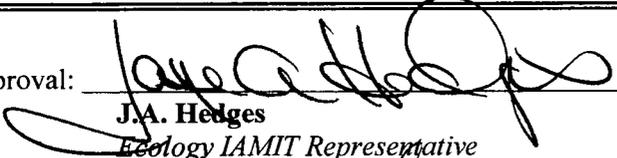
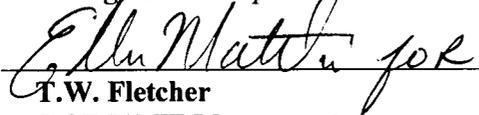
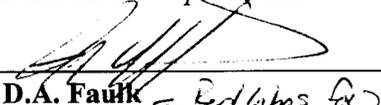


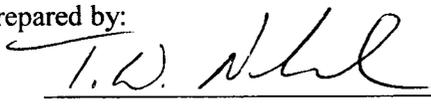
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**Office of River Protection  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
February 21, 2013**

Approval:  Date: 3/22/2013  
**J.A. Hedges**  
*Ecology IAMIT Representative*

Approval:  Date: 3/26/13  
**T.W. Fletcher**  
*DOE IAMIT Representative*

Approval:  Date: 3/22/2013  
**D.A. Faulk** *(Ed Lobos for)*  
*EPA IAMIT Representative*

Minutes Prepared by:  Date: 3/21/2013  
**T.W. Noland**  
*Mission Support Alliance*

Abdul, W.	ORP	Koll, R.J.*	ORP
Barnes, M.W.	Ecology	Knight, D.P.	ORP
Bohnee, G.	NPT	Knox, K.E.*	KCR
Braswell, S.M.*	MSA	Lobos, R.*	EPA
Caggiano, J.A.	Ecology	Luke, J.J.	WRPS
Charboneau, S.L.	ORP	Lynch, J.J.*	ORP
Cimon, S.*	ODE	Lyon, J.J.*	Ecology
Dahl, S.L.	Ecology	Mauss, B.M.	ORP
Diediker, J.A.*	ORP	Mattlin, E.M.*	ORP
Donnelly J.W.	WRPS	McDonald, D.*	Ecology
Dowell, J.A.*	RL	Miera F.R.*	WRPS
Eberlein, S.J.*	WRPS	Nazarali, A.	CTUIR
Faulk, D.A.	EPA	Niles, K.	OOE
Fletcher, T.W.	ORP	Noland, T.W.*	MSA
Gadbois, L.E.	EPA	Noyes, D.L.*	ORP
Grindstaff, J.F.	ORP	Pfaff, S.H.	ORP
Harrington, C.C.*	ORP	Piippo, R.E.*	MSA
Harris, S.	CTUIR	Price, J.B.*	Ecology
Hedges, J.	Ecology	Shattuck, A.F.*	MSA
Hendrickson, M.L.*	Ecology	Skinnarland, E.R.	Ecology
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	Wold, K.J.*	Ecology
Kaldor, R.A.	MSA	Administrative Record	
Kemp, C.J.*	ORP		
Killoy, S.E.*	WRPS		

*\*Attendees*

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

**Administrative Items/Milestone Status**

ORP provided an updated TPA and Consent Decree (CD) list of agreements, issues and actions that are discussed at the project manager level. ORP noted that the last page of the list contains recent items entered into the Administrative Record (AR). ORP reported that the milestone status is ongoing for fiscal years 2013 and 2014. ORP pointed out the three CD milestones that were completed in December 2012 for LAB construction substantially complete, Steam Plant construction complete in Balance of Facilities, and construction complete of structural steel to the 37-foot level in the High Level Waste facility. Ecology noted that a meeting with ORP will be held within a month to review the technical packages for the LAB and Steam Plant milestones to determine Ecology's assessment of the milestone completion.

ORP stated that one TPA target date was missed and there are three target dates to be missed in FY13. Ecology inquired about the status of the three-year review of the requirements in the CD (D-006-00-A). ORP stated that an internal effort is under way. Ecology asked if a schedule is in place for the review. ORP responded that a schedule has not been developed. ORP stated that it will provide a response to Ecology's questions regarding the schedule and the point of contact for the three-year review. Ecology requested that the tank T-111 event be carried as an issue or an action.

**System Plan; M-62-40**

ORP stated that there was discussion on the status of the System Plan during the dry run meeting held earlier this week, and asked for questions or discussion to relay to the System Plan representative. Ecology stated that the scenarios that are selected for the System Plan 7 must be relevant to today's reality, and cited the issues with the leaking tanks and delays to the Waste Treatment Plant (WTP). Ecology added that if the scenarios are not relevant, those scenarios will be rejected. ORP noted that Ecology will have the opportunity to select System Plan 7 scenarios. Ecology responded that it would be less than responsible if ORP did not select scenarios that reflect what is currently being done or is believed can be done. ORP noted Ecology's comments and will relay the message to the System Plan team. ORP noted that the joint ORP/Ecology System Plan 7 scenario discussion is slated for the July/August 2013 time frame, but discussions will likely occur sooner.

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

ORP stated that there is no new status relative to M-090-11 or M-047-06. The Interim Hanford Storage and the Secondary Liquid Waste projects have been suspended for FY13. In an effort to be responsive, ORP plans to submit a construction project data sheet for the Interim Hanford

Storage project with the FY15 budget submittal. ORP explained that the construction project data sheet is a request for capital line item funding, which must be submitted to the Office of Management and Budget (OMB) two years prior to the need for capital funding. ORP noted that there would still be operation funds for FY15 and FY16, and the capital funding request would be for FY17.

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

M-062-40ZZ - ORP stated that efforts continue with Washington River Protection Solutions (WRPS) to develop and support the preparation of the one-time report due October 31, 2014, and this milestone continues to be on schedule. ORP noted that there have been high-level discussions regarding moving the dates out for milestones M-062-40ZZ and M-062-45ZZ. ORP suggested meeting with Ecology to discuss the one-time report and what might be a suitable replacement. ORP noted that this discussion is associated with the development of System Plan 7. ORP stated that its intent would be to conduct efforts on the development of System Plan 7 in the same manner as the previous System Plans by implementing assigned roles and responsibilities, and establishing a detailed schedule that is routinely statused. Ecology agreed with that path forward for System Plan 7.

### **242-A Evaporator Status**

ORP reported that there have been some changes to the comment section for the FY13 242-A Evaporator campaign. ORP emphasized that the campaign is classified as one campaign with two passes. ORP stated that the first pass (13-01) will start in early August 2013, and the second pass (13-02) will start 21 days later. The goal is to achieve a waste volume reduction (WVR) of 700,000 gallons, with about 300,000 to 325,000 gallons WVR per pass. ORP stated that WRPS has submitted a final draft of the Plan of Action (POA) for review, and a meeting is scheduled later today to discuss scheduling with WRPS. Once the schedule is in place, the POA will be initiated per the 425.1 documentation received from DOE-Headquarters. Ecology inquired about how in depth the POA speaks to sustained operations and maintenance. ORP responded that the POA addresses all of the recent upgrades to the evaporator, the documented safety analysis (DSA), all of the maintenance and the management of emergency preparedness. Ecology asked when the POA would be available to review. ORP stated that the POA would be available within three weeks.

### **SST Integrity Assurance; M-45-91**

ORP noted the target date that was missed in January 2013, and several other target dates that are to be missed, due to funding constraints. A draft change package to realign the target dates and milestones has been submitted to Ecology for review. ORP stated that milestone M-045-91D-T01 is on schedule to be completed by its due date. ORP stated that the concrete core from C-107 has been sent to the lab and tested, and the results are encouraging. Some of the rebar has been pulled out of the dome plug for testing, and the results are expected within a few months.

## **In Tank Characterization and Summary**

ORP stated that the in tank characterization was discussed during the dry run meeting earlier this week. There were no questions or issues raised.

## **Tank Operations Contract (TOC) Overview**

ORP reported that through December 2012, there were more than six million hours worked without a lost time work day injury. ORP stated that the overall contract-to-date schedule and cost performances are doing well. Ecology asked if the issues associated with AY-102 are covered under a different account than base operations. ORP responded that it is not, noting that today's summary report is from December 2012. ORP added that AY-102 has a separate work breakdown structure (WBS). Ecology noted the schedule variance for retrieval and closure of SSTs, and asked if there was enough float in the schedule to maintain completion of all the retrievals by September 2014. ORP responded that there was enough float in the schedule.

