire service water tanks
- Completed over 520 cubic yards of earthwork in various BOF locations
- Completed 1,700 lf of cable and 390 terminations
- Completed coatings on the pipe rack and pump pads (subcontractor FD Thomas)

### Significant Planned Actions in the Next 6 Months:

- Complete construction of the Glass Former Storage Facility
- Receive the replacement non-radioactive liquid waste disposal system motor control panel
- Complete component testing of the low-voltage, medium-voltage, and fire detection systems for switchgear Buildings 87 and 91.

### Issues:

No major issues at this time.

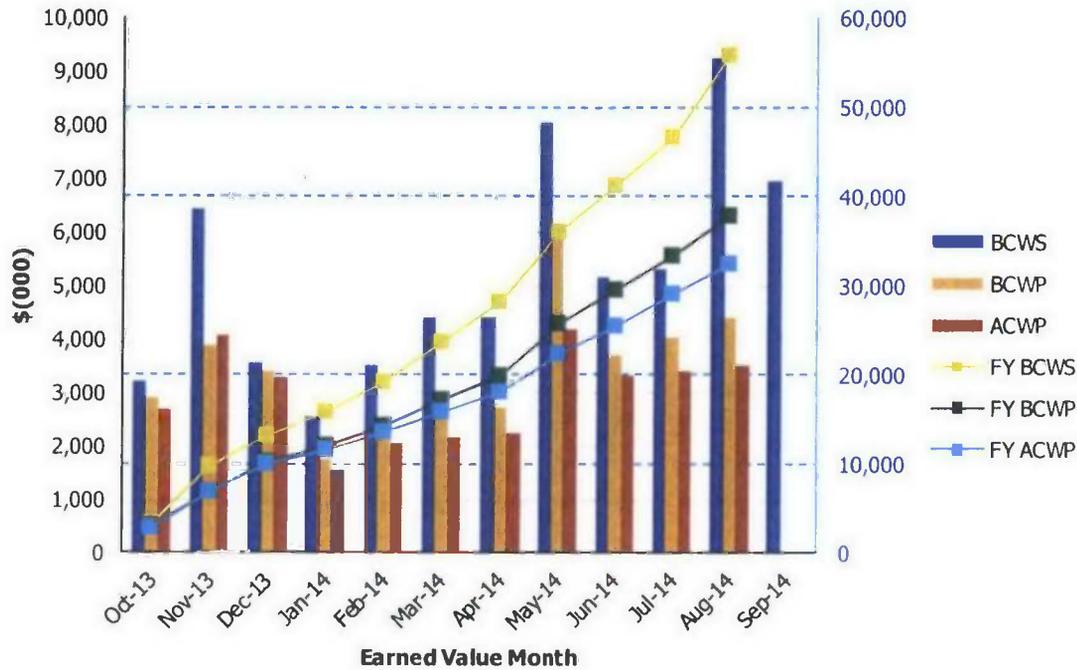
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: August 2014

**River Protection Project  
Balance of Facilities**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$3,218	\$2,901	\$2,679	0.90	1.08	\$3,218	\$2,901	\$2,679	0.90	1.08
Nov 2013	\$6,431	\$3,886	\$4,067	0.60	0.96	\$9,649	\$6,787	\$6,746	0.70	1.01
Dec 2013	\$3,547	\$3,395	\$3,267	0.96	1.04	\$13,196	\$10,182	\$10,013	0.77	1.02
Jan 2014	\$2,538	\$1,737	\$1,562	0.68	1.11	\$15,734	\$11,919	\$11,575	0.76	1.03
Feb 2014	\$3,528	\$2,356	\$2,047	0.67	1.15	\$19,262	\$14,275	\$13,622	0.74	1.05
Mar 2014	\$4,394	\$2,806	\$2,163	0.64	1.30	\$23,656	\$17,081	\$15,785	0.72	1.08
Apr 2014	\$4,399	\$2,724	\$2,238	0.62	1.22	\$28,055	\$19,805	\$18,023	0.71	1.10
May 2014	\$8,035	\$5,861	\$4,179	0.73	1.40	\$36,090	\$25,666	\$22,202	0.71	1.16
Jun 2014	\$5,161	\$3,711	\$3,320	0.72	1.12	\$41,251	\$29,377	\$25,522	0.71	1.15
Jul 2014	\$5,297	\$4,032	\$3,415	0.76	1.18	\$46,548	\$33,409	\$28,937	0.72	1.15
Aug 2014	\$9,233	\$4,399	\$3,499	0.48	1.26	\$55,781	\$37,808	\$32,436	0.68	1.17
Sep 2014	\$6,945									
PTD	\$382,495	\$355,458	\$343,806	0.93	1.03					

