

**Office of River Protection
Tri-Party Agreement Milestone Review
Meeting Minutes
November 21, 2013**

Approval: J.A. Hedges by E. Annala Date: 12/18/13
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Ecology IAMIT Representative

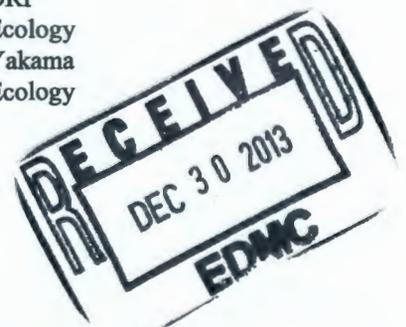
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DOE IAMIT Representative

Approval: [Signature] Date: 30 Dec 2013
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Minutes Prepared by: [Signature] Date: 12-30-13
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Beam, T.G.*	WRPS	Luke, J.J.*	WRPS
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Caggiano, J.A.*	Ecology	Lyon, J.J.*	Ecology
Cimon, S.*	ODE	Mauss, B.M.	ORP
Dahl, S.L.*	Ecology	Mattlin, E.M.	ORP
Diediker, J.A.	ORP	McDonald, D.*	Ecology
Donnelly J.W.	WRPS	Menard, N.M.*	Ecology
Dowell, J.A.*	RL	Nazarali, A.	CTUIR
Einan, D.R.	EPA	Niles, K.	OOE
Faulk, D.A.*	EPA	Noland, T.W.*	MSA
Fletcher, T.W.*	ORP	Noyes, D.L.*	ORP
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Grindstaff, J.F.	ORP	Piippo, R.E.*	MSA
Harrington, C.C.	ORP	Price, J.B.	Ecology
Harris, S.	CTUIR	Shattuck, A.F.	MSA
Hedges, J.*	Ecology	Skinnarland, E.R.	Ecology
Hendrickson, M.L.	Ecology	Smith, D.M.*	ORP
Higgins, K.L.*	ORP	Trenchard, G.D.	ORP
Hildebrand, R.D.	RL	Uziemblo, N.H.*	Ecology
Huffman, L.A.	ORP	Vanni, J.	Yakama
Jim, R.	Yakama	Whalen, C.L.	Ecology
Johnson, J.M.*	ORP	Administrative Record	
Kaldor, R.A.*	MSA		
Kemp, C.J.*	ORP		

*Attendees



**Office of River Protection
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Administrative Items/Milestone Status

ORP provided an updated TPA and Consent Decree (CD) list of agreements, issues and actions. ORP referred to issue No. 2, stating that the robotic inspection of the leak detection pit system was started yesterday (11/20/13). For issue No. 3, ORP stated that the level decrease evaluation for the 20 tanks was completed, and tank T-111 was identified as the only tank that is actively leaking. ORP noted that the website link for the evaluation documents is included under issue No. 3.

ORP stated that several action items were recently closed via email or meetings that were held. ORP stated that action No. TF-13-09-01 could be closed since a meeting was held November 14, 2013 with Ecology to discuss the C-104 retrieval data report. Ecology agreed that the action could be closed. ORP asked if action No. TF-13-05-04 could be closed since there are ongoing discussions between the state of Washington and Ecology. Ecology responded that a commitment was made during one of the meetings to schedule follow-up meetings on direct feed LAW, which haven't been held yet. This action will remain open until follow-up meetings are held.

ORP stated that the TPA monthly summary report lists the milestones for fiscal years 2013 through 2015, noting that the FY14 milestones are all on schedule, and that FY15 milestones M-045-61/62 and M-045-82 are to be missed. ORP stated that all of the milestones in the CD monthly summary table for FY13 through FY15 are listed as completed or ongoing. ORP noted that a date has been established for the three-year review (milestone D-006-00-A). Ecology asked why the ongoing milestones have asterisks instead of being reported at risk. ORP responded that the asterisks point to the note that the State of Washington and has been notified of a serious risk to meeting the milestones, and that was the direction given by legal counsel. Ecology suggested reversing the process and reporting the milestones at risk, with an asterisk indicating the milestones are ongoing with the retrieval being completed. ORP stated that Ecology's inquiry and suggestion will be taken back to legal counsel.

Ecology stated that there has been disagreement with ORP as to whether or not milestone D-00A-05 has been completed, and there is no notation on the milestone table regarding the disagreement. Ecology added that it should also be documented there was an agreement that the milestone would be completed by December 2013, and ORP recently notified Ecology that the date has slipped to April 2014. ORP responded that Ecology's comments regarding milestone D-00A-05 will be taken back to legal counsel. Ecology clarified that the CD report is not a joint report with the Tri-Parties, but it is a DOE report only. ORP responded that Ecology's statement was correct.

System Plan; M-62-40

ORP reported that milestone M-062-40C was deferred to December 15, 2013. ORP stated that on August 29, 2013, ORP met with Ecology to propose a delay with milestone M-062-40C, which is to select a minimum of three scenarios to be modeled in the System Plan. In September 2013, ORP informed Ecology that they decided to not select any scenarios for System Plan 7. On October 24, 2013, a TPA change package was signed by ORP and Ecology to move M-062-40C from October 31, 2013, to December 15, 2013. On October 9, 2013, ORP notified the core System Plan team members that system planning activities would resume starting the week of October 15, 2013. ORP stated that the team has met eight times between October 15 and November 20 of this year. The meetings consisted of a second review of the System Plan base assumptions, the WTP focus on selection scenarios, and single-shell tank and double-shell tank selection scenarios. ORP added that during the last three to four meetings, the various cases that Ecology had selected were reviewed.

Ecology stated that during the discussions with ORP and the Department of Justice, ORP committed to look at outyear scenarios for modeling and then hold discussions with Ecology about the scenarios. Ecology stated that the discussions with ORP about the outyear scenarios were anticipated to occur before the December 10, 2013 three-year review meeting (CD milestone D-006-00-A). ORP stated that it will follow up on Ecology's comments about scheduling a meeting to discuss the scenarios. Ecology indicated that it could also follow up with the ORP point of contact.

ORP stated that last evening (11/20/13), the core team members received the draft scenario selection documents consisting of Ecology's five selected scenarios. The core team is currently in the process of reviewing the document. ORP is not in a position to edit or revise any of the scenario selections, and is providing support to Ecology during the review process. ORP stated that the scenario selection document is anticipated for release on December 4, 2013, and will consist of all five of the scenarios. Following release of the document, the detailed assumptions for all five cases will be developed, starting in mid-December 2013. The final assumptions for each of the five cases are expected to be finalized in February 2014, and Ecology will review and approve all of the assumptions. The modeling is scheduled to begin in mid-March 2014. ORP stated that the core team will draft a letter formally transmitting the scenario selection document to Ecology and EPA. A joint letter signed by Ecology and ORP and sent to all of the agencies will close out the milestone for scenario selection. Ecology expressed appreciation for the work done by the core team in a cooperative manner.

EPA inquired about the purpose of the System Plan report. ORP responded that scenarios are run for the purpose of becoming the technical baseline for tank farms' mission, and it is a TPA requirement that it be done every three years. Ecology stated that the system planning was a critical part of the agreement when the CD was finalized, even though system planning is in the TPA under contingency planning. The purpose was to ensure all the parties were aware that the activities in tank farms were being done as planned and required, and what the effect on near-term CD and outyear milestones would be if there were changes to any of the elements. EPA

asked if the concept for developing multiple scenarios is to have the option to use an alternative scenario as the new baseline. ORP responded that in the past a baseline scenario would be established, and then alternatives were explored in an effort to determine the implications of various events, which were laid out through system plan modeling. ORP added that multiple scenarios also provide an opportunity to explore alternatives that could potentially accelerate the mission.

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

ORP stated that milestone M-090-13 is due at the end of fiscal year 2014 (9/30/14), and is being reported as on schedule. ORP noted that this milestone is not currently funded under the continuing resolution (CR) budget, although there may be improved funding in the January 2014 time frame. ORP noted that the critical decision 1 (CD-1) package includes the conceptual design for the Interim Hanford Storage Project, and the project is necessary for the High Level Waste (HLW) building to start up at the Waste Treatment Plant (WTP). ORP stated that M-047-07 is due by the end of FY14 to submit the CD-1, which includes the conceptual design report, and that this milestone is currently not funded under the CR. ORP stated that the Secondary Liquid Waste Treatment project also needs to be considered in the discussions with WTP startup as a whole because secondary liquid waste treatment capability is needed for the Pretreatment (PT) building at WTP to start up.

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

ORP stated that there have been several discussions with Ecology regarding milestone M-062-40ZZ to submit a one-time tank waste supplemental treatment technologies report. ORP and Ecology have agreed that the one-time report is not necessary and that several draft change packages to the milestone have been exchanged, but agreement has not been reached on the specific wording to the change package. ORP noted that as the parties move to delete the one-time report, changes to milestone M-062-45ZZ to negotiate a one-time supplemental treatment selection are under discussion with Ecology. ORP stated that the discussions with Ecology focus on resolving what specifically is to be negotiated by April 2015. Ecology stated that it is in agreement that the one-time report is not needed, but there are other milestones associated with M-062-40ZZ/45ZZ that the parties want to preserve, which is part of the ongoing discussions. ORP noted an element that is not reflected in M-062-45ZZ is that the direct feed LAW concept includes an interim pretreatment system. ORP added that direct feed LAW is in the supplemental treatment portion of the contract, but there are not yet any milestones for the direct feed LAW. Ecology expressed appreciation to ORP for the information that was presented on direct feed LAW, and requested additional meetings with ORP to get more information and gain an understanding of the details. ORP agreed to schedule a meeting with Ecology to occur shortly after the Thanksgiving holiday. ORP and Ecology noted that the discussion will support action No. 4, TF-13-05-04, on the agreements, issues and actions table.

242-A Evaporator Status

ORP reported that the evaporator campaigns, noted on the schedule as 13-01, 14-01 and 14-02, have been moved out slightly. ORP indicated that the cold runs, which will be done prior to the campaigns, are currently on schedule. ORP noted that the campaigns are called waste volume reductions. The first cold run, or operational acceptance testing (OAT), is scheduled to begin in mid-December 2013, and run through mid- to late January 2014. At that point, WRPS will start its readiness assessment, ending a month later. ORP stated that if everything goes as planned, ORP will begin its readiness assessment in mid-February 2014, and go through mid-March 2014.

ORP stated that between the OAT and the readiness assessments, it will be conducting an independent verification review. ORP indicated that the authorization to operate the facility starting March 12, 2014 is anticipated to be ten days later on March 22, 2014. The first waste volume reduction is scheduled to start in March 2014, ending in March 2014. The second waste volume reduction is scheduled to start in the middle of April 2014, ending in April 2014. The third waste volume reduction is scheduled to start in mid-May 2014, ending at the end of May 2014. ORP stated that at that point, the theoretical 750,000 gallons of evaporated effluents will be achieved.

ORP noted that there have been a few problems getting the facility operational, not only with getting resources to the facility, but also procurement items. One of the critical path items at the facility to date is the dump valve, and two dives are planned at the facility today to ensure everything is ready to install the linkage for the dump valve.

Ecology reiterated its concern whether the operations and maintenance of the evaporator will be consistent with the needs for process throughput when the WTP starts running. Ecology requested that over time, ORP provide more information about how the evaporator crew intends to maintain a high probability of operational efficiency, run times and diminished failures. Ecology expressed an interest in understanding how the evaporator system will work, stating its opinion that the evaporator continues to be the largest single point of failure in the whole WTP system. ORP concurred with Ecology's comments and concerns, and stated that it will gather information to share with Ecology.

Ecology stated that in the past, yearly operational preparations were done to maintain the evaporator and keep it operational. Ecology added that at one point the decision was made to allow the procedures to lapse, and it would take a certain amount of time for the evaporator to become operational. Ecology noted that now it is taking a long period of time to get the evaporator ready, and asked if there has been a lesson learned about maintaining the evaporator. ORP responded that in the past, cold runs at the evaporator were always done to maintain compliance with the documented safety analyses (DSA). Two years ago, a major component upgrade was started at the evaporator to meet the DSA 3009 compliance, which is a DOE standard. The component upgrades were hampered by the sequestration that was imposed in early 2013 calendar year. When the reprogramming funds were received in early summer 2013, crews were put back to work on the evaporator and bringing it up to a DSA 3009 standard compliant facility. ORP stated that going forward, a protocol will be in place and there will be

no lapse in operations.

SST Integrity Assurance; M-45-91

ORP noted that M-045-91E was completed in September 2013, and the report was transmitted to Ecology. ORP reported that work to support M-045-91B-T01 is under way in tank A-106. The sidewall concrete coring in A-106 is anticipated for spring 2014 when there is no chance of freezing.

In Tank Characterization and Summary

ORP reported that a few deliverables were provided to Ecology, closing several action items (see actions table). Ecology inquired about the scheduled tank sampling for AY-102. ORP responded that the sampling was done within the past two weeks, and the report has not been issued. Ecology inquired about how the activities associated with tank sampling are being tracked and reported. ORP responded that the monthly status report is sent to Ecology, and an effort will be made to ensure that the monthly report is distributed to the Ecology point of contact. Ecology asked if the future plans are included in the report. ORP stated that it is not specifically included in the report, and the pumping is planned based on the projected level increases in the pit. ORP added that Ecology could be notified a week in advance when pumping will be done.

Ecology expressed interest in the pumping plan and asked if the items associated with the plan are provided to Ecology. ORP responded that it is not reported to Ecology. ORP stated that the current budget constraints are posing challenges in tank farms, and although progress is being made, it is not being made at a satisfactory level. ORP noted that since the spike in rad level in AY-102 was observed in June 2013, preliminary discussions with WRPS indicate that no spikes of similar looking material have been observed.

Tank Operations Contract (TOC) Overview

ORP provided the TOC overview for the month of September 2013. ORP noted that the fiscal-year-to-date schedule performance index (SPI) of 0.87 was mainly associated with the retrievals section of the report. ORP stated that a lockdown date has been placed on baseline change requests (BCRs) due to contract reconciliation efforts. As a result, a lot of the variances are due to work that has not been BCR'd until the baseline is reconciled with the contract. ORP stated that a majority of the variances will be corrected by the end of the first quarter of FY14.

Regarding the cost savings associated with the WTP High Level Waste facility design (WFD/Treatment Planning/DST Retrieval/Closure), Ecology asked if the savings were because no design work was being done. ORP responded that savings are only against the work performed, and the work was performed at a lower cost than expected.

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

M-045-22-T01/TO2 - ORP reported that the characterization work in TX Farm and U Farm is ongoing.

M-045-22-T03 - ORP stated that the intent of the SX Farm characterization is to capture nitrate and Tc-99 from the 120-foot below grade in the Cold Creek formation. ORP added that liquid is being captured, which indicates that the contaminant removal may be working.

M-045-92N/O - ORP noted that the barrier work has been deferred until the M-045-20 series of work has been completed. Ecology noted that the milestones are due in 2015, and inquired about them being deferred. ORP responded that during discussions about the M-045-20 milestones and the interim measures study for the U, T and SX Farms, a change package was agreed to that deferred the original barrier dates to the current dates of 2015.

M-045-56I - ORP stated that the interim measures work under this milestone was completed in June 2013, and work has been initiated for the next report due in June 2014. ORP noted that the interim measures work is intended to keep the run-on and runoff of rainwater and snow melt off the tank farms. Additionally, during the early years of the milestone, the water lines that went into the tank farm was cut off, minimizing water put into the tank farm soils.