ORP noted that the negative schedule variance for waste feed delivery (WFD) was due in part to the suspension of WFD systems projects, and that baseline change requests (BCR) are in process. Ecology stated that WFD is important to both tank farms and WTP, and noted that it is a second-tier item that needs to be considered for all of the system to work. Ecology asked what recovery plans are being considered to get WFD back on track. ORP responded that an action was taken during the dry run meeting held earlier this week for the WFD federal project director to provide a response. Ecology requested that ORP's response provide concrete plans to move forward, including a schedule for getting WFD back on track. Ecology added that the response needs to be provided regardless of whether or not ORP believes funding is available, and that the funding issue could be addressed at a later time by Ecology and ORP.

ORP noted that a question was raised by Ecology during the dry run meeting regarding details of BCR 13-019 associated with Supplemental Treatment. ORP has provided a response to Ecology via email, and Ecology has responded with a request for more details.

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

M-045-20 - ORP expressed appreciation to Ecology for the approval to implement work via the updated work plan.

M-045-61/62 - ORP noted that these two milestones continue to be at risk due to the lack of funding in FY13 for the Waste Management Area C (WMA-C) Performance Assessment (PA) (see discussion below on SST retrieval and closure program). Ecology asked about the potential for completing the work under these two milestones without the PA. ORP responded that the work could be completed by utilizing another risk tool other than the PA, such as the current Environmental Impact Statement (EIS) and even a past SST PA. ORP stated its intent to hold a discussion with Ecology regarding that possibility. Ecology requested an action item to meet with ORP by the end of March 2013 to discuss the path forward for milestones M-045-61 and 62, with or without the PA.

M-045-92 - ORP stated that in lieu of doing the interim barriers, Ecology has approved the work

discussed under M-045-20. ORP noted that a draft change package has been submitted to Ecology, along with the initial work plan that provides target dates for M-045-22. Following incorporation of Ecology's comments, a signed change package will be submitted to establish the target dates that have been agreed to by Ecology.

#### **M-45-00 Series:**

SST Retrieval and Closure Program TPA - ORP noted that M-045-82 continues to be at risk due to the funding issue associated with the WMA-C PA. ORP stated that the C Farm PA needs to be funded by March 2013 to start the work, or the status of this milestone will be changed to be missed. Ecology asked about the probability for funding the PA. ORP responded that a decision won't be made until after March 1, 2013, when the sequestration budget cuts are slated to be implemented. A meeting is scheduled for March 4, 2013, to discuss the PA relative to the outcome of the sequestration. Ecology asked if the PA would be funded if the sequestration does not go through. ORP responded that that question could not be answered at this time. It was noted that ORP upper management is aware of the importance placed on funding the PA.

Tank Waste Retrieval Work Plan (TWRWP) Status - ORP noted the recent approval from Ecology for the C-110 TWRWP. A first, second and third retrieval technology will be used in C-110.

Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria - ORP reported there was no change in status. Ecology inquired about the turnaround time for the NRC once it receives the additional requested information, which is dependent upon the C Farm PA. ORP responded that the time frame for the NRC has been between 18 months and two years for turnaround. If the PA is funded and starts in March 2013, ORP estimated that the NRC would have a response to the C-106 exception request in late 2016 to early 2017. ORP noted that C-106 is not included in the list of tanks in the CD.

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:

Issue No. 1 - ORP stated that the C-105 dome cut is on hold pending resolution of the Differing Professional Opinion (DPO). The DPO was initiated by individuals who believed the dome cutting activities would have an impact downstream. The DPO panel, which is lead by DOE-Headquarters, found there was no impact downstream. The authors of the original concern have chosen to appeal the DPO panel's decision, and the appeal process should be completed by mid-April 2013. Ecology asked when the information from the DPO would be available to review, noting an interest in the density, viscosity, what the changes are likely to be, and the rationale for assuming that the issues with the downstream systems and components will not be exacerbated, particularly corrosion/erosion, mixing issues, and failed pumps and valves. ORP responded that the DPO is treated by DOE as an employee concern, and there are privacy issues that need to be considered. ORP indicated that it was not familiar with the process for releasing DPO information to the public, and took an action to determine what information could be released. Ecology expressed concern about ORP submitting a TWRWP without the opportunity to review the potential effects on WTP. ORP responded that the TWRWP for C-105 has been approved by Ecology for the water abrasive, and that Ecology's concerns about the potential effects on WTP would be an internal discussion within

Ecology. Ecology agreed that an internal discussion would take place.

Issue No. 2 - ORP provided a status on the sludge height issue. The Safety Review Board is meeting tomorrow (02/22/13) regarding the justification of continued operations (JCO) to raise the sludge height in the two receiver tanks AN-101 and AN-106. The current sludge height is limited to 172 inches, and the JCO will increase it to 192 to 193 inches. ORP stated that two contingencies will be considered, which would be to open up a third receiver tank and to transfer sludge from AN-101 and AN-106 to open up space. Ecology asked about the process for the Safety Review Board to approve the JCO. ORP stated that if the JCO is approved, the contractor will complete procedural and implementation documentation, and the process would take about two weeks to be completed and implemented.

TWRWP Status - ORP noted that the TWRWP table is included in both the CD and TPA summary reports, as agreed to by ORP and Ecology.

### **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**

ORP reported that the current project employment remains relatively stable. ORP noted that the Pretreatment (PT) and High Level Waste (HLW) facilities remain fixed at the September 2012 percent complete values, and those facilities are working to the two-year interim work plan. ORP added that until the rebaseline for PT and HLW is received from Bechtel, data won't be available to accurately update the percent complete values for the two facilities. Ecology asked if there is an anticipated date for release of the rebaseline. ORP responded that a more detailed discussion could be held separately, but currently there is no anticipated date. ORP stated that closure of the technical issues and defining technical pathways are needed. ORP added that the full-scale testing is the pacing element, and once the parameters of the testing are understood, the PT and HLW rebaseline can be recreated. ORP indicated that the rebaseline for HLW should occur in a shorter time period than PT. ORP noted that PT has a broader suite of technical issues to be resolved, and the technical issues in HLW are primarily associated with the wet cell and the RLD-8 vessels that should be resolved earlier than in PT. Ecology expressed the concern that the parties have a clear vision of the right thing to do in the right order. Ecology reiterated its request for the lifecycle of WTP and the criteria needed to be successful, and when it can be accomplished. ORP acknowledged Ecology's concerns.

ORP stated that Low Activity Waste (LAW), Balance of Facilities (BOF) and the Analytical Laboratory (LAB) continue to move forward as planned. For HLW, construction activities continue that aren't at risk; i.e., rebar, concrete and some piping that is tied to the concrete.

Ecology initiated a discussion regarding alternate scenarios for LAW waste feed and direct feed. ORP stated that a near-term business case for LAW direct feed is being developed with the S-1 team input. ORP added that it is likely another business case will be developed for HLW direct feed. ORP noted that LAW and HLW direct feed are not tied to baseline activities relative to the WTP project, although the allowance to do direct feed is in the LBL (LAW, BOF, LAB) construction and there would not be a big scope impact to the WTP project if the decision is made to do direct feed. Ecology asked when the business case will be released. ORP responded

that a detailed schedule was not available at this time. ORP and Ecology agreed to schedule a discussion regarding the status of the business cases for the direct feed initiative.

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

ORP stated that the key ongoing activities in PT are resolution of the technical issues, hazard analysis, and evaluation for process systems. PT is working to the two-year interim work plan, and as the technical issue resolutions get clarified, the baseline will be modified. Ecology asked about the status of the corrosion/erosion plan. ORP responded that Bechtel has submitted the plan and it is in review, and ORP has not yet approved the plan. ORP noted that the S-1 team is meeting with Ecology within a week to discuss the corrosion/erosion issue. ORP stated that Bechtel has also submitted the cathodic protection deliverable, and there may be issues with the document.

ORP stated that there is essentially no production engineering or production construction in PT, and safe and compliant conditions are being maintained in PT. Ecology asked about any near-term engineering change notices (ECNs) or redesign media being submitted to Ecology for review. ORP responded that unless the ECNs or redesign media are directly associated with technical issue resolution, there would not be any submitted in the near future. ORP added that there is not even a goal at this time to have a time frame for submitting any of those items to Ecology.