## Analytical Laboratory

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

LAB = Analytical Laboratory.

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of August 2014, the LAB was 76 percent complete overall, with engineering design 83 percent complete, procurement 86 percent complete, construction 94 percent complete, and startup and commissioning 26 percent complete.

Engineering efforts are focused on closure of nonconformance reports and construction deficiency reports. In addition engineering is supporting completion of construction punchlist items. Construction efforts are focused on installation of remaining electrical commodities and penetration seals to support the completion of LAB construction.

### Significant Past Accomplishments:

- Continued cable pulls and terminations (8,050 linear feet in August – 85% complete)
- Continued installation of conduit (1,500 linear feet in August – 97% complete)
- Continued installation of instrumentation tubing (3,440 linear feet in August)
- Continued installation of penetration seals and fireproofing.

### Significant Planned Actions in the Next 6 Months:

- Complete electrical commodity installation
- Complete penetration seal installation
- Initiate component level testing of select LAB systems.

### Issues:

No major issues at this time.

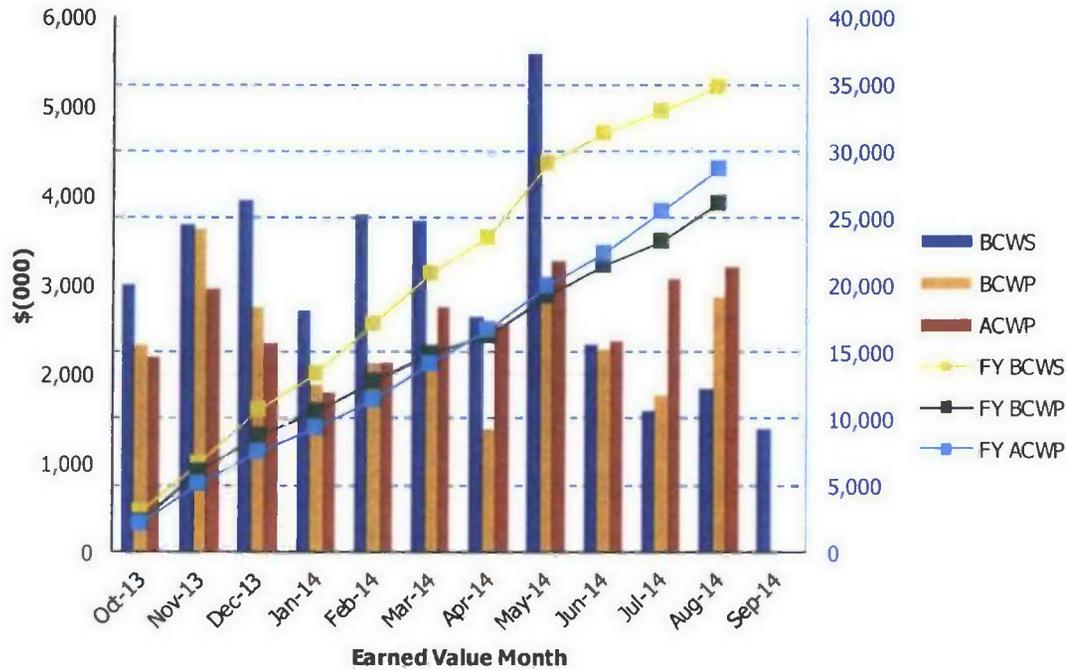
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2014 Earned Value Data