M-045-61/62 - ORP noted that these two milestones are to be missed. ORP stated that discussions are being held with Ecology. A meeting was held on October 28, 2013, and a continuation of that meeting is scheduled later today. ORP stated that part of the reason for not going forward with a change package at this time is that the parties need to collectively understand how the closure permit will be done. ORP indicated that when more clarity is reached regarding the closure permit, the parties would proceed with working through a change package. ORP noted that there is a draft change package, which is on hold until the parties work through related issues. Ecology expressed appreciation that meetings are starting up on these two to-be-missed milestones, and stated that its project personnel do not have an understanding about what ORP is planning. Ecology encouraged the parties to bring the issues to closure and reach agreement about what will be changed in the milestones.

M-45-00 Series:

SST Retrieval and Closure Program TPA - ORP stated that the WMA-C Performance Assessment (PA) work has started, and a meeting was held at the Ecology office. Several stakeholder groups and the Nuclear Regulatory Commission (NRC) attended the meeting. ORP stated that the modeling section of the PA has been initiated. ORP expressed appreciation to Ecology for hosting the planning session and 11 working sessions.

M-045-86 - ORP reported that tank retrievals completed in the last 18 months include tanks C-104, C-108, C-109 and C-110. ORP noted that for tanks under the Consent Decree (CD), a retrieval completion report is submitted after a tank has been retrieved. A year later a retrieval data report (RDR) is submitted comprised of the end retrieval sampling. The C-109 RDR is in concurrence, and the C-104 RDR and C-110 retrieval completion report are being prepared.

Significant Planned Activities in the Next 6 Months - ORP reported that retrieval in tank C-112 is under way with a caustic presoak. ORP stated that a process sample is scheduled to be pulled from C-112, and Ecology will be notified in advance.

Tank Waste Retrieval Work Plan (TWRWP) Status - ORP stated that the C-110 TWRWP is being modified.

Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria - ORP stated that there was no change in status.

Tank Retrievals with Individual Milestones - ORP stated there was no change in status.

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

D-00B-01 - ORP provided an update on the C Farm retrieval into double-shell tanks (DSTs) AN-101 and AN-106, and the concern regarding a deep sludge gas release event (DSGRE). ORP stated that historically there have never been sludge heights greater than 177 inches in any of the tanks, and work has been under way to determine whether a gas release event will occur if the sludge is piled higher than 177 inches. ORP reported that there have been encouraging results from the lab, and there is a full-scale test under way in the cold test facility. ORP stated that the Justification for Continued Operations (JCO) is expected by early April 2014, and the Documented Safety Analysis (DSA) is expected in late June 2014.

ORP stated that the cone penetrometer was placed in AN-106 on Tuesday, and the purpose was to confirm what was expected in the tank and what PNNL is testing, which is between one and 4,000 scales of shear strength. ORP stated that there were 500 at the top and about 3,000 scales of shear strength at the bottom of the tank, so what has been tested at the lab is bounded in AN-106. ORP noted that the test results were received this morning. ORP added that the same testing is planned for AN-101 in the next month. ORP stated that it is currently allowed to raise the sludge heights in AN-101 and AN-106 to 191 inches, and the sludge heights will be raised higher and licensed. In AN-106 the sludge height would be raised to 240 inches, and in AN-101 the sludge height would go up to about 310 inches. The increase in sludge height would allow retrieval to be completed in C Farm to tanks AN-101 and AN-106. ORP noted that if the DSGRE is not solved or those sludge heights aren't allowed, a third DST would have to be accessed, which would not meet the CD.

Significant Past Accomplishments - ORP stated that retrieval at C-101 has reached its limits of technology for sluicing and high pressure water. An evaluation is under way to determine whether it's practicable to deploy a third retrieval technology in C-101. Oregon Department of Energy (ODOE) asked how much was left in C-101. ORP responded that there are about 150 cubic feet on the walls of the tank, and high pressure water did not make a significant difference.

ORP added that all of the 100 series tanks in C Farm are designed with a dish bottom, and there are always 100 cubic feet at the bottom based off the dish bottom and the height of the pump with the screen. ORP reported that there have been challenges to removing the failed slurry pump in C-107, due to an alignment issue with the round screen wedging up against the mast, which is square. The mast and screen have since been aligned, and the plan is to pull the slurry pump out today.

Ecology inquired about getting a status report during the TPA meetings on the quarterly groundwater wells sampling and the dry well logging in support of C Farm retrievals. ORP responded that a report is being prepared. The parties agreed that the quarterly groundwater status would be reported at the monthly project managers meeting (PMM).

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

WTP Overall TPA and CD Summary and Milestone Status; M-62-01; M-62-49; D-00A-01,

-06, -17

Waste Treatment and Immobilization Plant (WTP) Project

Action No. WTP-13-04-03 - See discussion on TCO under LAB.

Action No. WTP-13-04-01 - ORP stated that the path forward for the Reliability Verification Process (RVP) Wave II was received from the contractor, but the contractor's causal analysis and actions from Wave II did not meet ORP's expectations. ORP has been working with the contractor on Wave II. A briefing will be provided to Ecology on the status of Wave I and Wave II, although the path forward for Wave II has not been finalized. EPA inquired about the RVP. ORP responded that a team of about 150 people conducted an independent overview to identify issues and concerns, and evaluate the corrective actions.

ORP stated that the weekly briefings for the High Level Waste (HLW) design review are ongoing, and this topic was inadvertently dropped and will be placed back on the agenda. ORP reported that the WTP construction project review was completed, and a briefing was provided to DOE-Headquarters this week. Ecology will be provided a copy of the construction project review report when it is released, which is scheduled for January 2014.

ORP stated that the briefing to Ecology on the HLW resumption plan has been rescheduled to December 9, 2013. ORP stated that there has been limited construction in HLW, mostly civil and rebar, and the engineering production work has been on hold. ORP noted that the first decision on what will be allowed to resume in HLW will primarily be engineering aspects. Ecology noted that there are a variety of technical issues to be resolved and also the HLW design review that's ongoing, and asked if it was fair to assume that the first meeting on authorization to proceed will just provide an overview of how ORP plans to go forward and what needs to be completed before making the final decision. ORP concurred that the briefing will provide a status of the resumption plan, the approach, the components of the decision and how the plan will be structured. ORP added that a decision regarding the schedule likely won't be made until the February 2014 time frame.

ORP reported that there has not been much change in areas of focus and activities from what has been communicated recently for WTP. The total number of full-time equivalents (FTE) has increased from about 2,000 to 2,200. ORP is continuing to work through the funding profiles and the continuing resolution (CR), which goes through January 2014. The trend in declining cost performance continues, primarily in LAW, BOF and LAB (LBL) activities due to impacts from the reprogramming and the efforts to ramp back up.

Significant Past Accomplishments - ORP stated that it received the HPAV probability risk-informed analysis plan (PRA) from the contractor, which will allow incorporation of probability into how the hydrogen events are evaluated. The HPAV PRA is a draft plan that ORP will be working through with the contractor. ORP noted that the HLW design review completed four of 14 systems, which is a key activity as part of evaluating HLW in terms of releasing more engineering and construction.

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

ORP stated that there are no construction or production engineering activities in PT. The main activities are technical issue resolution and continuing with the full-scale vessel testing preparation. ORP noted that the primary focus has been evaluation of HLW technical issues, and once the decisions are made regarding the HLW resumption plan by February 2014, the focus will switch to PT to develop the plan and schedules to work through all the technical issues.

Ecology inquired about integrating and getting the safety basis realigned for HLW and PT. ORP responded that there are three areas for addressing the safety basis: the continuing development of the Documented Safety Analysis (DSA) for LBL, which is ongoing and will factor into the HLW decision to resume; the management suspension of work and procurement where there is a misalignment; and developing the safety design strategy (SDS) for HLW, which will summarize the basic control strategies and provide the framework to be able to consistently review the SDS in a more system-wide perspective. ORP added that there will be a series of Authorization Basis Amendment Requests (ABARs) or Preliminary Documented Safety Analysis (PDSA) changes to realign the SDS.

Ecology asked if the final decision on any design changes for HLW will need to occur before the SDS can be completed. ORP concurred, adding that there may be a few back processes. ORP gave an example that if the HLW design group identified HVAC issues that changed some of the functionality, those design changes may have to feed back into the SDS. ORP noted that the SDS will be more of a strategy document, and it will not change the PDSA and no work will be authorized based on the design strategy. ORP added that the SDS will align the engineering and nuclear safety to a common vision so that when the design work and the PDSA changes are done, they will aim for the same thing.

Regarding the RLD-8 vessels, Ecology inquired about the progress to determine how many vessel configurations will need to be tested. ORP responded that a plan has been developed on the approach to testing, and the plan is currently in internal review. ORP indicated that parts of the plan have been shared. Ecology asked about a time frame for sharing the plan. ORP responded that during internal conversations a time frame has been discussed, but indicated that no time frame could be given at this time.

Significant Planned Actions in the Next Six Months - Ecology referred to the draft procedure for conducting the failure mode, effects and criticality analysis (FMECA) being issued, stating its understanding that the draft FMECA had been issued. ORP responded that the FMECA is under review in terms of screening, but it is still being drafted and has not been issued. Ecology noted that FMECA work is occurring, and asked if the contractor is being directed in concert with what ORP believes the procedure will be. ORP concurred that screening activities are occurring, and the actual FMECA will be done in accordance with issued procedures.

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

ORP stated that construction and procurement activities have been slowed down significantly, and civil construction work is being done in areas where there are no technical issues. Access to the wet cell is being maintained, which is located at the bottom of the facility, until all the technical issues are resolved. As discussed under the WTP project, the major activities are

associated with the evaluation for a ramp-up of construction and engineering production. ORP stated that the plan for ramping up activities is a two-phased process, with the initial evaluation and the decision to allow limited activities. ORP noted that design change work at the draft level for some of the issues will need to be initiated. ORP added that there is a sequence of plans, issues and schedules to get to a final decision, which would also include the PDSA alignment aspects as well as all the component technical aspects.

Significant Past Accomplishments - ORP noted that the design review team completed its review of four of 14 systems. ORP stated that the design review team is comprised of 30 to 35 professionals outside of the project team and/or Bechtel that ORP has contracted, and the team is conducting an independent design review. The intent of the design review is to ensure that not only the design and documentation, but the facility's operability and integration of systems will perform the intended function upon demand. ORP noted that it is considering moving the design review team over to LBL.

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

ORP stated that construction continues to move forward, and the craft have been increased as a second shift continues to run. Regarding the thermal catalytic oxidizer (TCO), ORP stated that the new vendor has been evaluating the materials and intellectual property that were retrieved when the original TCO vendor went bankrupt. ORP stated that the current schedule shows a ship date for the TCO in the January 2015 time period. ORP noted that a lot of the materials that were retrieved from the original vendor will not be usable, due to the quality and documentation.

ORP stated that activities are ongoing to construct and install the refractory into the melters. Ecology asked if the issues with the refractory have been resolved. ORP responded that work continues to move forward with the refractory, and the issues have been solved.

Significant Planned Actions in the Next 6 Months - ORP noted that the hazard analysis for the melters and the offgas system is planned for completion. ORP stated that in addition to the realignment of the PDSA for HLW and PT, the DSA development process for LAW and LAB will be done to establish a final DSA. Ecology noted that all of the facilities are thermal treatment facilities, and they have a risk assessment that considers the offgas and what gets deposited over 40 years of operating. Ecology added that if the public is allowed in places along the Columbia River that weren't originally in the risk assessment, that needs to be recalculated into the risk assessment. ORP responded that it is very aware of the potential changes. ORP stated that it has directed Bechtel to provide an initial evaluation of the potential impacts, both from an environmental permitting and a nuclear safety licensing perspective, to identify any concerns. ORP stated that based on the initial feedback from Bechtel, a determination will be made if the modeling needs to be rerun to identify any impacts. ORP added that an effort is being made to obtain the data in time to influence the decision-making process. Ecology expressed reservations about getting the data in time.

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

ORP stated that there were no significant changes in BOF. ORP stated that the primary focus is

the commercial grade dedication (CGD) activities for the emergency turbine generator (ETG). ORP noted that the CDG of the ETG is a major challenge, and ORP is heavily engaged with Bechtel's process.

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

ORP reported that some updates were given to Ecology on the weld repairs to the RLD vessels. ORP stated that the original forecast for completion and testing of the repairs was the end of December 2013, and the schedule has moved out. ORP added that the schedule moving out is not due to any major technical issues, and it is believed that all of the repairs are still repairable and retestable in place. ORP noted that the number of repairs, in conjunction with engineering work, has slowed the repair effort. ORP stated that the repairs to vessel 165 were relatively minor and they have been completed. ORP added that based on the nature of the repairs to 165, it is not believed that any retest will be required.

ORP stated that Chicago Bridge & Iron (CB&I) is currently making weld repairs to vessels 163 and 164. ORP stated that repairs to vessel 163 will be done by December 2013. The repairs to vessel 164 will take longer due to the type of steel (AL6X) that is more challenging to work on, and 164 also has the bulk of the nozzles. ORP stated that once the vessels are repaired, they will be R stamped. Following that, the retesting of the vessels will be a hydrostatic testing and will re-establish the NQA certification of the vessels. ORP stated that the current schedule is to have all the weld repairs done in the February/March 2014 time frame, with the tests done and the vessels recertified and stamped April 23, 2014. Ecology noted that there has been discussion about waiting on the hydrotest for vessel 163 until vessel 164 is ready and then doing the hydrotesting at the same time. ORP added that it makes sense to wait and do the hydrotesting at the same time, and that would push the final testing of vessels 163 and 164 to the April 2014 time frame. Ecology added that during a briefing on the vessels, ORP confirmed that there will be no reconfiguration or design updates needed on the vessels.

Ecology stated that ORP has been following the schedule for the vessel repairs very diligently, and at one point went through the schedule line item by line item, identified the anomalies, and did a good job of getting the schedule reconciled. ORP stated that there was a lack of communication from Bechtel regarding the schedule moving to the right, and the issue is being worked internally. ORP stated that there is nothing challenging the ability to do the weld repairs in place. ORP noted that CB&I has done work onsite before, and they have done a good job.