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

ORP stated that the S-1 team has a commitment to close out the technical issue resolution in HLW with the goal of having deliverables available by the end of 2014 that will clarify the path forward. ORP is anticipating by the end of March 2013 to see more clarity of the plans and actions resulting from technical issue resolution. ORP stated that a letter was sent to Bechtel directing it to identify the construction activities that could continue, given the concerns with Bechtel's preliminary documented safety analysis (PDSA) and the technical issues. Bechtel has provided a response, and ORP is in the process of responding to the letter and agreeing to the continuation of certain construction activities. ORP noted that there are no construction activities that will impact access to the wet cells, which is the site of the primary technical issue in HLW.

Ecology referred to the slow-down in HLW, and asked what process is in place to ensure that vulnerable components and systems will be maintained and that there won't be any unnecessary degradation. ORP responded that as part of the ramp-down and rebaseline direction, Bechtel was required to submit a process that will ensure all the equipment, materials and facilities are placed in a maintainable configuration. ORP added that a tracking system is in place that identifies preventative maintenance, and there are plans for both HLW and PT that outline the actions to achieve those processes. Ecology asked if ORP is conducting oversight to ensure all of the actions are being done correctly. ORP stated that its oversight will continue. ORP suggested that more detail could be provided to Ecology in a separate discussion, and Ecology requested an action for a briefing on the facility maintenance plans during the slowdown of HLW and PT.

Ecology noted its concern with components in the marshaling yard, such as pumps and valves, that need to stay in good working condition during the slowdown. ORP responded that there are plans in place for those components, and more detail could be provided during the briefing.

Oregon Department of Energy (ODOE) asked about the acronym ENS referred to in the summary report. ORP responded that ENS is engineering nuclear safety. Ecology asked about the status of the Reliability Validation Process (RVP). ORP responded that the first phase of the RVP activity is winding down, and an update is to be given tomorrow. ORP noted that there were approximately 1,200 issues identified, providing a good data set. The second phase of the RVP has been initiated, which will evaluate the data in terms of systems and process improvements and what other systems and areas to focus on. Another aspect of the second phase of the RVP will be to provide information for looking backwards at components and systems that have already been installed to ensure any deficiencies can be identified and fixed. Ecology asked if the RVP will also focus on work that has not yet been done in an effort to ensure there is enough of an understanding about what has occurred to mitigate or eliminate the recurrence of deficiencies. ORP responded that one aspect of the RVP was to look at what will be used as the foundational process for future work, and that look was focused specifically on the procedures and processes that are in place that highlight what needs to be fixed and the gaps that exist.

ORP indicated that Bechtel has recognized that there are gaps in the processes and systems, due to the design/build nature of WTP, that need to be addressed. ORP noted that recognition is the first step. ORP referred to the question about what will be done specifically to fix the systems going forward, and noted that the WTP project ranges from 50 to 80-90 percent complete, and now a look backwards needs to be done to identify and correct deficiencies so that issues don't arise during startup. ORP acknowledged the challenges, but will continue to demand a high performance from Bechtel in established areas and views Bechtel's recognition as a positive step forward.

ORP provided an update on the status of the RLD-8 vessel, noting there were a number of welding issues. As a result of the S-1 team activities associated with the technical issues resolution, the decision has been made to redesign the RLD-7 and 8 vessels and the systems within the vessels. The current plan is to use RLD-8 as part of the full-scale testing program. ODOE asked about the extent of the redesign of the vessels. ORP stated that there were two different issues. The welding issue would have required extensive rework, and the vessel was declared unfit for use on a production basis. The second issue was associated with the need for a complete redesign for metallurgy and function. The determination was made that the metal in RLD-8 was insufficient, and the redesign will incorporate different metallurgy and a different design function. ORP added that the design changes are fairly well understood, and the pump-back system will use a more positive displacement. The redesign includes a more robust pumping system and internals, and it will support a scenario of back flow from the melters.

ORP stated that the use of RLD-8 for testing is still in the planning phase. Ecology added that in theory RLD-8 is sufficient in size and configuration that it can represent several of the vessels for testing, but there is still a question as to whether it is the best vessel to use for testing, and the decision process is with the S-1 team. ORP noted that the rationale for using the RLD-8 vessel

for testing is to provide a starting point for testing and allow the testing methodologies to be improved, and it would resolve the technical issues and provide the deliverables and a path forward in the 2014 time frame.

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

ORP stated that LAW is working to the replan, although there was not much of a fundamental change to schedule and/or activities, with the exception of some activities linked to PT. As a result of the slowdown in PT and HLW, more of the shared services, which cover all facilities, are being applied to ongoing activities in LBL. LBL is carrying a larger burden of the overhead in terms of sitewide programs than before the slowdown, and will continue to carry the burden for some time.

Ecology asked if the bulk of ORP's efforts are being focused towards LBL on the off chance that those facilities will start running first. ORP responded that there will be a continued focus on resolution of technical issues in terms of potential impacts to LBL to ensure that a large amount of rework would not have to be done. ORP referred to the direction that was given to Bechtel to do the modifications in the LAW facility that would support a decision to provide direct feed. ORP noted that most of the impacts on tank farms infrastructure are associated with the ability to provide feed, but there will be joint impacts in terms of prioritizing activities. Ecology noted its comments made earlier during the tank farms portion of today's meeting in the TOC overview section about getting waste feed delivery back on track. ORP stated that the last formal written direction given to Bechtel in the August 2012 time frame, in terms of planning basis, is to be prepared to receive feed no later than September 2018. ORP added that as decisions are made through studies and activities in tank farms, the date may be modified. Ecology asked if a copy of ORP's letter to Bechtel was sent to Ecology. ORP indicated that a copy was sent, and pointed out the site in the AR where the letter could be located.

Ecology asked if the understanding of the community at large is that late 2018 is the target date for WTP to be ready for feed. ORP responded that the rebaselining direction to Bechtel was to maintain its schedule to meet or exceed the September 2018 date. ORP added that the understanding in the community would not be to a date, but would be what the amount of resources that are available to deploy the facility to be able to feed. ORP noted that a final decision on direct feed has not yet been made, but it is getting closer. Ecology pointed out that waste feed delivery is already late, especially given the late 2018 target, and the business case analysis has not been completed. ORP clarified that September 2018 is not a target date, but is the direction given to Bechtel to plan and rebaseline to.

ORP stated that the critical path in LAW continues to be the offgas system, and there are no changes or additional challenges in that area.

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

ORP stated that the milestone for the Steam Plant construction complete was completed at the end of December. ORP and Ecology will be meeting to discuss and review the documentation

for the milestone completion. ORP stated that many of the buildings have been in place for some time, and the punch list items are being closed to get construction complete for those buildings. Ecology noted that final instrumentation and equipment, especially for LAB, will not be put in place early because installation would degrade the equipment beyond use. A compliance schedule and a punch list schedule are in place for those items to be installed closer to the time of operation.

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

ORP stated that the milestone for LAB construction substantially complete was completed at the end of December 2012. ORP and Ecology will be meeting to discuss and review the documentation for the milestone completion. ORP noted that the LAB milestone was focused on construction complete, and as noted above in the BOF discussion, much of the analytical equipment and instrumentation will be installed closer to the time of operation. Testing of equipment, and procedure development and protocols will comprise ongoing activities. ORP stated that the welding repair work is ongoing with RLD vessels 163 and 164. Ecology asked if a schedule for the two vessels was available. ORP will provide Ecology an update on the schedules for vessels 163 and 164.