Data as of: August 2014

**River Protection Project  
Analytical Laboratory**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2013	\$3,008	\$2,328	\$2,196	0.77	1.06	\$3,008	\$2,328	\$2,196	0.77	1.06
Nov 2013	\$3,689	\$3,629	\$2,959	0.98	1.23	\$6,697	\$5,957	\$5,155	0.89	1.16
Dec 2013	\$3,943	\$2,750	\$2,350	0.70	1.17	\$10,640	\$8,707	\$7,505	0.82	1.16
Jan 2014	\$2,705	\$1,875	\$1,788	0.69	1.05	\$13,345	\$10,582	\$9,293	0.79	1.14
Feb 2014	\$3,783	\$2,130	\$2,126	0.56	1.00	\$17,128	\$12,712	\$11,419	0.74	1.11
Mar 2014	\$3,718	\$2,080	\$2,751	0.56	0.76	\$20,846	\$14,792	\$14,170	0.71	1.04
Apr 2014	\$2,642	\$1,382	\$2,552	0.52	0.54	\$23,488	\$16,174	\$16,722	0.69	0.97
May 2014	\$5,592	\$3,040	\$3,274	0.54	0.93	\$29,080	\$19,214	\$19,996	0.66	0.96
Jun 2014	\$2,330	\$2,291	\$2,375	0.98	0.96	\$31,410	\$21,505	\$22,371	0.68	0.96
Jul 2014	\$1,591	\$1,772	\$3,082	1.11	0.57	\$33,001	\$23,277	\$25,453	0.71	0.91
Aug 2014	\$1,847	\$2,871	\$3,202	1.55	0.90	\$34,848	\$26,148	\$28,655	0.75	0.91
Sep 2014	\$1,381									
PTD	\$271,886	\$259,231	\$281,158	0.95	0.92					

Waste Treatment Plant Project - (LBL) Percent Complete Status  
Through August 2014

(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars			Project Management & Shared Services Unallocated Dollars		
	Performance Measurement 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
Facilities	1,240.4	866.6	71%	329.7	273.5	83%	283.5	233.9	89%	464.1	363.9	78%	181.3	13.8	8%	1.9	1.6	85%
Low-Activity Waste	339.9	259.2	76%	73.7	61.4	83%	56.0	48.4	86%	138.5	130.3	94%	71.1	18.6	26%	0.6	0.5	85%
Analytical Lab	562.9	355.5	63%	96.5	81.6	85%	74.7	54.3	73%	225.6	186.2	83%	165.5	32.8	20%	0.6	0.5	85%
Balance of Facilities	2,143.3	1,501.3	70%	499.9	416.5	83%	394.2	336.6	85%	328.1	680.4	82%	418.0	65.2	16%	3.0	2.6	85%
<b>PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)</b>																		
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%	n/a	n/a	n/a
Pretreatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%	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%	n/a	n/a	n/a
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%	n/a	n/a	n/a
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	10,866.1	7,465.5	69%	2,673.0	2,365.4	88%	1,959.7	1,461.4	75%	3,715.7	2,445.2	66%	1,176.5	208.4	18%	n/a	n/a	n/a

Source: Preliminary WTP Contract Performance Report - Format 1, Data for August 2014

Note: In September 2012, the LBL Replan was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB value for the project for PT/HLW/SS is \$2,014M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLW/PT/SS BCWP values. In March 2014, Project Controls and Project M 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 UB.