Agenda
November 21, 2013
Office of River Protection Quarterly Milestone Review Meeting
 Ecology Offices, Conference Room 3A/B
Chairperson: Tom Fletcher

Topic	Leads	Time
Administrative Items / Milestone Status	James Lynch / Dan McDonald / Jeff Lyon	8:30
System Plan; M-62-40	Dabrisha Smith / Jeff Lyon / Dan McDonald	8:35
Acquisition of New Facilities; M-90-00; M-47-00	Janet Diediker / Jeff Lyon / Dan McDonald	8:40
Supplemental Treatment and Part B Permit Applications; M-62-00, -20, -30, -45	Steve Pfaff / Jeff Lyon / Dan McDonald	8:45
242-A Evaporator Status	Ron Koll / Jeff Lyon	8:50
SST Integrity Assurance; M-45-91	Jeremy Johnson / Michelle Hendrickson	8:55
In Tank Characterization and Summary	Billie Mauss / Michael Barnes	9:00
Tank Operations Contract (TOC) Overview	Kathy Higgins/ Jeff Lyon	9:05
Single-Shell Tank Corrective Action; M-45, -50, -60	Chris Kemp / Jeff Lyon	9:10
Single-Shell Retrieval and Closure Program TPA Milestones Status; M-45-00 series, - Tank in Appendix H Status - Tanks with Individual Milestones SST Retrieval and Closure CD Milestones and TWRWP Status; D-00B series	Chris Kemp / Kathy Higgins / Jeff Lyon	9:15
WTP Overall TPA and CD Summary and Milestones Status; M-62-01; M-62-49; D-00A-01, -06, -17	Delmar Noyes / Dan McDonald	9:20
WTP Pretreatment (PT) Facility; D-00A-13, -14, -15, -16, -19	Delmar Noyes / Dan McDonald	
WTP High-Level Waste (HLW) Facility; D-00A-02, -03, -04, -21	Delmar Noyes / Dan McDonald	
WTP Low-Activity Waste (LAW) Facility; D-00A-07, -08, -09	Delmar Noyes / Dan McDonald	
WTP Analytical Laboratory (LAB); D-00A-05		
WTP Balance of Facilities (BOF); D-00A-12		

Tri-Party Agreement Office of River Protection Milestone Review
 November 21, 2013

Name	Organization
Terry Noland	MSA TPA
Kathy Knox	Knox Court Reporting
ROB PIIPPO	MSA TPA
JAMES LYNCH	DOE-ORP
Kathy Higgins	DOE-ORP
Steve Pfaff	ORP
Jeremy Johnson	ORP
Dan McDonald	Ecy
Dabrisha Smith	ORP
Stacey Simon	ODOE
NINA MENARD	ECY
JANE HEDGES	ECY
Chris King	ORP
JEFF LYON	WA DOE
JOE CAGGIANO	ECOLOGY
Kim Ballinger	DOE-RL
Suzanne Ahl	Ecology
DENNIS PAULK	ERF

ORP/Ecology TPA and CD Agreements, Issues, and Actions for November 2013

Recent Items for the TPA Administrative Record (searchable online at: <http://pdw.hanford.gov/arpir/index.cfm/advancedSearch>)

Item Description	TPA/CD Topic Milestone Tie	TPA Admin Record – EDMC File Number
October 2013 TPA Monthly Summary Report	All	1221890
October 2013 CD Monthly Summary Report	All	1221889
Meeting Minutes for Revision of RPP-9937, dated 09/04/2013	TPA Primary Document	1222112
Meeting Minutes for Revision of RPP-9937, dated 09/24/2013	TPA Primary Document	1222113
Meeting Minutes for Revision of RPP-9937, dated 10/09/2013	TPA Primary Document	1222114

Agreements:

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

Issues:

1. Ecology has a concern with WTP data being reported exclusively in the CD Monthly Summary Report as the current CD reporting process does not allot ECY early review time of the CD Monthly Summary Report. ORP and ECY have raised this concern for discussion at the Senior Management levels.
2. AY-102 Primary Tank Leak: Monitoring of the leak into the annulus of AY-102 continues. The tank is ready to be able to transfer liquids out of the primary tank or from the annulus to the primary. Robotic inspection of the leak detection pit system is scheduled in November 2013.
3. T-111 and Other Single Shell Tank Level Decreases: ORP and WRPS have determined that 19 of the 20 single shell tanks showing decreased liquid levels at the Hanford Site are not actively leaking. The one tank previously identified as leaking, T-111, appears to be stabilizing. Final evaluation documents are available at: <http://www.hanford.gov/page.cfm/SingleShellTankEvaluations>
4. Ecology TPA Project Managers expressed concerns with a line item in the ORP FY2014 budget request for planning for the direct-feed of the WTP Law Facility, and why there has been no discussion with Ecology prior to this being included in the budget request. The ORP and Ecology TPA PMs have agreed to raise this issue to their respective management for discussion/resolution.

ORP/Ecology TPA and CD Agreements, Issues, and Actions for November 2013

Actions:

Tank Farms Actions							
#	Action ID	Date Initiated	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	TF-13-09-01	09/24/13	ORP will setup a meeting with ECY (Barnes) to discuss the C-104 Retrieval Data Report (RDR).	Open.		Chris Kemp	
2	TF-13-09-02	09/24/13	ORP will send RPP-RPT-47306, Rev. 1, <i>Waste Type Analysis for Aluminum Leachability Estimates of All Non-Retrieved Hanford Tank Wastes</i> , to ECY (Barnes).	Closed.	Provided via email on 11/13/13	Billie Mauss	11/13/13
3	TF-13-06-01	06/25/13	ECY requests a meeting with ORP PMs to look at issues with the System Plan (unknowns, scheduling/timing of the milestone deliverables/decisions, etc.)	Closed.	ORP met with ECY on 08/29/13 to discuss the System Plan. TPA Chg Pckg M-62-13-02, signed on 10/25/13, extended scenario selection to 12/15/13 and framing sessions have restarted.	DaBrisha Smith / Steve Pfaff	
4	TF-13-05-04	05/16/13	ORP will set up a meeting with ECY to discuss direct feed LAW and TF support (with TF/WTP Integration POCs). ECY requests that ORP close with them on this action within the next month.	Open.	Combined with Action TF-13-02-04 which was opened on 02/21/13.	Tom Fletcher	
5	TF-13-05-03	05/16/13	ORP will set up a meeting with ECY to discuss the SSTs for chemistry effects/changes on liners based on current inspection data.	Closed.	The meeting was held at Ecology on 10/29/13	Jeremy Johnson / Billie Mauss	10/29/13
6	TF-13-05-01	05/14/13	ORP will provide two DQOs to ECY (Mike Barnes) for a Solubility Model and Tank C-112 Hard Heel Dissolution	Closed.	Provided via email on 11/13/13	Billie Mauss	11/13/13

ORP/Ecology TPA and CD Agreements, Issues, and Actions for November 2013

Tank Farms Actions							
#	Action ID	Date Initiated	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
7	TF-13-04-01	04/23/13	ECY would like to gain a better understanding of the WFD pulse jet mixing change request for implementation of DNFSB 2010-2.	Open.	ORP will share the DNFSB 2010-2 response/plan when it is finalized/transmitted.	Steve Pfaff	
8	TF-13-03-05	03/26/13	ECY would like ORP to provide a table outlining the previous DST Core Sampling done for AY/AZ/SY tanks, their sampling spec results, and any follow-up actions (i.e. chemicals added to maintain DST Acceptance criteria).	Closed.	ORP provided tables of sampling efforts via email on 11/15/13.	Billie Mauss	11/15/13
9	TF-13-03-04	03/26/13	ECY will review the draft TPA Chg Pckg for M-062-40ZZ and M-062-45ZZ (regarding work on the one-time Supplemental Treatment Technologies Report) provided by ORP and will provide any comments before the Parties agree to finalize any changes.	Open.	ORP and ECY are in discussions about a draft TPA Change Package.	Steve Pfaff	
10	TF-13-02-03	02/21/13	ECY would like to meet with ORP to discuss work on the WMA C PA and other options for M-045-61/-62. Initial talks were held on 03/14/13, 05/13/13, 05/16/13, and 06/20/13.	Open.	A meeting was held on 10/28/13 and included some discussion on M-045-82. Further meetings are being planned.	Chris Kemp	
11	TF-12-10-04	10/16/12	ECY would like to discuss C-107 and considerations for Tc-99 concerns with tank residuals and technology selection.	Open.	On hold until after C-107 RDR sampling has occurred.	Chris Kemp	
12	TF-12-09-02	09/25/12	ECY PMs would like to set up a meeting with ORP PMs to define the purpose and scope of the PMM meetings (roles, responsibilities, objectives). This meeting was held on 11/13/12.	Open.	ECY will review these results for discussion at a follow-up overall ORP/ECY Comms Improvements meeting.	Jeff Lyon	

ORP/Ecology TPA and CD Agreements, Issues, and Actions for November 2013

WTP Actions							
#	Action ID	Date Initiated	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	WTP-13-04-03	04/23/13	ORP will update ECY on a monthly basis on the path forward for the TCO vendor concerns.	Open.	On-going, status given monthly.	Jeff Bruggeman	
2	WTP-13-04-01	04/23/13	ORP will meet with ECY to discuss status on the RVP Wave I and path forward for RVP Wave II.	Open.		Gary Olsen	
3	WTP-13-01-01	01/22/13	ORP will get back to ECY on a briefing to discuss the LAB cathodic protection issue.	Closed.	This briefing was provided on 10/07/13.	Jason Young	10/07/13

FINAL

Office of River Protection
Tri-Party Agreement
Monthly Summary Report
November 2013



**Office of River Protection
Tri-Party Agreement Milestone Review
November 2013 (Monthly Summary Report/Project Earned Value Management System
reflects September 2013 information)**

Page	Topic	Leads
1	Administrative Items/Milestone Status	James Lynch/Dan McDonald/Jeff Lyon
2	System Plan; M-062-40	DaBrisha Smith/Jeff Lyon/Dan McDonald
3	Acquisition of New Facilities; M-090-00; M-047-00	Janet Diediker/Jeff Lyon/Dan McDonald
4	Supplemental Treatment and Part B Permit Applications; M-062-00, M-062-20, M-062-30, and M-062-45	Steve Pfaff/Jeff Lyon/Dan McDonald
5	242-A Evaporator Status	Ron Koll/Jeff Lyon
5	SST Integrity Assurance; M-045-91	Jeremy Johnson/ Jim Alzheimer
7	In Tank Characterization and Summary	Billie Mauss/Michael Barnes
9	Tank Operations Contract Overview	Kathy Higgins/Jeff Lyon
14	Single-Shell Tank Corrective Action; M-045-22, M-045-50 series, M-045-60 series, and M-045-92	Chris Kemp/Jeff Lyon
15	Single-Shell Retrieval and Closure Program Tri-Party Agreement (TPA) Milestones Status; M-045-00 series	Chris Kemp/Jeff Lyon
17	Tank Waste Retrieval Work Plan Status	Chris Kemp/Jeff Lyon
18	Tank in TPA Appendix H, Status Tank Retrievals with Individual Milestones	Chris Kemp/Jeff Lyon
CD	Waste Treatment and Immobilization Plant (WTP) Overall TPA Summary and Milestone Status; *see the August 2013 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

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2013				
M-045-20	Submit Interim Measures Investigation Work Plan and TPA Chg Pckgs for M-045-22 Target Dates	12/31/2012	12/06/2012	Completed
M-090-11	Comp. Neg's No More Than 2 Canister Storage Fac. Const. Int. M/S	12/31/2012	11/19/2012	Completed
M-062-01Z	Submit Semi-Annual Project Compliance Report	01/31/2013	1/31/2013	Completed
M-045-21	Submit Sampling and Analysis Plan for 241-TX Tank Farm	03/31/2013	3/11/2013	Completed
M-045-91D-T01	Provide Report on the Concrete Dome Samples from Tank C-107 Plug	05/31/2013	5/21/2013	Completed
M-045-91F-T03	Provide Report on Testing for Ionic Conductivity of SSTs	05/31/2013	5/02/2012	Completed
M-045-56I	Ecology And DOE Agree, At A Minimum, To Meet Yearly (By July)	07/31/2013	06/12/2013	Completed
M-062-01AA	Submit Semi-Annual TPA Project Compliance Report	07/31/2013	07/31/2013	Completed
M-045-91E	Provide SST Farms Dome Deflection Surveys Every Two Years	09/30/2013	09/17/2013	Completed
Fiscal Year 2014				
M-062-40C	Select a Minimum of Three Scenario's for the System Plan	12/15/2013		On Schedule
M-045-86C	Submit Retrieval Data Report to Ecology for C-104	03/21/2014		On Schedule
M-045-22-T02	Submit Results of Vadose Zone Characterization of 241-U to Ecology	04/30/2014		On Schedule
M-045-86F	Submit Retrieval Data Report to Ecology for C-108	05/01/2014		On Schedule
M-045-86G	Submit Retrieval Data Report to Ecology for C-109	06/04/2014		On Schedule
M-045-22-T03	Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology	07/31/2014		On Schedule
M-045-56J	Ecology And DOE Agree, At A Minimum, To Meet Yearly (By July)	07/31/2014		On Schedule
M-045-91B-T01	Provide Ecology report on the Concrete Core from Tank A-106 or alt	09/30/2014		On Schedule
M-045-22-T01	Submit Results of Vadose Zone Characterization of 241-TX to Ecology	09/30/2014		On Schedule
M-047-07	CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to Ecology	09/30/2014		On Schedule
M-090-13	CD-1 for Interim Hanford Storage Project and CR for CD-2 to ECY	09/30/2014		On Schedule
M-045-22	Review M-045-22-T03 Report and Determine Path Forward	09/30/2014		On Schedule
Fiscal Year 2015				
M-062-40D	Submit System Plan	10/31/2014		On Schedule
M-062-40ZZ	Submit One Time Tank Waste Supp Treatment Technologies Report	10/31/2014		On Schedule
M-045-91G-T03	Provide AOR Final Doc. for SSTs on 1,000,000 Gallon Tanks	10/31/2014		On Schedule
M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	12/26/2014		On Schedule
M-045-61	Phase 2 RCRA Facility Investigation/Corrective Measures Study	12/31/2014		To Be Missed

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2015 Continued				
M-045-91G-T04	Provide AOR Final Doc. for SSTs on 55,000 Gallon Tanks	01/30/2015		On Schedule
M-045-91F-T02	Provide Report of Liner Failures for SSTs	03/31/2015		On Schedule
M-062-45-T01	Comp. Neg's 6-Mo After Last Issuance of System Plan	04/30/2015		On Schedule
M-062-45-ZZ	Negotiate a One Time Supplemental Treatment Selection	04/30/2015		On Schedule
M-062-45-ZZ-A	Convert M-062-31-T01 Thru M-062-34-T01 to Interim Milestones	04/30/2015		On Schedule
M-045-91F	Provide Summary Conclusions Report on Leak Integrity	06/30/2015		On Schedule
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA C	06/30/2015		To Be Missed
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
 CR = condition report.
 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: On Schedule. See discussion "Past Accomplishments" below.

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:

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.

Significant Planned Actions in the Next 6 Months:

On October 9, 2013, notification was provided to the core team members (ORP, Ecology, and Washington River Protection Solutions LLC [WRPS]) stating System Plan 7 framing sessions will resume the week of October 15, 2013. The System Plan 7 core team members will continue discussions and scenario selections.

Issues:

None.

Acquisition of New Facilities

M-090-13, Submit CD-1 for Interim Hanford Storage Project and Tri-Party Agreement (TPA) Change Request for CD-2 to Ecology, Due: September 30, 2014, 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 CR for CD-2 to Ecology, Due September 30, 2014, 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:

On November 19, 2012, Ecology and ORP signed TPA Change Control Forms M-47-12-02 and M-90-12-02 establishing M-047-07 and M-090-13, respectively. ORP letter 12-ECD-0225 notified Ecology of the completion of milestones M-047-06 and M-090-11.

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: On schedule.

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

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

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

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

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

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

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

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

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

Significant Past Accomplishments:

None.

Significant Planned Actions in the Next 6 Months:

None.

Issues:

ORP and Ecology are in discussions on a TPA change package that would delete the requirement for the one-time supplemental treatment technologies report (M-062-40ZZ) and modify the requirements for negotiation of supplemental treatment milestones (M-062-45, item #3).