**Agenda**  
**February 21, 2013**  
**Office of River Protection Quarterly Milestone Review Meeting**  
 Ecology Offices, Conference Room 3A/B  
**Chairperson: John Price**

<b>Topic</b>	<b>Leads</b>	<b>Time</b>
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	8:55
SST Integrity Assurance; M-45-91	Jeremy Johnson / Michelle Hendrickson	9:00
In Tank Characterization and Summary	Billie Mauss / Michael Barnes	9:05
Tank Operations Contract (TOC) Overview	Daniel Knight / Jeff Lyon	9:10
Single-Shell Tank Corrective Action; M-45, -50, -60	Chris Kemp / Jeff Lyon	9:20
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	9:25
WTP Overall TPA and CD Summary and Milestones Status; M-62-01; M-62-49; D-00A-01, -06, -17	Delmar Noyes / Dan McDonald	9:40
WTP Pretreatment (PT) Facility; D-00A-13, -14, -15, -16, -19	Delmar Noyes / Dan McDonald	9:50
WTP High-Level Waste (HLW) Facility; D-00A-02, -03, -04, -21	Delmar Noyes / Dan McDonald	9:55
WTP Low-Activity Waste (LAW) Facility; D-00A-07, -08, -09	Delmar Noyes / Dan McDonald	10:00
WTP Analytical Laboratory (LAB); D-00A-05		10:05
WTP Balance of Facilities (BOF); D-00A-12		10:10

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

<u>Name</u>	<u>Organization</u>
<u>Terry Noland</u>	<u>MSA</u>
<u>Kathy Knox</u>	<u>Knox Court Reporting</u>
<u>James Lynch</u>	<u>ORP</u>
<u>John Price</u>	<u>Ecology</u>
<u>Chris Harrington</u>	<u>ORP</u>
<u>Janet Diederker</u>	<u>ORP</u>
<u>Jeremy Johnson</u>	<u>ORP</u>
<u>Jan McJannet</u>	<u>Ecology</u>
<u>Cheryl Whalen</u>	<u>Ecology</u>
<u>Shirley Simpson</u>	<u>ORP</u>
<u>Red Lobos</u>	<u>EPA</u>
<u>Chris Kemp</u>	<u>ORP</u>
<u>Rob PIPPO</u>	<u>MSA</u>
<u>Kathy Higgins</u>	<u>ORP</u>
<u>Dowell, J.A.</u>	<u>DOE/RL/AMRP</u>
<u>Delmar Hayes</u>	<u>ORP</u>
<u>Ellen MATTUN</u>	<u>DOE-ORP</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>



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

### 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 Inner Tank Leak: A team comprised of experts from ORP, ECY, WDOH, and WRPS are evaluating a range of potential cumulative impacts (DST space/water balance, 242-A Evaporator, Waste Feed Delivery to WTP, risk readiness/contingency, etc.) with follow-on topic meetings to be held with close involvement of ORP and ECY Senior Management as information becomes available for evaluation.

### Tank Farms Actions:

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
13-01-01	02/19/13	Ecology would like to be added to the Groundwater Quarterly Monitoring Report distribution list and be notified of the months when groundwater sampling is scheduled to occur for the seven Tank Farms WMAs.	<b>Open.</b> Ecology has been added to the distribution list. DOE is working to transmit the last two GW reports and provide GW sampling notifications.	Chris Kemp / Doug Hildebrand	
12-12-03	12/20/12	ORP will complete the updates for the comments provided on the draft SST Integrity TPA change package and meet with Ecology.	<b>Open.</b> ORP has incorporated comments and the SST Integrity Chg Pckg is under ECY review.	Jeremy Johnson	
12-12-01	12/20/12	Ecology has questions about Tc-99, Uranium, and Iodine-129 increased groundwater contamination trending in WMA C wells.	<b>Open.</b>	Chris Kemp	
12-10-05	10/23/12	ORP will set up a meeting with Ecology to discuss the September 2009 Report, External Technical Review for Evaluation of System Level Modeling and Simulation Tools in Support of Hanford Site Liquid Waste Process for recommendations and determine if those recommendations have been implemented.	<b>Open.</b> ORP will set up a meeting with ECY to discuss after the March 9 <sup>th</sup> timeframe, when applicable SMEs are available.	DaBrisha Smith	

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

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
12-10-04	10/16/12	Ecology would like to discuss C-107 and considerations for Tc-99 concerns with tank residuals and technology selection.	<b>Open.</b> ORP and ECY have placed these discussions on hold until after C-107 RDR sampling has occurred.	Chris Kemp	
12-10-03	10/10/12	Per M-045-56 annual meeting: Set meeting on Interim Measures Inspection and Maintenance, to address inspection scope, criteria, and results of past inspections.	<b>Closed.</b> This meeting was held on 01/08/13. Meeting minutes will be out for signature soon.	Susan Eberlein	01/08/13
12-10-02	10/10/12	Per M-045-56 annual meeting: Set meeting with site water purveyor to address leak detection and testing in active water lines.	<b>Open.</b> Ecology has provided questions for the water purveyor. ORP will set up a meeting to discuss.	Chris Kemp	
12-10-01	10/10/12	Per M-045-56 annual meeting: Set meeting on interim surface barrier surveillance and maintenance actions and status.	<b>Closed.</b> This meeting was held on 02/19/13. Meeting minutes will be out for signature soon.	Susan Eberlein	02/19/13
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).	<b>Open.</b> This was discussed at the ORP/ECY Communications meeting held on 10/16/12 and a break-out team held a follow-up meeting on to outline expectations, discuss the process, available tools (agreements, issues, action items list), and develop improvements. This meeting was held on 11/13/12 and ECY will review these results and provide for discussion at the follow-up overall ORP/ECY Communications Improvements meeting.	Jeff Lyon	

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

### WTP Actions:

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
12-10-04	10/23/12	ORP will determine the status of the updated G2 Run and provide to ECY.	<b>Open.</b>	Wahed Abdul	
13-01-04	01/22/13	ECY would like ORP to provide documentation justifying why the LAW Melter Assembly Building was removed from the WTP project baseline.	<b>Closed.</b> Email with ORP letter 09-AMD-213 and referenced BNI report CCN-193447 provided to ECY on 01/24/13.	Delmar Noyes / Jeff Bruggeman	01/24/13
13-01-03	01/22/13	ORP will get back to ECY by early February to setup a briefing on LAB Substantially Complete documentation.	<b>Open.</b>	Jason Young	
13-01-02	01/22/13	ORP will get back to ECY by early February to setup a briefing Steam Plant Complete documentation.	<b>Open.</b>	Jason Young	
13-01-01	01/22/13	ORP will get back to ECY by early February on a briefing to discuss the LAB cathodic protection issue.	<b>Open.</b>	Jason Young	

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

(see <http://www5.hanford.gov/arpir/?content=advancedSearch> - search EDMC File Number)

Item Description	TPA/CD Topic Milestone Tie	TPA Admin Record EDMC File Number
January 2013 ORP CD Monthly Report	All	1218934
January 2013 ORP TPA Monthly Report	All	1218933
TPA Change Notice 2012-09, Update of RPP-PLAN-36705, 241-TY Tank Farm Interim Surface Barrier Monitoring Plan, Revision 1, final approval date on 01/08/13, entered at 01/22/13 PMM	M-045-92	1218822
TPA Project Manager Agreement for SST Retrievals Completion Final Sampling	SST Retrievals	1219006
January 2013 TPA Semi-Annual Report, ORP letter 13-WTP-0013, dated 01/31/13	M-062-01	1219191
January 2013 CD Semi-Annual Report, ORP Letter 13-WTP-0022, dated 01/31/13	CD Milestones	1219192

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



**Office of River Protection  
Tri-Party Agreement Milestone Review  
February 2013 (Project EVMS reflects December 2012)**

<b>Page</b>	<b>Topic</b>	<b>Leads</b>
1	Administrative Items / Milestone Status	James Lynch / Dan McDonald / Jeff Lyon
2	System Plan; M-62-40	Dabrisha Smith / Jeff Lyon / Dan McDonald
3	Acquisition of New Facilities; M-90-00; M-47-00	Janet Diediker / Jeff Lyon / Dan McDonald
4	Supplemental Treatment and Part B Permit Applications; M-62-00, -20, -30, -45	Steve Pfaff / Jeff Lyon / Dan McDonald
5	242-A Evaporator Status	Ron Koll / Jeff Lyon
6	SST Integrity Assurance; M-45-91	Jeremy Johnson/ Michelle Hendrickson
7	In Tank Characterization and Summary	Billie Mauss / Michael Barnes
9	Tank Operations Contract (TOC) Overview	Dan Knight / Jeff Lyon
14	Single-Shell Tank Corrective Action; M-45, -50, -60	Chris Kemp / Jeff Lyon
16	Single-Shell Retrieval and Closure Program TPA Milestones Status; M-45-00 series, - Tank in Appendix H Status - Tank Retrievals with Individual Milestones	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
19	WTP Overall TPA Summary and Milestone Status; M-62-01	Delmar Noyes / Dan McDonald

Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2013</b>				
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	1/31/2013	1/31/2013	Completed
M-045-91F-T01	Provide Report of the Liquid Leak Rate Assessments	1/31/2013		Missed
M-045-21	Submit Sampling and Analysis Plan for 241-TX Tank Farm	3/31/2013		On Schedule
M-045-91D-T01	Provide Report on the Concrete Dome Samples from Tank C-107 Plug	5/31/2013		On Schedule
M-045-91F-T03	Provide Report on Testing for Ionic Conductivity of SSTs	5/31/2013	05/02/2012	Completed
M-045-91F-T02	Provide Report of Liner Failures for SSTs	7/31/2013		To Be Missed
M-062-01AA	Submit Semi-Annual TPA Project Compliance Report	7/31/2013		On Schedule
M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	7/31/2013		To Be Missed
M-045-91E	Provide SST Farms Dome Deflection Surveys Every Two Years	9/30/2013		On Schedule
M-045-91G-T03	Provide AOR Final Doc. for SSTs on 1,000,000 Gallon Tanks	9/30/2013		To Be Missed
<b>Fiscal Year 2014</b>				
M-045-91G-T04	Provide AOR Final Doc. for SSTs on 55,000 Gallon Tanks	10/31/2013		To Be Missed
M-062-40C	Select a Minimum of Three Scenario's for the System Plan	10/31/2013		On Schedule
M-045-91F	Provide Summary Conclusions Report on Leak Integrity	12/31/2013		To Be Missed
M-045-91G	Provide Summary Conclusions Report of AOR for SSTs	04/30/2014		To Be Missed
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 TankA-106 or alt	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

## System Plan

**M-062-40B, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2011, Status: Completed 10/24/2011 via DOE-ORP/ECY joint signature letter 11-TPD-087.**

**M-062-40C, Select a minimum of three scenarios that will be analyzed in the system plan, Due: 10/31/2013, Status: On Schedule**

**M-062-40D, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2014, 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: 4/30/2015, Status: On Schedule**

### Significant Past Accomplishments:

DOE/ORP submitted the River Protection Project System Plan, Revision 6, with a joint Ecology signature to EPA on October 24, 2011.

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

ORP and WRPS plan to meet with Ecology in March 2013 to provide the status on various recommendations made in regards to several model planning tools in the 2009 "External Technical Review for Evaluation of System Level Modeling and Simulation Tools in Support of Hanford Site Liquid Waste Process." Please see issues below.

Various circumstances have occurred in which no new scenarios have been selected for System Plan 6 Addendum.

ORP and Ecology will jointly begin defining the System Plan 7 scenarios in the July-August 2013 time frame. The defined scenarios milestone (M-062-40C) is due October 31, 2013.

### Issues:

In the October 23, 2012 TPA Project Managers meeting Dan Mc Donald, Ecology, informed ORP that system plan development for FY 14 could not move forward until ORP had read and responded to the comments in the headquarters document, "External Technical Review for Evaluation of System Level Modeling and Simulation Tools in Support of Hanford Site Liquid Waste Process." Ecology has asked for a meeting with ORP and WRPS as soon as they have read the document and are able to brief on where they think they are going with comment response development.

## Acquisition of New Facilities

**M-090-11, Complete the Negotiation of No More Than Two Canister Storage Facility Construction Interim Milestones, Due: 12/31/12, Status: Completed on 11/19/12.** TPA Change Control Form M-90-12-02, signed by ORP and Ecology on 11/19/12, created new interim milestone, M-090-13, 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-090-13, Submit CD-1 for Interim Hanford Storage Project and TPA Change Request for CD-2 to Ecology, Due: 09/30/14, Status: On Schedule.**

**M-090-00, Acquire/modify facilities for storage of IHLW, Due: 12/31/2019, Status: On Schedule**

**M-047-06, Complete negotiation of no more than two interim milestones governing work necessary to support completion of M-047-00, Due: 06/30/12, Status: Completed on 11/19/12 (note this was initially Missed).** Change Control Form M-47- 12-02, that creates a new interim milestone, M-047-07, 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-047-07, Submit CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to Ecology, Due 09/30/14, Status: On Schedule.**

**M-047-00, Complete Work Necessary to provide facilities for management of secondary waste from the WTP, Due: 12/31/2022, Status: On Schedule**

### Significant Past Accomplishments:

On November 15, 2012, Ecology and ORP met and agreed on wording that met the requirements of both M-047-06 and M-090-11. 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 completion of milestones M-047-06 and M-090-11.

### Significant Planned Actions in the Next Six 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 2nd LAW, Due: 10/31/2014, Status: On Schedule.**

**M-062-45ZZ, Negotiate a one-time supplemental treatment selection, Due: 4/30/2015, 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: 4/30/2015, Status: On Schedule.**

**M-062-31-T01, Complete final design and submit RCRA Part B permit mod request, Due: 4/30/2016, Status: On schedule**

**M-062-32-T01, Start construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2018, Status: On schedule**

**M-062-33-T01, Complete construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2021, Status: On schedule**

**M-062-45XX, No later than 12/31/2021, 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: 12/31/2021, Status: On Schedule**

**M-062-34-T01, Complete hot commissioning of supplemental vitrification treatment facility and/or WTP enhancements, Due: 12/30/2022, Status: On schedule**

**M-062-21, Annually, submit data that demonstrates operation of the WTP, Due: 2/28/2023, Status: On Schedule**

**M-062-00, Complete Pretreatment Processing and Vitrification of HLW and LAW Tank Wastes, Due: 12/31/2047, Status: On Schedule**

### Significant Past Accomplishments:

None

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

None

### Issues:

At the January TPA PMM meeting, ORP stated DOE and Ecology are currently in discussions to move out the due dates for M-062-40ZZ and M-062-45ZZ (current due dates 10/31/2014 and 4/30/2015, respectively).

## 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 FY2010 through FY2015 depicted below has been updated based on ORP-11242, River Protection Project Plan, Revision 6, and ongoing schedule integration efforts.

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY10	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.
FY10	10-02	AW-106	AW-106	Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY11	NA	NA	NA	No campaign conducted in FY11 due to ongoing 242-A and Tank Farm facility life extension and ARRA funded upgrades.
FY12	NA	NA	NA	No campaign conducted in FY12 due to ongoing 242-A and Tank Farm facility upgrades and revision to the 242-A Documented Safety Analysis (DSA).
FY13	13-01	AP-107	AP-107	Estimated start early August 2013. May require two (2) passes to achieve waste volume reduction.
FY13	13-02	AW-106	AW-106	Estimated start late August 2013.
FY14	14-01	AN-106 AZ-102 AW-106	AP-107	Estimated start March 2014. Two (2) passes required.
FY15	15-01	AY-101 AZ-102	AP-107	Estimated start March 2015. Three (3) passes required.
FY15	15-02	AY-101	AP-107	Estimated start August 2015. Four (4) passes required.

## SST Integrity Assurance

**M-045-91F-T01, Provide to Ecology as a HFFACO secondary document a report evaluating the applicability to Hanford SSTs of the liquid leak rate assessments of sludge and salt-cake from the Savannah River Site, Due: 1/31/2013, Status: Missed. See issues below.**

**M-045-91D-T01, Provide Ecology a report containing the results and interpretation of testing, and analysis performed on the concrete dome samples obtained from the Tank C-107 plug, Due: 5/31/2013, Status: On schedule.**

**M-045-91F-T03, Provide to Ecology, as a HFFACO secondary document a report assessing the feasibility of testing for ionic conductivity between the inside and outside of SSTs, Due: 5/31/2013, Status: Complete 05/02/2012. (ORP letter 12-TF-0009)**

**M-045-91F-T02, Provide to Ecology as a HFFACO 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: 7/31/2013, Status: To Be Missed. See issues below.**

**M-045-91F-T04, provide to Ecology, as a HFFACO secondary document, a report on the 100-series single-shell tanks which have been or will be identified as having leaked in RPP-32681, Rev 0, Due: 7/31/2013, Status: To Be Missed. See issues below.**

**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: 9/30/2013, Status: To Be Missed. See issues below.**

**M-045-91E, Provide to Ecology a compilation of the Single-Shell Tank farms dome deflection surveys every two years, beginning 9/30/2013, Due: 9/30/2013, 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: 10/31/2013, Status: To Be Missed. See issues below.**

**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 -T04, Due: 12/31/2013, Status: To Be Missed. See issues below.**

**M-045-91G, Provide a Summary Conclusions Report of Structural Analysis of Record (AOR) for SSTs, Due: 4/30/2014, Status: To Be Missed. See issues below.**

**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 alternate tank, Due: 9/30/2014, 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 milestones to date, Due: 7/31/2015, Status: On schedule.**

**M-045-91I, Provide to Ecology an 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: 9/30/2018, Status: On schedule.**

**Significant Past Accomplishments:**

- Work has resumed in the areas of SST structural analysis, sidewall coring, analysis of rebar from C-107, and SST leak cause and location analysis.