## ORP/Ecology TPA and CD Agreements, Issues, and Action Items – October 2014

### Agreements:

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

### Issues:

1. Ecology has a concern with WTP data being reported exclusively in the CD Monthly Summary Report as the current CD reporting process does not allot ECY early review time of the CD Monthly Summary Report. ORP and ECY have raised this concern for discussion at the Senior Management levels.
2. **AY-102 Primary Tank Leak:** Tank 241-AY-102 (AY-102) is an approximate one million gallon underground double-shell tank (DST) containing mixed radioactive and hazardous waste located in the 241-AY Tank Farm (AY Farm). In August 2012, a leak to the annulus was detected. DOE submitted a pumping plan & revised pumping plan to Ecology, both of which were rejected. On March 21, 2014, Ecology issued Administrative Order Docket #10156 against DOE and WRRPS alleging violations of 40 CFR 265.196 and identifying 14 action items that DOE/WRRPS must comply with including the pumping of AY-102. On April 18, 2014, DOE and WRRPS filed Notices of Appeal and Motions to Stay the Administrative Order with the Washington State Pollution Control Hearings Board (PCHB). A Prehearing Conference was held on May 8, 2014. The legal issues of the case were identified and a case schedule has been set based upon a hearing date in October 2014. **DOE and Ecology reached a Settlement Agreement (PCHB No. 14-041c) for AY-102 on October 2, 2014 resulting in a safe and mutually agreed-upon path forward for the removal of waste from AY-102.**
3. T-111 and Other Single Shell Tank Level Decreases: ORP and WRRPS have determined that 19 of the 20 single shell tanks showing decreased liquid levels at the Hanford Site are not actively leaking. Evaluation documents are available online at: <http://www.hanford.gov/page.cfm/SingleShellTankEvaluations>

**ORP/Ecology TPA and CD Agreements, Issues, and Action Items – October 2014**

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	TF-14-08-01	08/21/14	ECY requested information on the evaporator maintenance protocols and the depth and breadth of the maintenance spares.	Open.		Koll	
2	TF-14-08-01	08/21/14	ORP took an action to set up discussions with Ecology on DFLAW and the WTP TOC integrated readiness support starting in October 2014.	Open.		Pfaff / Wrzesinski	
3	TF-14-07-02	07/17/14	ORP will provide a briefing to ECY on the design, history, testing process, and path forward for the deferred use lines.	Closed.	<b>ORP and WRPS met with ECY on 10/09/14 to provide a briefing on deferred use lines.</b>	Johnson	<b>10/09/14</b>
4	TF-14-06-02	06/19/14	Schedule an oversight opportunity with ORP and ECY for the WMA C PA modeling	Open.	Meeting held on 09/11/14. Next meeting tentatively scheduled for 10/30/14.	Kemp / Beach	
5	TF-14-02-02	02/18/14	ECY would like a schedule/project management plan (if available) for the closure of WMA C.	Open.		Kemp	
6	TF-14-01-01	01/28/14	ORP, ECY, and WRPS are working to complete revisions on the Hose-In-Hose Transfer Line Management Plan (RPP-12711) Revision 7.	Open.	Meeting with ORP, ECY, and WRPS was held on 09/15/14. <b>Meeting notes have been provided to ECY. The next meeting is scheduled for 11/17/14.</b>	Lynch / Mathey / Fox	
7	TF-13-12-01	12/19/13	ECY will provide a list of team members and their roles and responsibilities to ORP so that ORP can provide all applicable invitees to future meetings.	Open.		Lyon / McDonald	

**ORP/Ecology TPA and CD Agreements, Issues, and Action Items – October 2014**

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
	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 and other options for M-045-61/-62/-82. ORP proposes a six month extension to M-045-61 to continue PM discussions.	Open.	ECY proposal presented to ORP on 03/26/14. ECY will update its table in the proposal. ORP provided a draft change package to ECY at the Sept. 2014 meeting.	Kemp / Eberlein / Price	
8							

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	WTP-14-06-01	06/19/14	ECY would like a schedule for the full-scale vessel testing	Closed	ORP sent schedule to ECY on 10/1/14.	Wahed Abdul	10/1/14
2	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.		Delmar Noyes	
3	WTP-14-06-03	06/19/14	ECY requests a briefing on the LAW design operability review before the September timeframe.	Open.		Jeff Bruggeman	
4	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.		Delmar Noyes	