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

242-A Campaign Strategy:

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

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY 2010	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and completing in early October 2010. Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY 2010	10-02	AW-106	AW-106	
FY 2011	NA	NA	NA	No campaign conducted in FY 2011 due to ongoing 242-A and tank farm facility life extension and <i>American Recovery and Reinvestment Act</i> funded upgrades.
FY 2012	NA	NA	NA	No campaign conducted in FY 2012 due to ongoing 242-A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis.
FY 2013	NA	NA	NA	No campaigns to be conducted in FY 2013 due to ongoing 242-A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis.
FY 2014	13-01	AP-107	AP-107	Estimated start January 2014. Requires two passes to achieve waste volume reduction.
FY 2014	14-01	AW-106	AP-107	Estimated start late March 2014.
FY 2014	14-02	AZ-102	AP-103	Estimated start June 2014.
FY 2015	15-01	AW-106	AP-103	Estimated start October 2014.
FY 2015	15-02	AZ-102	AP-103	Estimated start March 2015.

FY = fiscal year.

NA = not applicable.

SST Integrity Assurance

M-045-91E, Provide to Ecology a compilation of the single-shell tank (SST) farms dome deflection surveys every two years, beginning September 30, 2013, Due: September 30, 2013, Status: Completed. Transmitted to Ecology via ORP Letter 13-TF-0066 on September 17, 2013.

M-045-91G-T03, Provide to Ecology the structural analyses of record final documentation for SSTs for 1,000,000 gallon tanks (A, AX, and SX Farms), Due: October 31, 2014, Status: On schedule.

M-045-91F-T04, Provide to Ecology, as a Hanford Federal Facility Agreement and Consent Order secondary document, a report on the 100-series SSTs, which have been or will be identified as having leaked in RPP-32681, Revision 0, Due: December 26, 2014, Status: On schedule.

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

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

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

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

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

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

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

Significant Past Accomplishments:

On August 23, 2013, WRPS transmitted *Dome Survey Report for Hanford Single-Shell Tanks*, RPP-RPT-55202, to ORP. ORP reviewed this report and delivered RPP-RPT-55202 to Ecology on September 17, 2013, via ORP Letter 13-TF-0066, completing TPA Milestone M-045-91E.

Significant Planned Actions in the Next 6 Months:

None.

Issues:

None.

In Tank Characterization and Summary

For the period from October 1 through October 31, 2013:

Accomplishments:

- Completed RPP-PLAN-56090, Rev. 0, *Grab Sampling and Analysis Plan for the 241-AZ-102 Leak-Detection Pit*.
- Completed RPP-55762, Rev. 0, *Integrated Solubility Model (ISM) Data Quality Objectives*.
- Completed RPP-54991, Rev. 0, *Multi-Media Sampling Program Data Quality Objectives*.
- Completed RPP-54919, Rev. 0, *Cone Penetrometer Data Quality Objectives*.
- RPP-RPT-56166, Rev. 0, *Final Report for Tank 241-AY-102A Annulus Leak-Detection Pit Liquid Grab Samples, August 2013*, was released on October 29, 2013.
- RPP-RPT-56007, Rev. 0, *Final Report for Tank 241-AY-102A Annulus Leak-Detection Pit Liquid Grab Samples, August 2013* was released on October 7, 2013.
- RPP-RPT-56012, Rev. 1, *Final Report for Analysis of AZ-301 Catch Tank Samples Collected in July 2013*, was released on October 3, 2013.
- Completed sampling of tank C-110 for Closure using fold track operations to push samples to a clam shell sampler. Four samples were collected on October 30, 2013.

Planned Action within the next 6 Months:

Tank sampling

- Tank 241-AZ-102 Leak Detector Pit sampling is currently scheduled for December 2013.
- Tank 241-AY-102 Leak Detector Pit sampling is currently scheduled for November and January 2013.
- Tank 241-C-112 grab sampling during hard heel dissolution is currently scheduled for November/December 2013.
- Tank 241-C-107 Off-Riser Sampling System/Drag Sampler sampling is currently scheduled for March 2014.
- Tank 241-AN-106 grab sampling for chemistry control is currently scheduled for January 2013.
- Tank 241-SY-102 core sampling for chemistry control and strategic planning is currently scheduled for April 2014.

Best-Basis Inventory Updates

The following tanks have been identified for updates in FY 2014 Quarter 1:

- 241-AN-101
- 241-AN-102
- 241-AN-106
- 241-AP-104
- 241-AP-107
- 241-AY-101
- 241-AW-102
- 241-C-109
- 241-C-101
- 241-C-107
- 241-C-110

The best-basis inventory updates will be released in January 2014.

Data Quality Objectives

- A revision to the tank farms chemistry control program data quality objective is due to be released in October/November 2013.
- A data quality objective on process sampling during caustic dissolution of tank 241-C-111 is due to be released in November 2013.

Issues:

None.

TANK OPERATIONS CONTRACT OVERVIEW

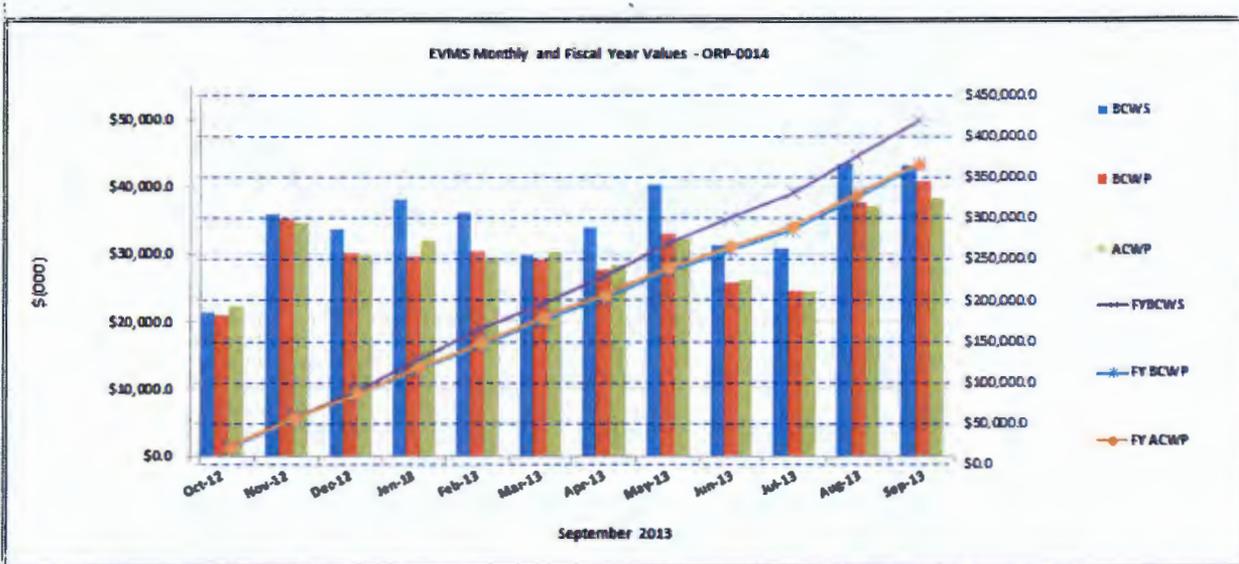
Project Performance

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

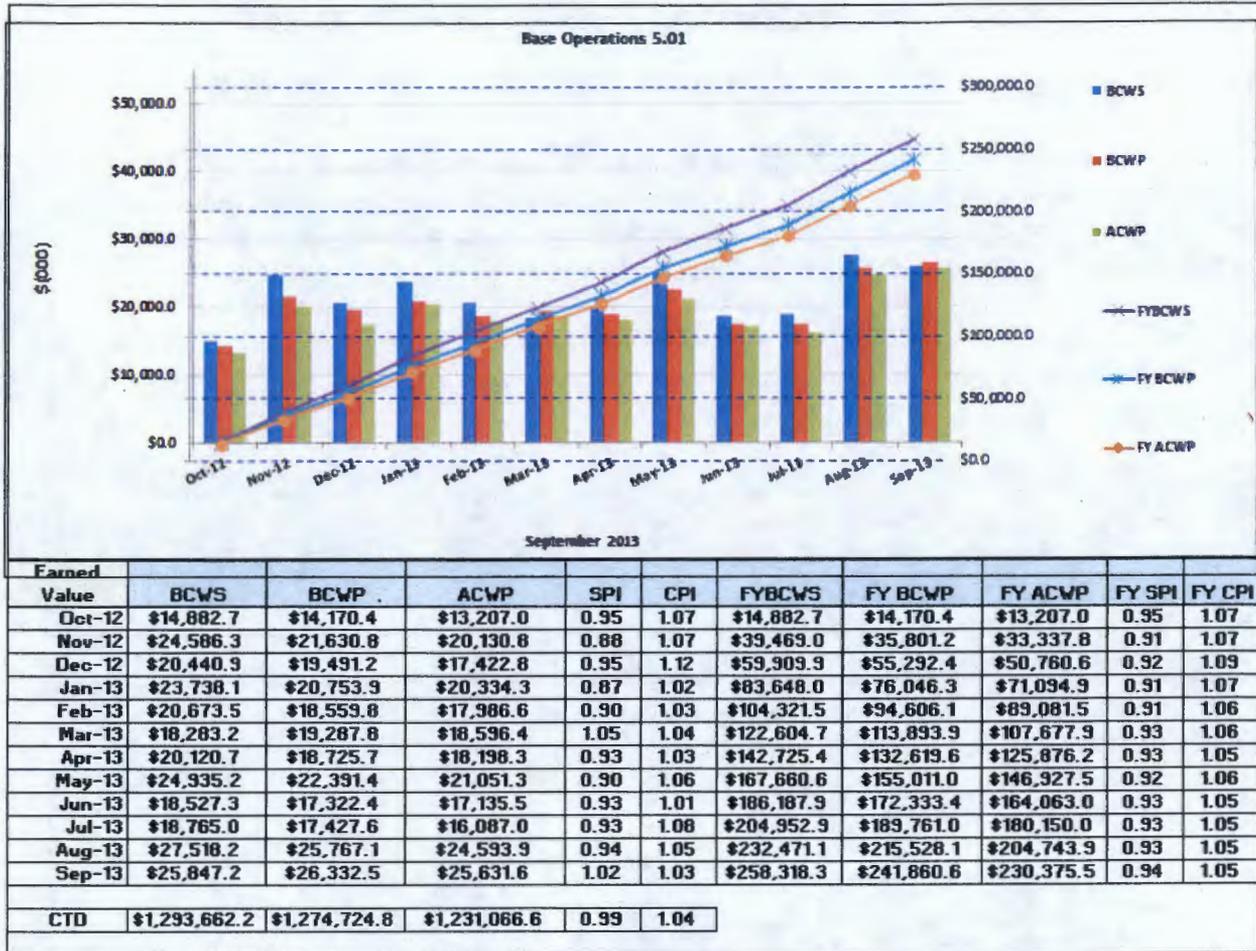
As of September 2013, WRPS has worked 138 days without a lost time workday injury and 55 days since the last recordable case. There were no days away, restricted, or transferred cases and one recordable case in September.

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	43,280.4	40,900.9	38,363.4	(2,379.5)	2,537.5	0.95	1.07			
FYTD	419,011.2	365,294.3	366,598.2	(53,716.9)	(1,303.9)	0.87	1.00	419,011.2	366,598.2	52,413.0
CTD	2,023,111.2	1,964,170.5	1,891,743.8	(58,940.7)	72,426.7	0.97	1.04	3,276,035.4	3,200,610.9	75,424.5

Red shaded cells indicates a SPI/CPI less than .90;
 Green shaded cells indicate a SPI/CPI between .90 and .99 and
 Blue shaded indicates a SPI/CPI greater than or equal to 1.0



Earned Value	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-12	\$21,350.5	\$20,911.7	\$22,382.9	0.98	0.93	\$21,350.5	\$20,911.7	\$22,382.9	0.98	0.93
Nov-12	\$35,910.8	\$35,319.2	\$34,775.1	0.98	1.02	\$57,261.3	\$56,230.9	\$57,158.0	0.98	0.98
Dec-12	\$33,795.4	\$30,044.9	\$29,940.1	0.89	1.00	\$91,056.7	\$86,275.8	\$87,098.1	0.95	0.99
Jan-13	\$38,179.6	\$29,766.1	\$32,202.8	0.78	0.92	\$129,236.3	\$116,041.9	\$119,300.9	0.90	0.97
Feb-13	\$36,167.5	\$30,290.9	\$29,773.7	0.84	1.02	\$165,403.8	\$146,332.8	\$149,074.6	0.88	0.98
Mar-13	\$30,026.2	\$29,261.1	\$30,306.9	0.97	0.97	\$195,430.0	\$175,593.9	\$179,381.5	0.90	0.98
Apr-13	\$33,933.7	\$27,671.7	\$28,393.7	0.82	0.97	\$229,363.7	\$203,265.6	\$207,775.2	0.89	0.98
May-13	\$40,387.8	\$33,112.9	\$32,460.5	0.82	1.02	\$269,751.5	\$236,378.5	\$240,235.7	0.88	0.98
Jun-13	\$31,454.5	\$25,677.6	\$26,212.6	0.82	0.98	\$301,206.0	\$262,056.1	\$266,448.3	0.87	0.98
Jul-13	\$30,918.3	\$24,548.4	\$24,555.7	0.79	1.00	\$332,124.3	\$286,604.5	\$291,004.0	0.86	0.98
Aug-13	\$43,606.5	\$37,788.8	\$37,230.7	0.87	1.01	\$375,730.8	\$324,393.3	\$328,234.7	0.86	0.99
Sep-13	\$43,280.4	\$40,900.9	\$38,363.4	0.95	1.07	\$419,011.2	\$365,294.2	\$366,598.1	0.87	1.00
CTD	\$2,023,111.2	\$1,964,170.5	\$1,891,743.8	0.97	1.04					