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

- Conclude discussion with Ecology regarding “To Be Missed” target dates and interim milestone impacts and submit the agreed-upon TPA Change Package for approval.
- Complete analysis of rebar from C-107 and complete M-045-91D-T01.

**Issues:**

- FY2012 and FY2013 funding constraints have impacted M-045-91 scheduled work. ORP has met with Ecology to discuss impacts on individual milestones and targets dates for FY2013 and beyond per the TPA Section 12.0 Change Process. Ecology’s initial comments on a draft TPA Change Request have been incorporated, and ORP has provided this updated draft to Ecology for review. After Ecology completes this review, ORP will then submit a final, signed TPA Change Request.

## **In Tank Characterization and Summary**

For the period from January 1 – January 31, 2013:

**Accomplishments:**

- Completed RPP-PLAN-51499, Rev. 1, Tank 241-SY-102 Grab Sampling and Analysis Plan for Waste Chemistry Control
- Completed RPP-PLAN-53192, Rev. 1, Tank 241-AN-101 Grab Sampling and Analysis Plan after Completion of Tank 241-C-104 Hard Heel Retrieval
- Completed RPP-PLAN-54233, Rev. 0, Tank 241-AN-101 Grab Sampling and Analysis Plan at Tank 241-C-101 Mid-Retrieval
- Completed RPP-PLAN-44844, Rev. 2, Sampling and Analysis Plan for Waste Solids in Tank 241-C-104 To Support Tank Closure
- Completed RPP-RPT-54017, Rev. 0, Derivation of Best-Basis Inventory for Tank 241-AP-102 as of October 1, 2012
- Completed RPP-RPT-50313, Rev. 1, Derivation of Best-Basis Inventory for Tank 241-AP-101 as of October 1, 2012
- Completed RPP-RPT-44049, Rev. 6, Derivation of Best-Basis Inventory for Tank 241-AZ-102 as of October 1, 2012

- Completed RPP-RPT-43498, Rev. 3, Derivation of Best-Basis Inventory for Tank 241-AP-105 as of October 1, 2012
- Completed RPP-RPT-48639, Rev. 5, Derivation of Best-Basis Inventory for Tank 241-AP-104 as of October 1, 2012
- Completed RPP-RPT-46686, Rev. 3, Derivation of Best-Basis Inventory for Tank 241-AW-106 as of October 1, 2012
- Completed RPP-RPT-46616, Rev. 4, Derivation of Best-Basis Inventory for Tank 241-C-104 as of October 1, 2012
- Completed RPP-RPT-48745, Rev. 3, Derivation of Best-Basis Inventory for Tank 241-C-107 as of October 1, 2012
- Completed RPP-RPT-44814, Rev. 9, Derivation of Best-Basis Inventory for Tank 241-AN-101 as of October 1, 2012
- Completed RPP-RPT-43992, Rev. 6, Derivation of Best-Basis Inventory for Tank 241-AN-106 as of October 1, 2012
- Completed RPP-RPT-51343, Rev. 2, Derivation of Best-Basis Inventory for Tank 241-C-109 as of October 1, 2012
- RPP-RPT-54104, Rev. 0, Final Report for Tank 241-AN-106 2012 Grab Samples in support of Chemical Adjustment and Waste Compatibility

**Planned Action within the next Six Months:**

- Tank Sampling
  - Tank 241-C-104 Off Riser Sampling System (ORSS) sampling for closure is currently scheduled for February 2013.
  - Tank 241-SY-102 grab sampling for chemistry control is currently scheduled for February 2013.
  - Tank 241-AN-101 grab sampling for chemistry control (C-101 mid-retrieval) is currently scheduled for February 2013.
  - Tank 241-AN-106 grab sampling for chemistry control (C-107 100% retrieval) is currently scheduled for March 2013.
  - Tank 241-C-109 ORSS sampling for closure is currently scheduled for March 2013.
  - Tank 241-AN-101 grab sampling for chemistry control (C-101 100% retrieval) is currently scheduled for February 2013.
  - Tank 241-AN-102 grab sampling for chemistry control is currently scheduled for April/May 2013.
- BBI Updates:
  - The tanks identified for updates in FY13 Quarter 2 are still being approved by ORP. The BBI updates will be issued in April 2013.
- Data Quality Objectives (DQO)
  - A DQO on a Solubility Model is due to be released in April 2013.

**Issues:**

None.

## TANK OPERATIONS CONTRACT (TOC) OVERVIEW

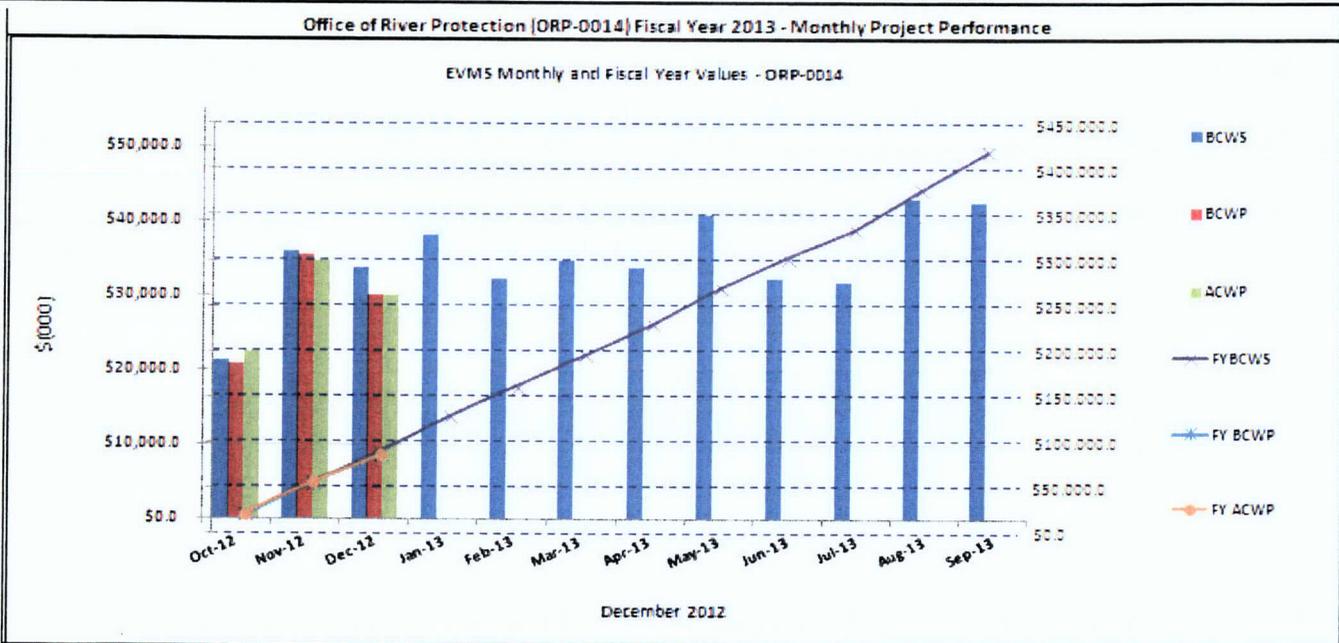
### Project Performance

The earned value performance reporting reflects the format, Work Breakdown Structure (WBS) reporting levels, and variance thresholds as agreed to with the Tank Farms Operations Contractor (TOC) for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing Tri-Party Agreement Milestones.