## WORKING ORP Key Documents List – October 2014

Topic Areas	Document	ORP Delivery to Regulators Date <sup>1</sup>	Anticipated Regulatory Review Completion Date <sup>2</sup>	Final Completion Date <sup>3</sup>	DOE-ORP Lead	Contractor Lead	Regulator Lead	Comments/Issues
<b>PERMIT DOCUMENTS</b>	Tier 1 Framework Closure Plan Update	09/30/15			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>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.</li> </ul>
	Tier 2 WMA-C Closure Plan	TBD			C. Kemp	S. Eberlein	J. Lyon	
	All Remaining Closure Plans for WMA-C	09/30/15			C. Kemp	S. Eberlein	J. Lyon	
	WMA-C Closure Conceptual Design	TBD			C. Kemp	S. Eberlein	J. Lyon	
	Tier 3 Closure Plans for Tanks Already Received	TBD			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>Due 180-day post EIS</li> </ul>
	Tier 3 Closure Plans for Additional Tanks	09/30/15			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>Several Dates in out years</li> </ul>
	WMA-C Closure Design	TBD			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>Final dates not yet determined; provides basis for the Tier 2 Closure Plan</li> </ul>
	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	
<b>OTHER DOCUMENTS</b>	IDF Performance Assessment (ORP/WRPS has support role to RL/CHPRC)	TBD			T. Fletcher		J. Lyon	
	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"> <li>To be made into a TPA Primary Document with submittal of revision 7 per a TPA Project Managers Agreement, signed 01/22/2013</li> </ul>
	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"> <li>Discussions are underway for a number of revisions to this document</li> </ul>
WMA Quarterly Groundwater Reports	Ongoing Quarterly			D. Hildebrand		J. Lyon	<ul style="list-style-type: none"> <li>Ecology SST counterparts have been added to this distribution list as of March 2013</li> <li>ORP continues to provide reports to Ecology</li> </ul>	

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.

<sup>1</sup> Note: "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.

<sup>2</sup> 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.

<sup>3</sup> Note: "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**   
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**Bold black = document under comment/review response or other actions**   
**Bold blue = document is completed**

## WORKING ORP Key Documents List – October 2014

Milestone Title	Milestone Tie	Document	TPA Milestone Due Date (if applicable) <sup>1</sup>	ORP Delivery to Regulators Date <sup>2</sup>	Anticipated Regulatory Review Completion Date <sup>3</sup>	Final Completion Date <sup>4</sup>	DOE-ORP Lead	Contractor Lead	Ecology Lead	Comments/Issues
ORP and Ecology will review the reports generated in M-045-22-T01, -T02, and -T03 and determine whether to continue with soil desiccation/contaminant removal testing and other interim measures (TPA MS M-045-22).	M-045-22-T01	Submit Results of VZ Characterization of 241-TX to ECY	09/30/14	09/17/14	N/A	09/17/14	D. Hildebrand	S. Eberlein	J. Lyon	• ORP provided this report to ECY on 09/17/14 via ORP letter 14-TF-0100.
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-045-61	WMA-C PA Initial Model Run Data Package		TBD			C. Kemp	S. Eberlein	J. Lyon	• Feeds input for M-045-61 and all Closure Plans
		WMA-C PA Initial Document		TBD			C. Kemp	S. Eberlein	J. Lyon	• Feeds input for M-045-61 and all Closure Plans
		WMA-C Characterization Summary 2013		TBD			C. Kemp	S. Eberlein	J. Lyon	• Feeds input for M-045-61 and all Closure Plans
	M-045-61	Phase 2 Draft A RFI Report for WMA C	12/31/14				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-45-14-03 signed on 10/01/14 split up the WMA C RFI and CMS into separate deliverables.
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	06/30/15	TBD			C. Kemp	S. Eberlein	J. Lyon	• Reported as To Be Missed in the March 2013 TPA PMM. Discussions ongoing at the PM level.
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	06/30/15			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	06/30/16			C. Kemp	S. Eberlein	J. Lyon	• ORP/ECY TPA Change Package M-45-12-04 modified this to a due date of 06/30/16.
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	

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

<sup>2</sup> "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.

<sup>3</sup> 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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