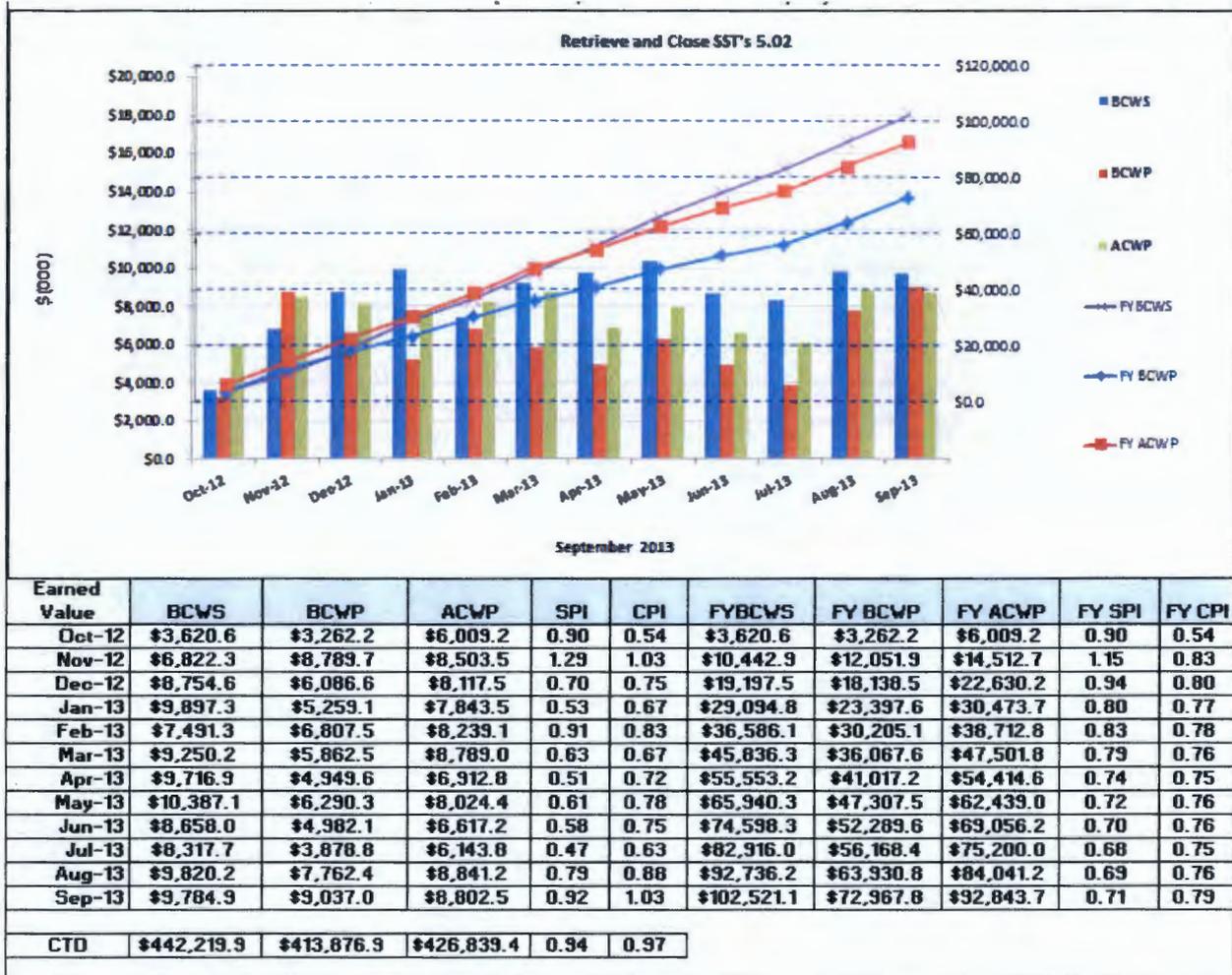
Base Operations and Tank Farm Projects

The current month favorable schedule variance of \$485K is primarily due to:

- Acceleration of the Enterprise Asset Management software that will replace the current CHAMPs software
- Schedule recovery of workscope associated with AW-105 corrosion probe fabrication and AY-102 Corrosion Probe mobilization
- Recovery of past due workscope associated with simulant valve testing.

The current month favorable cost variance of \$700.9K is primarily due to the following:

- AW-105 Corrosion Probe Fabrication/Testing/Install realized subcontractor cost savings of associated with fabrication, testing, installation, and startup operations of 241-AW-105 retractable corrosion monitoring probe
- AZ Team Corrective and Preventive Maintenance resources being reassigned to support the Double-Shell Tank Near-Term Extent of Condition.



Retrieval and Close Single-Shell Tanks

Schedule Variance of (\$747.8K):

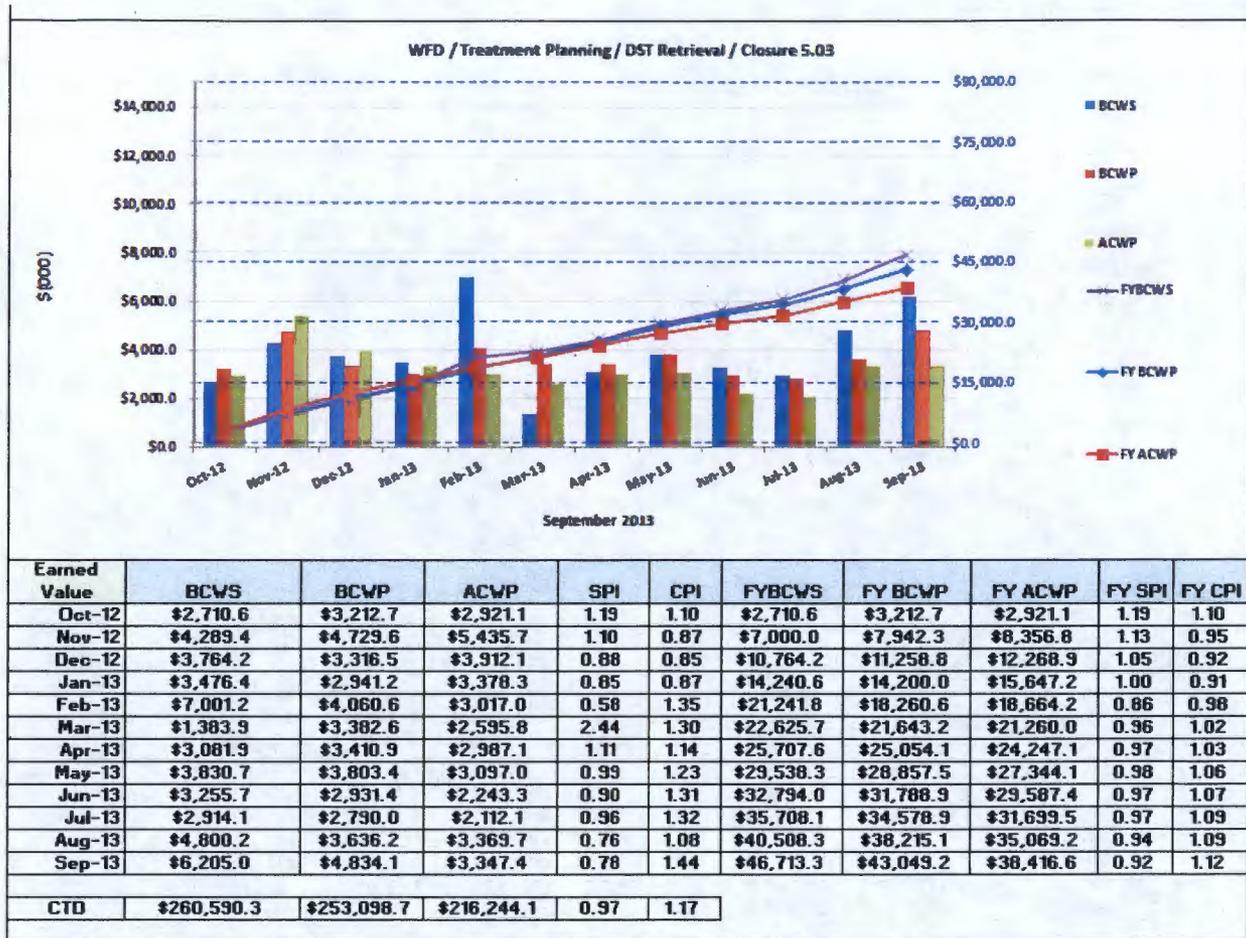
The unfavorable schedule variance is primarily due to:

- Not performing retrieval of tank C-102 as planned due to ongoing efforts to resolve the deep sludge gas generation issue
- Acceleration of post retrieval sampling and analysis of tank C-104
- C-105 Mobile Arm Retrieval System-Vacuum startup and retrieval delays caused by the C-101 event
- C-111 and C-112 partial design and construction delays due to a change in strategy.

Cost Variance of \$234.6K:

The favorable cost variance is primarily due to:

- The tools and equipment project realizing less subcontract costs in support of the completion of the Mobile Arm Retrieval System 42-inch riser feasibility study
- Efficiencies in shipping the hoses for disposal.



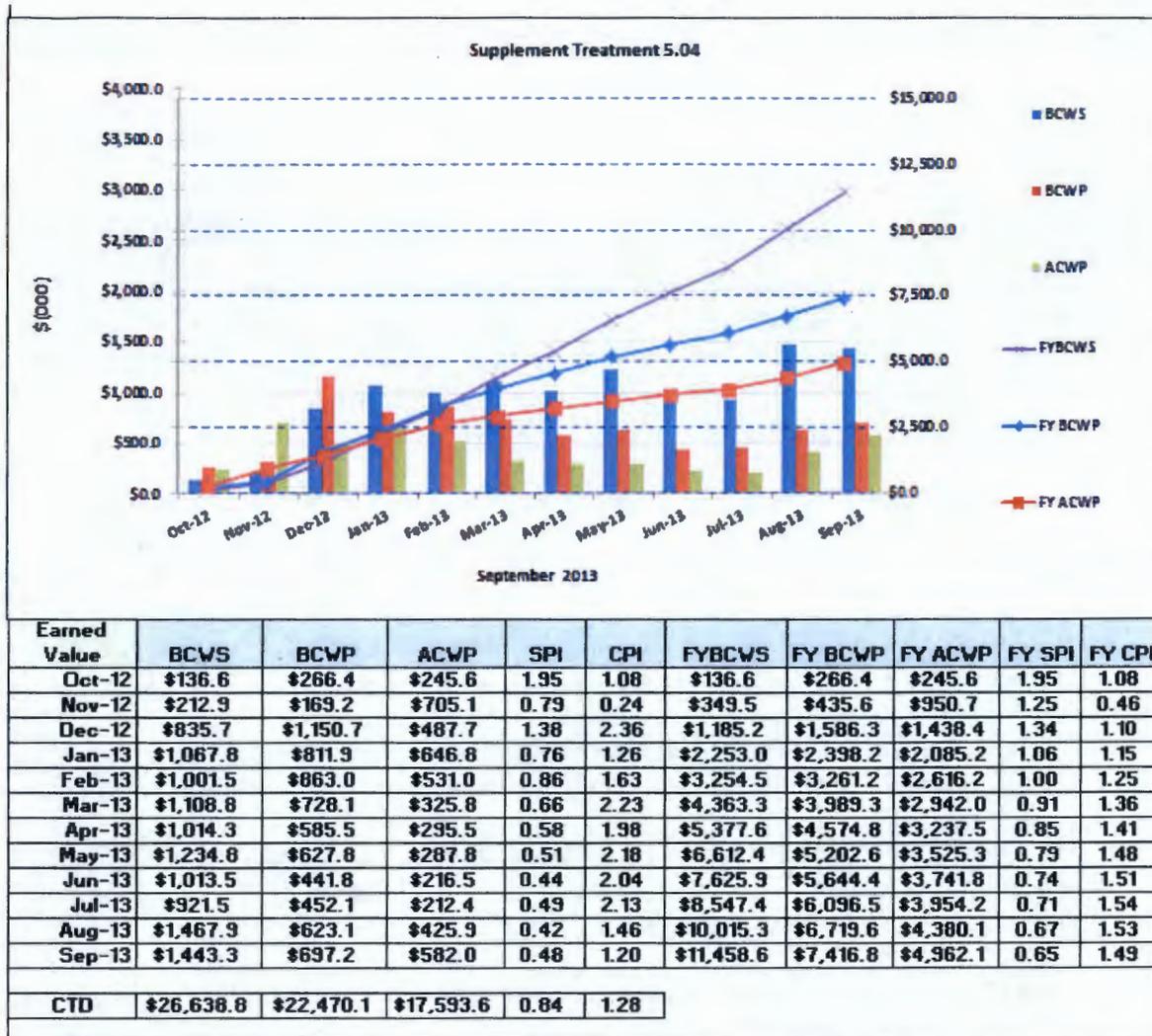
Waste Feed Delivery/Treatment/Double-Shell Tank Retrieval Closure

The current month unfavorable schedule variance of **(\$1,371)** is due to:

- AY/AZ ventilation system upgrade scope being deferred to FY 2014.

The current month favorable cost variance of \$1,487K is due to:

- Efficiencies realized due to the Development of New Flammable Gas Program work package, which utilization fewer full-time equivalents than planned
- Support for the review of the WTP HLW Facility design and operability of specified systems complete on schedule and under cost.



Supplemental Treatment

The current month unfavorable schedule variance of **(\$746K)** is due to one-time report activities. As a result of sequestration, one time report activities were ramped down for the remainder of FY 2013. Work supporting these activities was stopped, as of the current reporting period, and minimal progress was reported for performance of close-out activities.

The current month favorable cost variance of \$115K is within the reporting threshold.

Work Breakdown Structure 5.2 Retrieve and Close Single-Shell Tanks

M-045-22, Review M-045-22-T03 Report and Determine Path Forward, Due: September 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: On schedule. This ORP/Ecology decision point will determine whether to continue with soil desiccation/contaminant removal testing and other interim measures, and if the remaining work in milestone M-045-92 should be modified. ORP submitted TPA change package M-45-12-05 adding dates for M-045-22 and its targets with the revised work plan via letter 13-TF-0014, *The U.S. Department of Energy, Office of River Protection (ORP) submittal of Revised 200 West Area Tank Farms Interim Measures Investigation Work Plan in Completion of Hanford Federal Facilities Agreement and Consent Order (HFFACO) Milestone M-045-20*. Ecology approved the TPA change package on April 1, 2013.

M-045-22-T01, Submit Results of Vadose Zone Characterization of 241-TX to Ecology, Due: September 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: On schedule.

M-045-22-T02, Submit Results of Vadose Zone Characterization of 241-U to Ecology, Due: April 30, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: On schedule.

M-045-22-T03, Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology, Due: July 31, 2014, based on M-045-20 TPA Change Package M-45-12-05, Status: On schedule.

M-045-56I, Complete Implementation of Agreed to Interim Measures, Due: July 31, 2013, Status: Completed June 12, 2013. The annual meeting was held on June 12, 2013; meeting notes have been entered into the TPA 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 CMS report, milestone M-45-58, and implementation of other interim corrective measures), Due: To be determined, Status: On schedule.

M-045-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RFI/CMS Report for WMA C, Due: December 31, 2014, Status: To be missed. Please see issues.

M-045-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Study Implementation Plan for WMA C, Due: June 30, 2015, Status: To be missed. Please see issues.

M-045-92, DOE and Ecology will establish selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due: September 30, 2017, Status: On schedule. This milestone date has been modified according to M-45-12-04 and the decision to move forward with construction/design of additional barriers dependent on discussions per M-045-22.

M-045-92N, Construct Barriers 1 and 2 in 241-SX Farm, Due: October 31, 2015, Status: On schedule. The decision to move forward with construction/design of additional barriers is dependent on discussions per M-045-22.

M-045-92O, Submit a Final Design and Monitoring Plan for Interim Barrier 3, Due: June 30, 2015, Status: On schedule. The decision to move forward with construction/design of additional barriers is dependent on discussions per M-045-22.

Significant Past Accomplishments:

- Automated data collection systems for T-Farm and TY-Farm interim barrier monitoring continue gathering data.
- The pore water extraction test south of SX-Farm under the M-045-20 work plan, was initiated.
- Collection of resistivity data near the C-200 tanks has been completed. Analysis of the data is underway.
- Data collection in U-Farm for electrical resistivity characterization was completed. Data analysis and reporting will be completed in FY 2014.
- Direct-push field work in TX-Farm continues under the M-045-20 work plan and M-045-21 sampling and analysis plan.

Significant Planned Actions in the Next 6 Months:

- Complete direct-push field work in TX-Farm under the M-045-20 work plan.
- Complete analysis and reporting of the electrical resistivity data collected in U-Farm under the M-045-20 work plan.
- Complete analysis and reporting of electrical resistivity data collected near the C-200 tanks per the WMA-C Phase 2 Resource Conservation and Recovery Act Field Investigation/Corrective Measures Study Work Plan.
- Begin documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act Field Investigation Report.
- Complete the SX-Farm pore water extraction proof of principle test under the M-045-20 work plan.