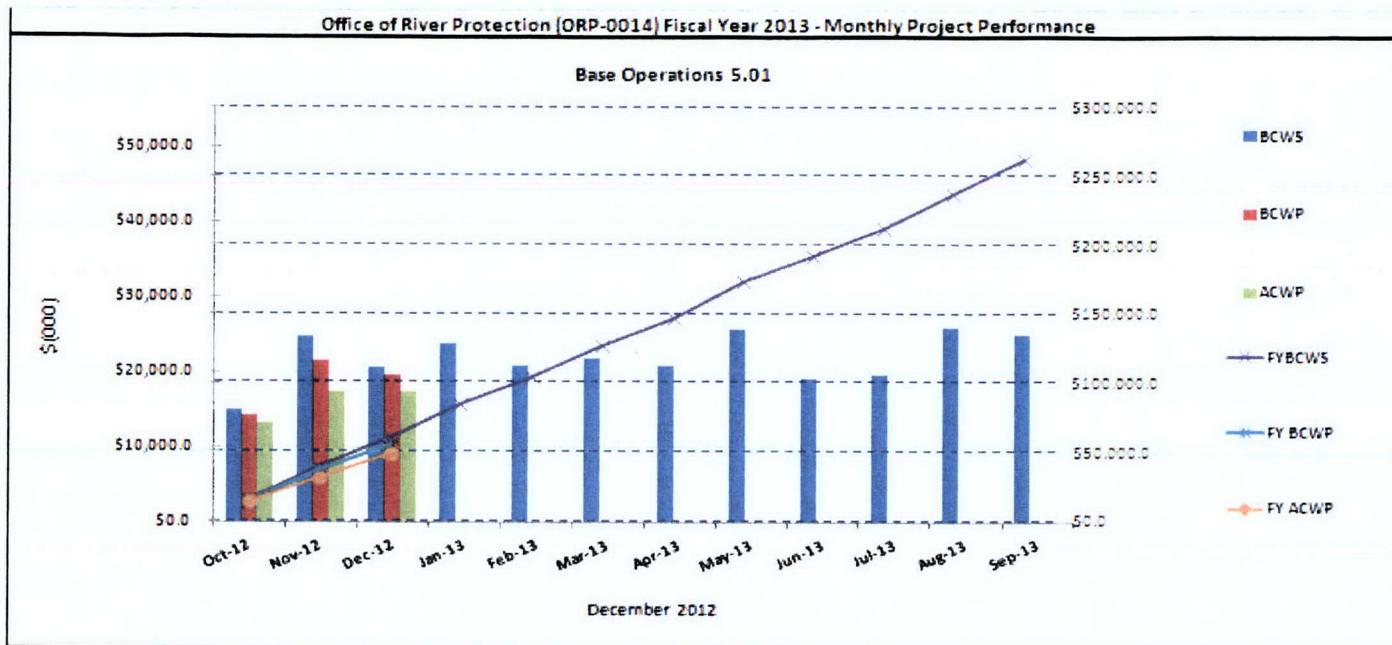
As of December 31, 2012, Washington River Protection Solutions LLC (WRPS) worked 6,061,210 hours (630 days) without a Lost Time Workday Injury and 28,081 hours (3 days) without a Recordable case. There were no Days Away, Restricted, or Transferred (DART) cases and one Recordable case in December.

WRPS Project Performance - (\$k)										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	33,795.0	30,044.9	29,940.1	(3,750.1)	104.8	0.89	1.00			
FYTD	91,056.8	86,275.9	87,098.1	(4,780.9)	(822.2)	0.95	0.99	420,271.2	397,118.6	23,152.6
CTD	1,695,156.8	1,685,152.1	1,612,243.8	(10,004.7)	72,908.3	0.99	1.05	6,997,663.6	6,907,663.7	89,999.9

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 Month	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			0.00		\$129,236.3			0.00	
Feb-13	\$32,248.7			0.00		\$161,485.0			0.00	
Mar-13	\$34,599.7			0.00		\$196,084.7			0.00	
Apr-13	\$33,773.8			0.00		\$229,858.5			0.00	
May-13	\$40,892.1			0.00		\$270,750.6			0.00	
Jun-13	\$32,288.5			0.00		\$303,039.1			0.00	
Jul-13	\$31,800.4			0.00		\$334,839.5			0.00	
Aug-13	\$42,997.4			0.00		\$377,836.9			0.00	
Sep-13	\$42,434.3			0.00		\$420,271.2			0.00	
CTD	\$1,695,156.8	\$1,685,152.1	\$1,612,243.8	0.99	1.05					



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-12	\$14,882.7	\$14,170.4	\$13,207.0	0.95	1.07	\$14,882.7	\$14,170.4	\$13,207.0	0.95	1.07
Nov-12	\$24,586.3	\$21,630.8	\$17,422.8	0.88	1.24	\$39,469.0	\$35,801.2	\$30,629.8	0.91	1.17
Dec-12	\$20,440.9	\$19,491.2	\$17,422.8	0.95	1.12	\$59,909.9	\$55,292.4	\$48,052.6	0.92	1.15
Jan-13	\$23,738.1			0.00		\$83,648.0			0.00	
Feb-13	\$20,902.8			0.00		\$104,550.8			0.00	
Mar-13	\$21,758.8			0.00		\$126,309.6			0.00	
Apr-13	\$20,728.3			0.00		\$147,037.9			0.00	
May-13	\$25,607.5			0.00		\$172,645.4			0.00	
Jun-13	\$19,077.3			0.00		\$191,722.7			0.00	
Jul-13	\$19,634.2			0.00		\$211,356.9			0.00	
Aug-13	\$25,939.3			0.00		\$237,296.2			0.00	
Sep-13	\$24,820.9			0.00		\$262,117.1			0.00	
<b>CTD</b>	<b>\$1,095,253.8</b>	<b>\$1,088,156.5</b>	<b>\$1,051,451.3</b>	<b>0.99</b>	<b>1.03</b>					

**Base Operations**

Schedule Variance (\$3,751K):

The unfavorable schedule variance is primarily due to:

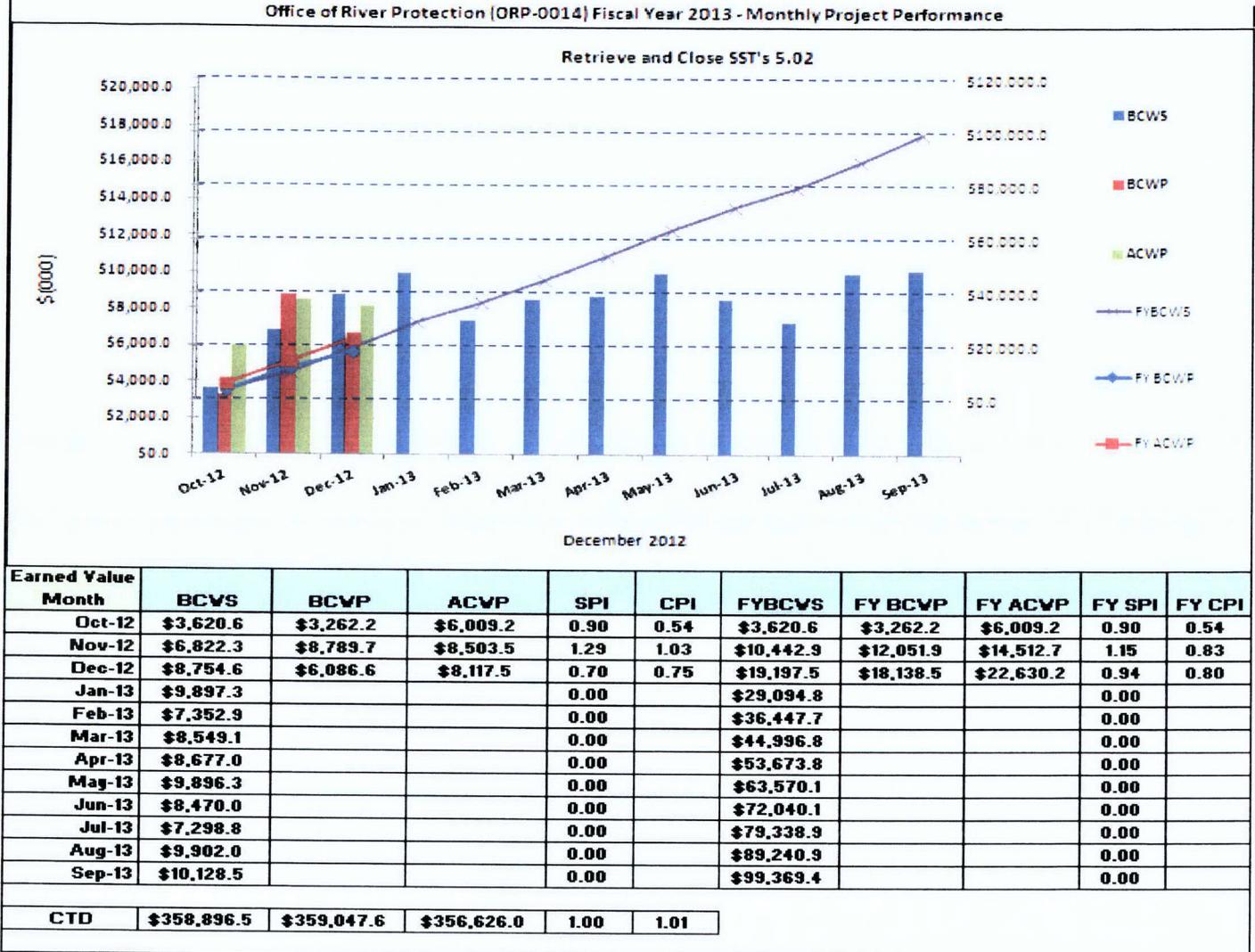
- DST Infrastructure Upgrades; completing installation of the AW, AN, SY, and AY/AZ ventilation flow test ports 2 months early by using an improved strategy to install ductwork saddles and performing a hot tap.
- 242-A Evaporator Operation and Maintenance; late release of design media impacting DSA implementation upgrades construction due to delays in finalizing the design basis safety requirements specifications.