SST Retrieval and Closure Program

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

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

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

M-045-85, Complete negotiations of TPA interim MS 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 Single-Shell Tank 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: The Retrieval Data Report for C-104 is due March 21, 2014
- M-045-86F: The Retrieval Data Report for C-108 is due May 1, 2014
- M-045-86G: The Retrieval Data Report for C-109 is due June 4, 2014.

Significant Past Accomplishments:

- Completed initial draft of the C-108 Retrieval Data Report
- Completed post-retrieval spectral gamma logging of drywells near tank C-108 in support of the M-045-86 retrieval data report
- Completed post-retrieval sampling analysis and reporting of results for tank C-104 in support of the M-045-86 retrieval data report
- Completed post-retrieval sampling, analysis, and reporting of tank C-109 in support of the M-045-86 retrieval data report
- See discussions above and related discussions in Consent Decree report
- Initiate numeric modeling for the WMA-C performance assessment
- Completed post-retrieval logging of the drywells near C-104 and C-109 to support the Retrieval Data Reports
- A Retrieval Data Report for tank C-104 has been drafted.

Significant Planned Activities in the Next 6 Months:

- Develop a retrieval data report for tank C-104
- Develop a retrieval data report for C-109
- Issue a retrieval data report for C-108
- See discussions above and related discussions in Consent Decree report
- Hold a kick-off meeting with regulators/stakeholders to discuss the activities underway for the WMA-C performance assessment.

Issues:

The WMA-C performance assessment (PA) was not funded at the beginning of FY 2013. ORP had reported previously that the WMA-C PA would need to be funded by March 31, 2013, in order to maintain the milestone schedule. Funding of the WMA-C PA was provided in FY 2013, TPA milestones M-045-61, M-045-62, and M-045-82 are still to be missed. ORP and Ecology met on October 28, 2013, to begin development of an integrated path forward that addresses all the deliverables associated with milestones M-045-61, M-045-62, and M-045-82. These discussions will continue.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-102	RPP-22393, Rev. 6A	In Process	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-104	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 7	Complete	MARS-V	MARS-V-High Pressure Water	-
C-107	RPP-22393, Rev. 6A	Complete	MARS-S	MARS-S -High Pressure Water	-
C-108	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 2	Complete	Modified Sluicing	Mechanical Waste Conditioning	High Pressure Water
C-111	RPP-37739, Rev. 1	In Process	Modified Sluicing	High pressure water with ERSS	Chemical Dissolution with ERSS
C-112	RPP-22393, Rev. 6A	In Process	Modified Sluicing	Chemical Dissolution	-

ERSS = Extended Reach Sluicing System.

MARS = Mobile Arm Retrieval System.

S = sluicing.

TWRWP = Tank Waste Retrieval Work Plan.

V = vacuum.

Significant Accomplishments:

None.

Significant Planned Activities in the Next 6 Months:

Revise TWRWP RPP-22393 from 6A to 7.

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 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 to 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 M-45-11-04 change package.

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 A-103 tank and due date of September 30, 2022, per M-45-11-04 change package.

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
November 2013**

Office of River Protection

Consent Decree 08-5085-FVS
Monthly Summary ReportNovember 2013 (Monthly Summary Report/Project Earned Value Management System
reflects September 2013 information)

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

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

DOE = U.S. Department of Energy.

Fac. = facility.

HLW = high-level waste.

LAB = Analytical Laboratory.

PT = pretreatment.

SST = single-shell tank.

WMA-C = C-Farm Waste Management Area.

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

Consent Decree Reports/Reviews

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

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

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

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

Single-Shell Tank Retrieval Program

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

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

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

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

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

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

Significant Past Accomplishments:

- Completed C-101 retrieval with high pressure water and modified sluicing retrieval activities. Reached the limits of technology for the second technology (high pressure water).
- Continued installation of equipment for the Mobile Arm Retrieval System-Vacuum (MARS-V) at C-105, installation of the portable instrument valve box, and the hose-in-hose transfer line systems continues.
- Initiated removal of failed C-107 slurry pump.
- Completed retrieval of C-110 using the foldtrack and modified sluicing systems.
- Continued modification and installation of equipment for C-112 hard heel removal, completed installation of new Extended Reach Sluicing System sluicer, flow meter valve box, and tie in to the existing splitter valve box. Verification of the system leak check for operation was completed.

Significant Planned Activities in the Next 6 Months:

- Complete installation of the MARS-V in C-105
- Complete replacement of the C-107 slurry pump
- Submit retrieval data report for C-108 to Ecology
- Begin start-up of hard heel retrieval in C-112 using caustic dissolution.

Issues:

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

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-102	RPP-22393, Rev. 6A	In Process	Modified Sluicing with ERSS	High-Pressure Water with ERSS	-
C-104	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 7	Complete	MARS-V	MARS-V-High Pressure Water	-
C-107	RPP-22393, Rev. 6A	Complete	MARS-S	MARS-S-High Pressure Water	-
C-108	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Dissolution, retrieval complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 2	Complete	Modified Sluicing	Mechanical Waste Conditioning	High Pressure Water
C-111	RPP-37739, Rev. 1	In Process	Modified Sluicing	High pressure water with ERSS	Chemical Dissolution with ERSS
C-112	RPP-22393, Rev. 6A	In Process	Modified Sluicing	Chemical Dissolution	-

ERSS = Extended Reach Sluicing System.
MARS = Mobile Arm Retrieval System.
S = sluicing.
TWRWP = Tank Waste Retrieval Work Plan.
V = vacuum.

Significant Past Accomplishments:

None.

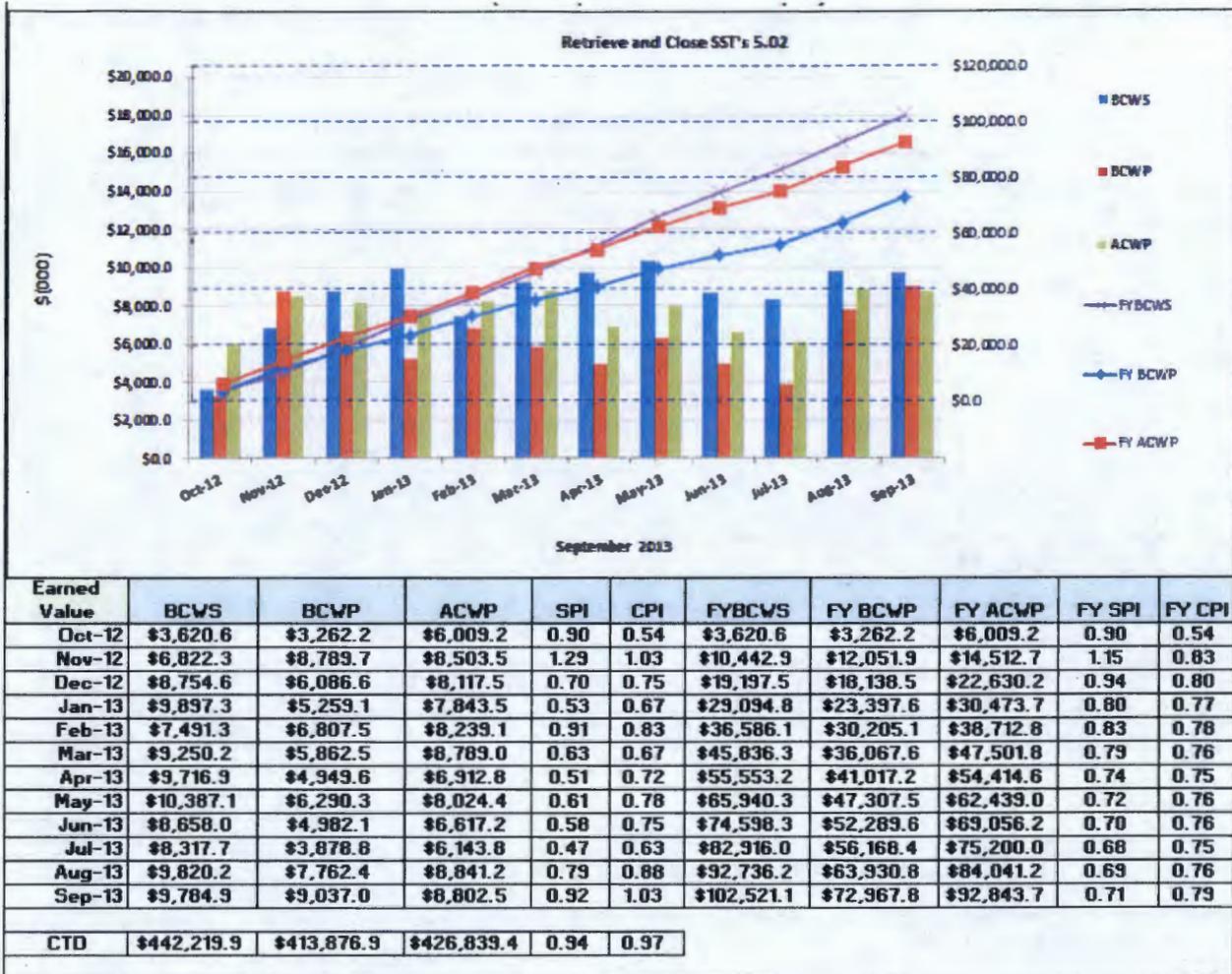
Significant Planned Activities in the Next 6 Months:

Revise Tank Waste Retrieval Work Plan RPP-22393 from 6A to 7.

Issues:

None.

SST Retrieval Monthly and Fiscal Year Earned Value Management System Data



Retrieval and Close Single-Shell Tanks

Schedule Variance of (\$747.8K):

The unfavorable schedule variance is primarily due to:

- Not performing retrieval of tank C-102 as planned due to ongoing efforts to resolve the deep sludge gas generation issue
- Acceleration of post retrieval sampling and analysis of tank C-104
- C-105 MARS-V startup and retrieval delays caused by the C-101 event
- C-111 and C-112 partial design and construction delays due to a change in strategy.

Cost Variance of \$234.6K:

The favorable cost variance is primarily due to:

- The tools and equipment project realizing less subcontract costs in support of the completion of the MARS 42-inch riser feasibility study
- Efficiencies in shipping the hoses for disposal.

Waste Treatment and Immobilization Plant Project

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

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 2,206 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 616 craft, 368 nonmanual, and 129 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

As of September 2013, the combined Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) (collectively LBL) were 65-percent complete, design and engineering was 78-percent complete, procurement was 84-percent complete, construction was 74-percent complete, and startup and commissioning was 11-percent complete.

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

In September 2013, the cumulative to-date WTP Project schedule variance was a negative \$47.8 million, and the cumulative to-date WTP Project cost variance was a negative \$19.1 million. The major contribution to the cumulative to-date cost and schedule variance is based on the progress of the LBL replan and PT/HLW 2-Year Interim Work Plan.

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

Significant Past Accomplishments:

- Received risk-informed analysis plan for resolving nuclear safety issues for hydrogen in piping and ancillary vessels (HPAV), hydrogen events in vessels, and criticality in the PT Facility (PT)
- HLW design review has completed four systems (HLW canister decontamination handling system, radioactive solid waste handling, pulse jet ventilation system, HLW melter handling system) out of 14 systems targeted for review (HLW)
- Pressure tested 1,100 linear feet of instrument service air system, and pulled 9,060 linear feet of cable in the Glass Former Facility (BOF)

- Pulled 14,080 linear feet of cable and completed 1,027 cable terminations (LAB).

Significant Planned Actions in the Next 6 Months:

- Assess the resumption of design, procurement, and construction for HLW (HLW)
- Install radioactive liquid waste disposal (RLD) Vessel 8T at the test platform (PT/HLW)
- Complete reliability validation process reviews (HLW)
- Develop vessel-specific particle characteristics report for erosion/corrosion (PT/HLW)
- Complete installation of melter power supplies (LAW)
- Complete installation of ASX System (LAW)
- Complete construction of the Glass Former Storage Facility (BOF)
- Complete construction of WTP Chiller Compressor Plant (BOF)
- Complete repairs to RLD vessels (LAB).

Issues:

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

** In October 2013, DOE notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet milestone A-6.

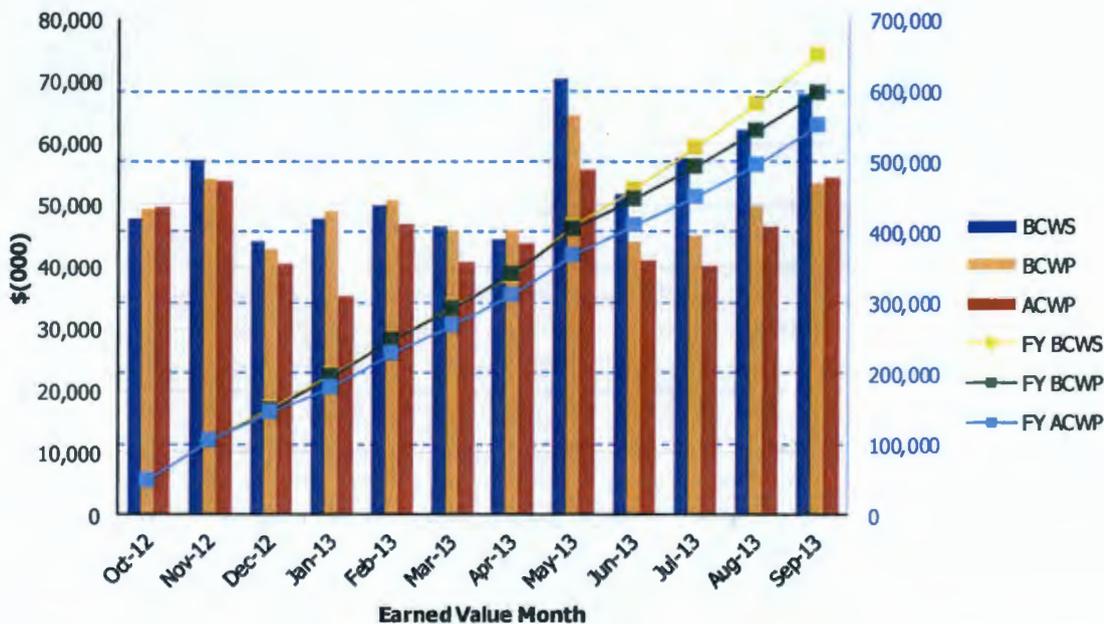
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

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**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 2012	\$47,840	\$49,300	\$49,742	1.03	0.99	\$47,840	\$49,300	\$49,742	1.03	0.99
Nov 2012	\$57,411	\$54,398	\$53,916	0.95	1.01	\$105,251	\$103,698	\$103,658	0.99	1.00
Dec 2012	\$44,336	\$43,083	\$40,457	0.97	1.06	\$149,587	\$146,781	\$144,115	0.98	1.02
Jan 2013	\$47,780	\$49,037	\$35,389	1.03	1.39	\$197,367	\$195,818	\$179,504	0.99	1.09
Feb 2013	\$49,984	\$50,929	\$47,008	1.02	1.08	\$247,351	\$246,747	\$226,512	1.00	1.09
Mar 2013	\$46,568	\$45,897	\$40,819	0.99	1.12	\$293,919	\$292,644	\$267,331	1.00	1.09
Apr 2013	\$44,537	\$46,052	\$43,887	1.03	1.05	\$338,456	\$338,696	\$311,218	1.00	1.09
May 2013	\$70,575	\$64,750	\$55,933	0.92	1.16	\$409,031	\$403,446	\$367,151	0.99	1.10
Jun 2013	\$51,759	\$44,327	\$41,082	0.86	1.08	\$460,790	\$447,773	\$408,233	0.97	1.10
Jul 2013	\$57,703	\$45,164	\$40,078	0.78	1.13	\$518,493	\$492,937	\$448,311	0.95	1.10
Aug 2013	\$62,183	\$50,011	\$46,647	0.80	1.07	\$580,676	\$542,948	\$494,958	0.94	1.10
Sep 2013	\$67,953	\$53,661	\$54,593	0.79	0.98	\$648,629	\$596,609	\$549,551	0.92	1.09
PTD	\$7,789,239	\$7,741,476	\$7,760,610	0.99	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 *

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

Technical review teams continue to evaluate open technical issues. Construction of the mixing test platform continues in preparation for full-scale testing. Engineering specifications for full-scale testing have been prepared and are undergoing a multidiscipline review. National laboratories are developing a test plan, simulant, and instrumentation requirements. Phase 1 testing for erosion/abrasivity is scheduled to be completed by the end of calendar year 2013. BNI is developing probabilistic risk assessment plans and project execution plans to resolve technical issues regarding criticality, hydrogen in vessels, and HPAV. The plans are undergoing comment resolution.

BNI is evaluating the impact of a proposed change to the natural phenomenon hazards design criteria that would double the ashfall criteria. This design criteria revision has the potential to impact facility design and heating, ventilating, and air-conditioning (HVAC) system design.

Significant Past Accomplishments:

- Continued construction at Full-Scale Test Facility with installation of compressors and receivers
- Completed alternate seismic input for HOP-903/904 structural evaluation
- Received risk-informed analysis plan for resolving nuclear safety issues for HPAV, hydrogen events in vessels, and criticality in the PT Facility.

Significant Planned Actions in the Next 6 Months:

- BNI to conduct an assessment of PT Facility impacts resulting from stopping construction
- Install RLD Vessel 8T into position in test platform
- Update basis of design for safety classification regarding seismic analysis of vessels
- Issue sampling action plan to determine sampling accuracy
- Define pulse-jet mixing control strategy
- Award sensitivity tests for erosion
- Issue execution plan to resolve technical issues regarding criticality, hydrogen in vessels, and HPAV
- Perform independent review of the potential for criticality in vessels
- Review flammable gas generation, retention, and release from sediments in vessels
- Develop decision process for vessel structural modifications
- Develop vessel-specific particle characteristics report for erosion/corrosion
- Issue engineering specification for vessel testing
- Issue draft procedure for conducting failure mode, effects, and criticality analysis (FMECA).

Issues:

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

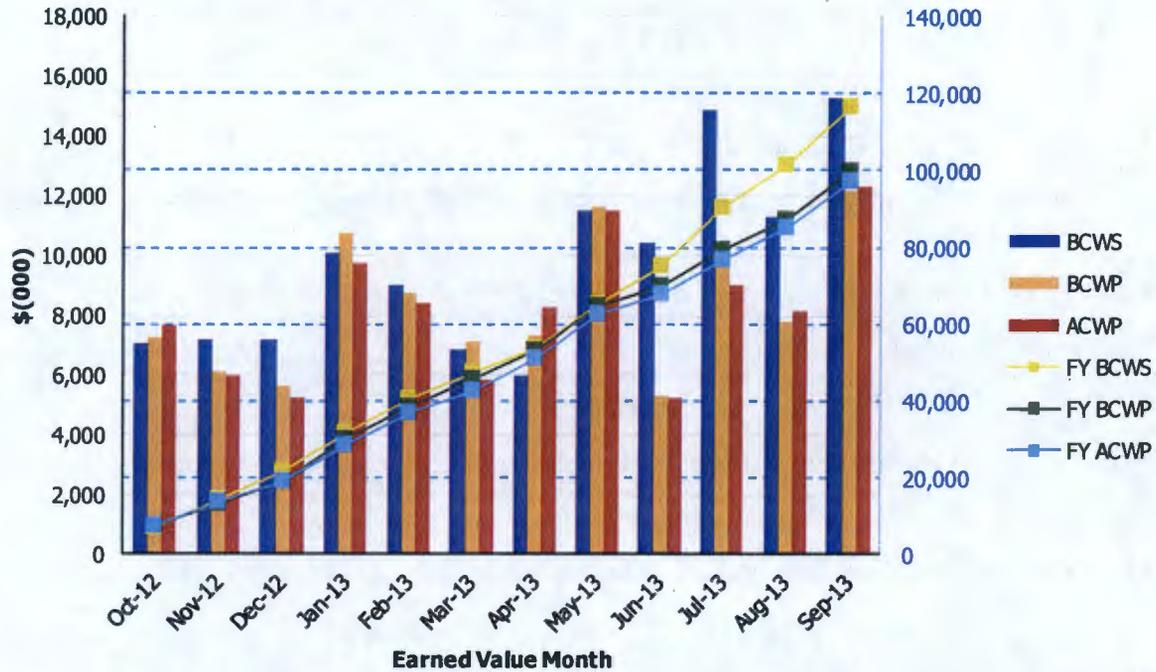
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: September 2013

**River Protection Project
Pretreatment Facility**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2012	\$7,077	\$7,269	\$7,660	1.03	0.95	\$7,077	\$7,269	\$7,660	1.03	0.95
Nov 2012	\$7,200	\$6,130	\$5,974	0.85	1.03	\$14,277	\$13,399	\$13,634	0.94	0.98
Dec 2012	\$7,163	\$5,619	\$5,230	0.78	1.07	\$21,440	\$19,018	\$18,864	0.89	1.01
Jan 2013	\$10,097	\$10,759	\$9,756	1.07	1.10	\$31,537	\$29,777	\$28,620	0.94	1.04
Feb 2013	\$8,994	\$8,716	\$8,382	0.97	1.04	\$40,531	\$38,493	\$37,002	0.95	1.04
Mar 2013	\$6,839	\$7,142	\$5,831	1.04	1.22	\$47,370	\$45,635	\$42,833	0.96	1.07
Apr 2013	\$5,995	\$7,355	\$8,252	1.23	0.89	\$53,365	\$52,990	\$51,085	0.99	1.04
May 2013	\$11,509	\$11,641	\$11,512	1.01	1.01	\$64,874	\$64,631	\$62,597	1.00	1.03
Jun 2013	\$10,410	\$5,286	\$5,242	0.51	1.01	\$75,284	\$69,917	\$67,839	0.93	1.03
Jul 2013	\$14,873	\$9,616	\$8,989	0.65	1.07	\$90,157	\$79,533	\$76,828	0.88	1.04
Aug 2013	\$11,280	\$7,831	\$8,142	0.69	0.96	\$101,437	\$87,364	\$84,970	0.86	1.03
Sep 2013	\$15,286	\$12,178	\$12,308	0.80	0.99	\$116,723	\$99,542	\$97,278	0.85	1.02
PTD	\$1,527,189	\$1,510,009	\$1,507,745	0.99	1.00					

High-Level Waste Facility

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

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

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

Technical review teams continue to evaluate open technical issues with priority placed on the resumption of HLW construction. Construction activities include the placement of walls at the 37-ft elevation, installation of structural steel at the 58-ft and 77-ft elevation, and installation of cable tray supports and ventilation ducts at the 14-ft elevation. Engineering efforts are focused on resolution of Priority Level 1 findings. The Environmental and Nuclear Safety Group is in the process of developing the Safety Design Strategy as part of the initiative to resume design, procurement, and construction.

The path forward to ramp up HLW production engineering and construction is separated into three actions: Conduct engineering studies to resolve technical safety issues; perform risk assessment for the issues noted in Priority Level 1 findings, reliability validation process, project issues evaluation reporting, etc.; and perform assessment of BNI process improvement for the readiness to proceed.

BNI is evaluating the impact of a proposed change to the natural phenomenon hazards design criteria that would double the ashfall criteria. This design criteria revision has the potential to impact facility design and HVAC system design.

Significant Past Accomplishments:

- Completed screening of systems to undergo FMECA
- FMECA simplified process for extraction and evaluation of data (FSPEED)
- Issued software life cycle volume 1
- Conducted testing and completed V&V
- Issued erosion/corrosion test strategy
- HLW design review has completed four systems (HLW canister decontamination handling system, radioactive solid waste handling, pulse jet ventilation system, and HLW melter handling system) out of 14 systems targeted for review
- Risk assessment reviews for the resumption of HLW production is on-going.

Significant Planned Actions in the Next 6 Months:

- Assess the resumption of design, procurement, and construction for HLW
- Complete reliability validation process reviews
- Development of HLW-specific safety design strategy
- Develop plan to close technical issues and other issues (e.g., safety basis compliance, quality assurance issues, and design defensibility) of HLW
- Complete draft analysis of single-point failures in support of failure mode analysis
- Complete conceptual design of in-service inspection
- Complete plan for erosion/corrosion risk evaluation for HLW
- Perform high-efficiency particulate air (HEPA) filter qualification testing at Mississippi State University.

Issues:

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

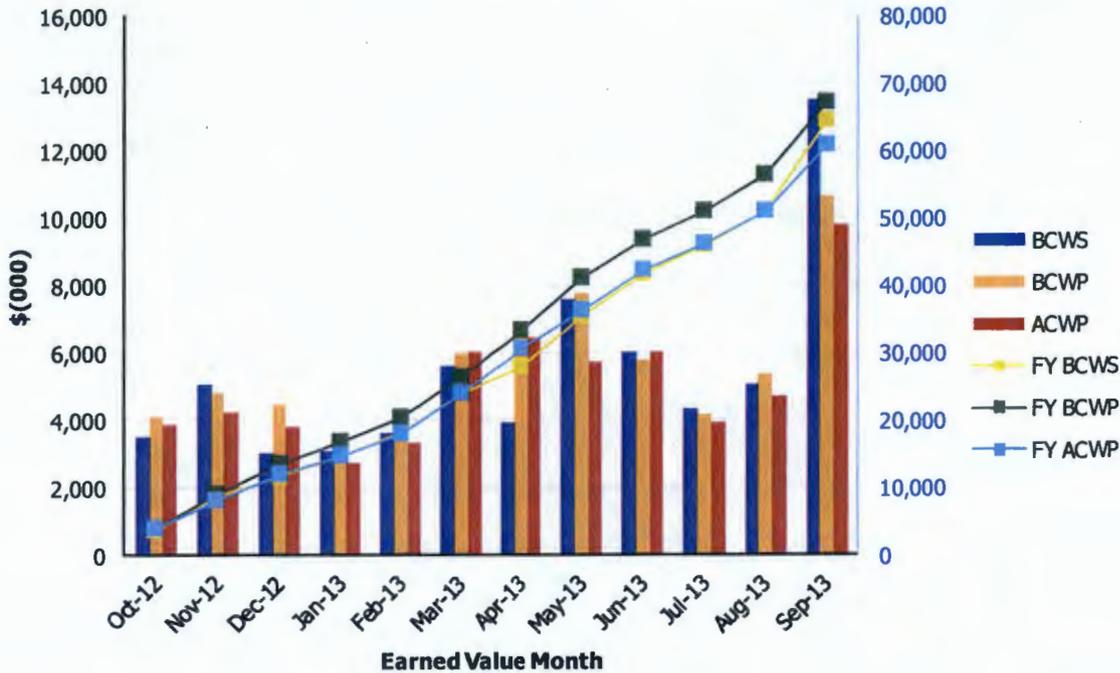
EXC-01a: Fiscal Year Cost and Schedule Report

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**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 2012	\$3,545	\$4,105	\$3,895	1.16	1.05	\$3,545	\$4,105	\$3,895	1.16	1.05
Nov 2012	\$5,079	\$4,852	\$4,256	0.96	1.14	\$8,624	\$8,957	\$8,151	1.04	1.10
Dec 2012	\$3,054	\$4,496	\$3,795	1.47	1.18	\$11,678	\$13,453	\$11,946	1.15	1.13
Jan 2013	\$3,092	\$3,266	\$2,714	1.06	1.20	\$14,770	\$16,719	\$14,660	1.13	1.14
Feb 2013	\$3,639	\$3,791	\$3,362	1.04	1.13	\$18,409	\$20,510	\$18,022	1.11	1.14
Mar 2013	\$5,595	\$5,953	\$6,053	1.06	0.98	\$24,004	\$26,463	\$24,075	1.10	1.10
Apr 2013	\$3,944	\$6,860	\$6,443	1.74	1.06	\$27,948	\$33,323	\$30,518	1.19	1.09
May 2013	\$7,604	\$7,788	\$5,726	1.02	1.36	\$35,552	\$41,111	\$36,244	1.16	1.13
Jun 2013	\$6,045	\$5,767	\$6,047	0.95	0.95	\$41,597	\$46,878	\$42,291	1.13	1.11
Jul 2013	\$4,382	\$4,152	\$3,929	0.95	1.06	\$45,979	\$51,030	\$46,220	1.11	1.10
Aug 2013	\$5,080	\$5,402	\$4,728	1.06	1.14	\$51,059	\$56,432	\$50,948	1.11	1.11
Sep 2013	\$13,524	\$10,619	\$9,789	0.79	1.08	\$64,583	\$67,051	\$60,737	1.04	1.10
PTD	\$986,717	\$989,179	\$982,870	1.00	1.01					

Low-Activity Waste Facility

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

The LAW Facility will process LAW that will be mixed with glass formers, vitrified into glass at a design capacity of 30 metric tons per day, and placed in stainless steel containers that are anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of September 2013, the LAW Facility is 66-percent complete overall, with engineering design 78-percent complete, procurement 86-percent complete, construction 69-percent complete, and startup and commissioning 5-percent complete.

Significant Past Accomplishments:

- Issued caustic scrubber seismic calculation to vendor releasing material procurement and equipment fabrication
- Received thermal catalytic oxidizer (TCO) process design submittal from IONEX, which included mass balance calculations, piping and instrumentation diagrams, and datasheets
- Hydro-tested over 5,000 linear feet of piping
- Installed over 700 linear feet of instrument tubing and 2,400 linear feet of electrical conduit and pulled over 7,800 linear feet of cable.

Significant Planned Actions in the Next 6 Months:

- Complete installation of autosampling system
- Receive HEPA preheaters for LAW secondary offgas/vessel vent process system
- Continue refractory brick installation in the melter
- Complete hazard analysis for the melter and melter off-gas.

Issues:

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

** In October 2013, DOE notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet Consent Decree milestones A-8 and A-9.

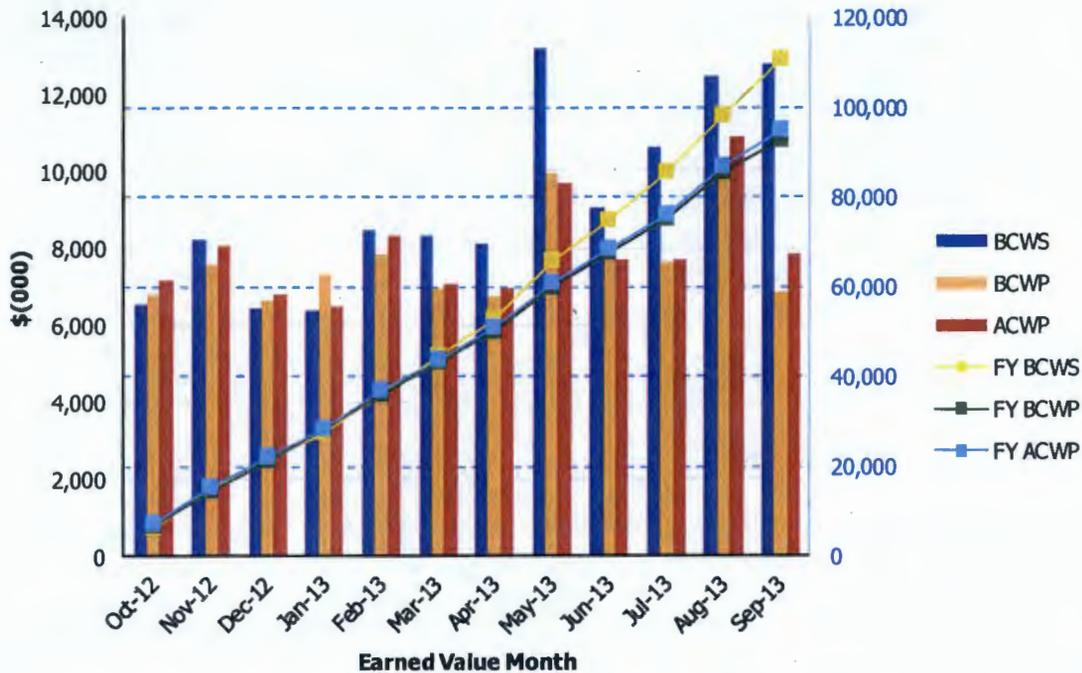
EXC-01a: Fiscal Year Cost and Schedule Report

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**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 2012	\$6,536	\$6,787	\$7,142	1.04	0.95	\$6,536	\$6,787	\$7,142	1.04	0.95
Nov 2012	\$8,212	\$7,602	\$8,071	0.93	0.94	\$14,748	\$14,389	\$15,213	0.98	0.95
Dec 2012	\$6,418	\$6,648	\$6,814	1.04	0.98	\$21,166	\$21,037	\$22,027	0.99	0.96
Jan 2013	\$6,392	\$7,303	\$6,469	1.14	1.13	\$27,558	\$28,340	\$28,496	1.03	0.99
Feb 2013	\$8,503	\$7,873	\$8,338	0.93	0.94	\$36,061	\$36,213	\$36,834	1.00	0.98
Mar 2013	\$8,316	\$6,966	\$7,054	0.84	0.99	\$44,377	\$43,179	\$43,888	0.97	0.98
Apr 2013	\$8,135	\$6,765	\$6,950	0.83	0.97	\$52,512	\$49,944	\$50,838	0.95	0.98
May 2013	\$13,190	\$9,960	\$9,706	0.76	1.03	\$65,702	\$59,904	\$60,544	0.91	0.99
Jun 2013	\$9,044	\$7,696	\$7,701	0.85	1.00	\$74,746	\$67,600	\$68,245	0.90	0.99
Jul 2013	\$10,642	\$7,665	\$7,714	0.72	0.99	\$85,388	\$75,265	\$75,959	0.88	0.99
Aug 2013	\$12,448	\$10,375	\$10,909	0.83	0.95	\$97,836	\$85,640	\$86,868	0.88	0.99
Sep 2013	\$12,777	\$6,861	\$7,867	0.54	0.87	\$110,613	\$92,501	\$94,735	0.84	0.98
PTD	\$804,323	\$789,490	\$843,280	0.98	0.94					

Balance of Facilities

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

The BOF provides services and utilities to support operation of the main production facilities: PT, HLW, LAW, and LAB. As of September 2013, BOF is 59-percent complete overall, with engineering design 79-percent complete, procurement 73-percent complete, construction 78-percent complete, and startup and commissioning 12-percent complete.

Commercial grade dedication activities in support of the emergency turbine generator procurement are the primary focus for design engineering and the procurement organization. Construction efforts are focused on completion of the Chiller Compressor Plant, Glass Former Facility, and the Non-Radioactive Liquid Waste Disposal building. Excavation activities for the Standby Diesel Generator Building are complete, and facility completion is targeted for June 2014. The construction organization is completing activities to turn the nonradioactive nondangerous liquid drains system over to the start-up organization for component level testing.

Significant Past Accomplishments:

- Hydro-tested 1,100 linear feet of instrument service air system in the Glass Former Facility
- Pulled 9,060 linear feet of cable and completed 550 cable terminations in the Glass Former Facility
- Started excavation for the Liquid Effluent Retention Facility pipe vaults at the northwest corner of the PT Facility.

Significant Planned Actions in the Next 6 Months:

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

Issues:

No major issues at this time.

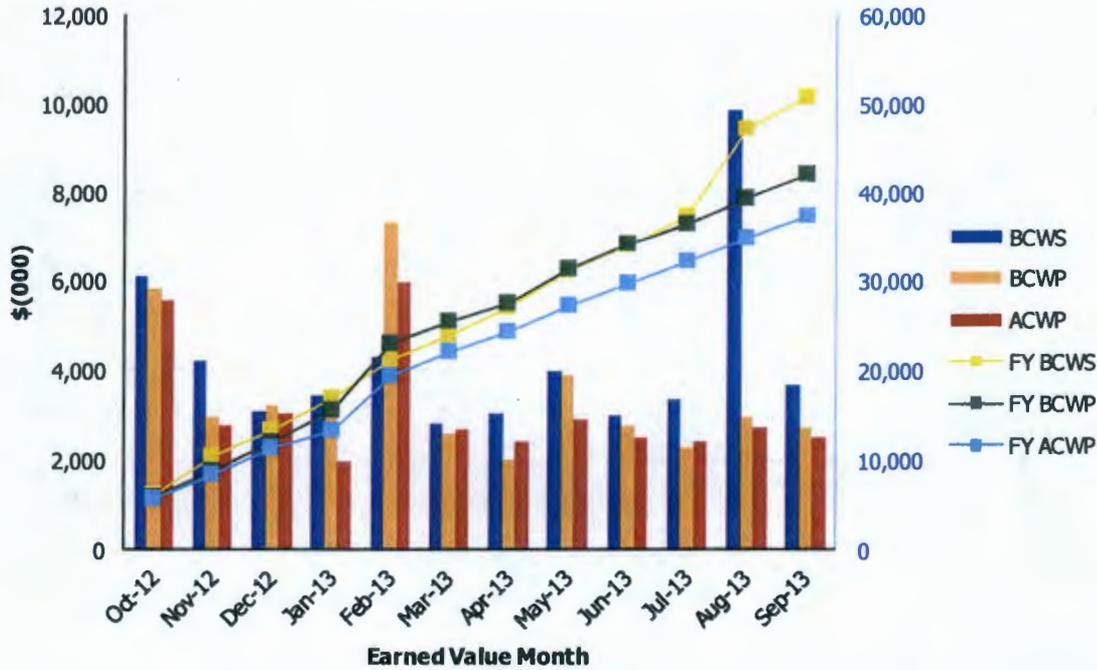
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: September 2013

**River Protection Project
Balance of Facilities**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2012	\$6,106	\$5,820	\$5,580	0.95	1.04	\$6,106	\$5,820	\$5,580	0.95	1.04
Nov 2012	\$4,226	\$2,955	\$2,775	0.70	1.06	\$10,332	\$8,775	\$8,355	0.85	1.05
Dec 2012	\$3,077	\$3,213	\$3,026	1.04	1.06	\$13,409	\$11,988	\$11,381	0.89	1.05
Jan 2013	\$3,452	\$3,559	\$1,970	1.03	1.81	\$16,861	\$15,547	\$13,351	0.92	1.16
Feb 2013	\$4,286	\$7,315	\$5,963	1.71	1.23	\$21,147	\$22,862	\$19,314	1.08	1.18
Mar 2013	\$2,799	\$2,588	\$2,675	0.92	0.97	\$23,946	\$25,450	\$21,989	1.06	1.16
Apr 2013	\$3,057	\$1,988	\$2,397	0.65	0.83	\$27,003	\$27,438	\$24,386	1.02	1.13
May 2013	\$3,987	\$3,897	\$2,929	0.98	1.33	\$30,990	\$31,335	\$27,315	1.01	1.15
Jun 2013	\$3,021	\$2,789	\$2,504	0.92	1.11	\$34,011	\$34,124	\$29,819	1.00	1.14
Jul 2013	\$3,357	\$2,277	\$2,396	0.68	0.95	\$37,368	\$36,401	\$32,215	0.97	1.13
Aug 2013	\$9,852	\$2,944	\$2,707	0.30	1.09	\$47,220	\$39,345	\$34,922	0.83	1.13
Sep 2013	\$3,674	\$2,720	\$2,516	0.74	1.08	\$50,894	\$42,065	\$37,438	0.83	1.12
PTD	\$326,641	\$317,650	\$311,371	0.97	1.02					

Analytical Laboratory

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

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of September 2013, the LAB is 70-percent complete overall, with engineering design 77-percent complete, procurement 86-percent complete, construction 85-percent complete, and startup and commissioning 22-percent complete.

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

Significant Past Accomplishments:

- Completed LAB vessel 163 and vessel 164 engineering dispositions and started repairs on vessel-164
- Intermech completed duct/support modifications, currently mobilizing for stack discharge installation
- Pulled 14,080 linear feet of cable and completed 1,027 cable terminations.

Significant Planned Actions in the Next 6 Months:

- Receive instrument and transport lines for the exhaust stack monitors
- Start installation of penetration seals
- Complete repairs to RLD vessels.

Issues:

No major issues at this time.

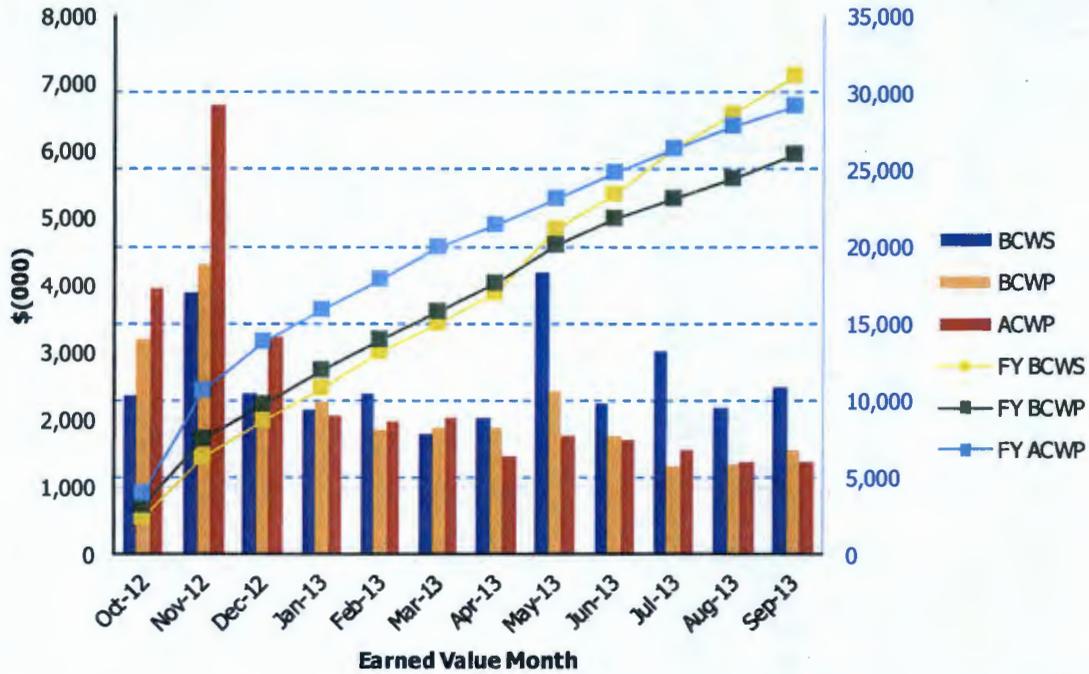
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: September 2013

**River Protection Project
Analytical Laboratory**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2012	\$2,370	\$3,183	\$3,952	1.34	0.81	\$2,370	\$3,183	\$3,952	1.34	0.81
Nov 2012	\$3,896	\$4,303	\$6,675	1.10	0.64	\$6,266	\$7,486	\$10,627	1.19	0.70
Dec 2012	\$2,381	\$2,257	\$3,219	0.95	0.70	\$8,647	\$9,743	\$13,846	1.13	0.70
Jan 2013	\$2,137	\$2,270	\$2,052	1.06	1.11	\$10,784	\$12,013	\$15,898	1.11	0.76
Feb 2013	\$2,387	\$1,852	\$1,977	0.78	0.94	\$13,171	\$13,865	\$17,875	1.05	0.78
Mar 2013	\$1,783	\$1,879	\$2,044	1.05	0.92	\$14,954	\$15,744	\$19,919	1.05	0.79
Apr 2013	\$2,021	\$1,883	\$1,475	0.93	1.28	\$16,975	\$17,627	\$21,394	1.04	0.82
May 2013	\$4,187	\$2,419	\$1,757	0.58	1.38	\$21,162	\$20,046	\$23,151	0.95	0.87
Jun 2013	\$2,224	\$1,749	\$1,698	0.79	1.03	\$23,386	\$21,795	\$24,849	0.93	0.88
Jul 2013	\$3,021	\$1,303	\$1,560	0.43	0.84	\$26,407	\$23,098	\$26,409	0.87	0.87
Aug 2013	\$2,185	\$1,354	\$1,358	0.62	1.00	\$28,592	\$24,452	\$27,767	0.86	0.88
Sep 2013	\$2,481	\$1,559	\$1,383	0.63	1.13	\$31,073	\$26,011	\$29,150	0.84	0.89
PTD	\$236,999	\$233,083	\$252,504	0.98	0.92					

Waste Treatment Plant Project - (LBL) Percent Complete Status Through September 2013															
(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars		
	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities															
Low-Activity Waste	1,201.0	789.6	66%	313.3	244.9	78%	281.3	225.5	80%	448.6	303.4	68%	177.8	9.7	5%
Analytical Lab	332.1	233.1	70%	72.2	55.3	77%	64.6	47.0	80%	136.4	115.3	85%	68.9	15.5	22%
Balance of Facilities	542.7	317.7	59%	94.2	74.8	79%	71.2	51.9	73%	222.6	172.6	78%	154.7	18.4	12%
Total LBL	2,075.8	1,340.2	65%	479.7	375.0	78%	387.1	324.4	84%	807.7	597.3	74%	401.4	43.6	11%
PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)															
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%
Pretreatment	2,517.3	1,410.5	56%	761.7	645.9	85%	679.9	390.4	58%	890.0	378.6	43%	185.8	5.8	3%
Shared Services	4,728.9	3,632.8	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%
Total WTP w/o UB	n/a	n/a	67%	n/a	n/a	87%	n/a	n/a	73%	n/a	n/a	62%	n/a	n/a	15%
Undistributed Budget	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	n/a	n/a	67%	n/a	n/a	87%	n/a	n/a	73%	n/a	n/a	62%	n/a	n/a	15%

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

Note: In September 2012, the LBL Replan was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB Value for the project for PT/HLW/SS is \$1,976M.