Cost Variance \$105K:

The favorable cost variance is primarily due to:

- Base Operations Farms A/AX/AY/AZ, The CM favorable CV within the level-of-effort accounts is primarily due to labor resources charging out to Tank Farm Projects in support of the DST near-term extent-of-conditions workscope, specifically the 241-AY-102 biweekly annulus video and the work package preparation and fieldwork for 241-AY-101, 241-AZ-101, and 241-AZ-102 annulus videos.

Office of River Protection (ORP-0014) Fiscal Year 2013 - Monthly Project Performance



### Single-Shell Tanks

#### Cost Variance (853K):

The unfavorable cost variance is primarily due to:

- Costs incurred for idle operation crews due to delays in declaring startup and readiness and C-101 retrieval operations.
- Installation and startup and readiness activities of the SST C-102 waste retrieval system.

The favorable CV was partially offset by:

- Cost savings by modifying the existing Fold-Track system instead of procuring a new hard heel removal unit for the next technology to be used in SST C-110.

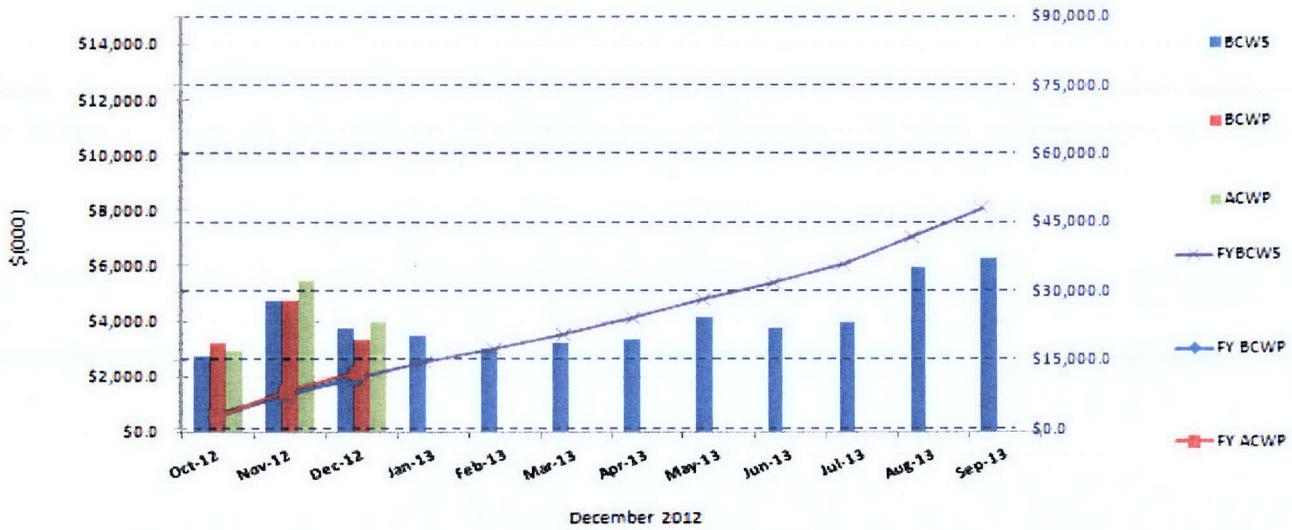
#### Schedule Variance (\$497K):

The unfavorable schedule variance is primarily due to:

- Weather delays and resource availability issues that prevented the completion of AN-106 pump removal in December.
- One week of schedule delay was incurred because key resources for the pump removal were working on S-Complex HIHTL removals.
- High winds and associated cleanup work in mid-December resulted in another 1-week delay.

Office of River Protection [ORP-0014] Fiscal Year 2013 - Monthly Project Performance

WFD / Treatment Planning / DST Retrieval / Closure 5.03



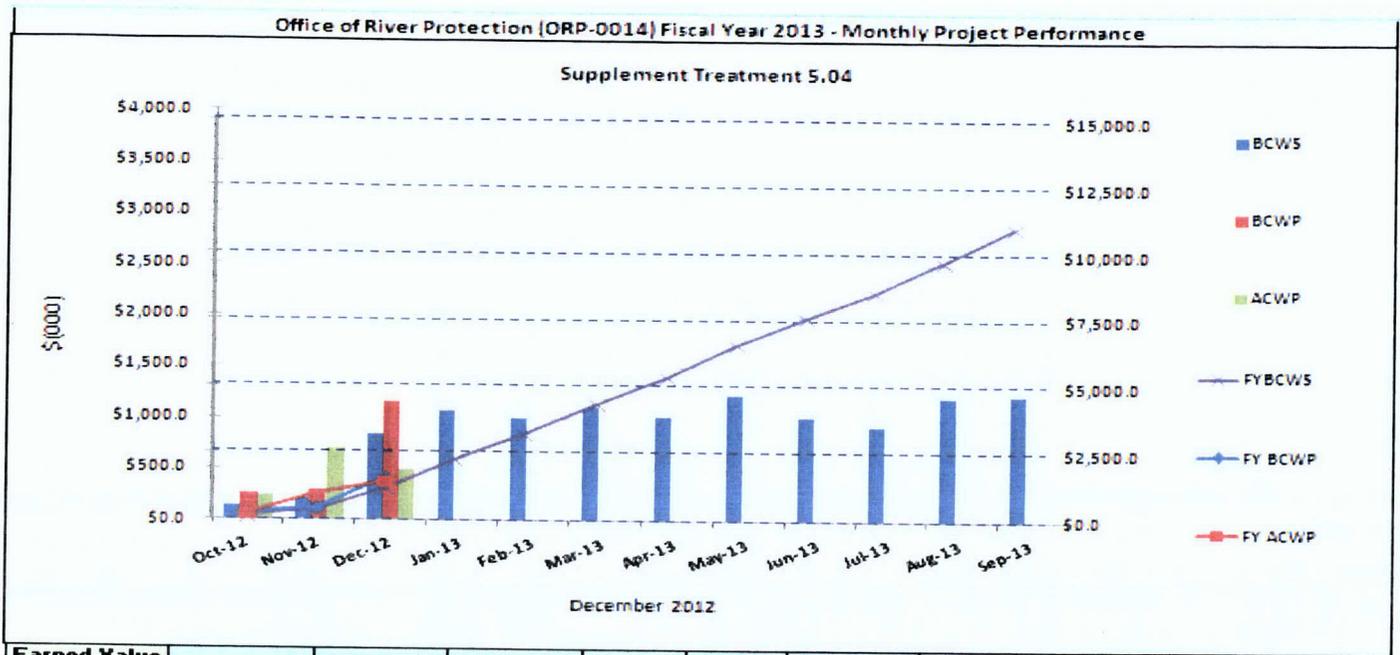
Earned Value Month	BCWS	BCVP	ACVP	SPI	CPI	FYBCWS	FY BCVP	FY ACVP	FY SPI	FY CPI
Oct-12	\$2,710.6	\$3,212.7	\$2,921.1	1.19	1.10	\$2,710.6	\$3,212.7	\$2,921.1	1.19	1.10
Nov-12	\$4,729.6	\$4,729.6	\$5,435.7	1.00	0.87	\$7,440.2	\$7,942.3	\$8,356.8	1.07	0.95
Dec-12	\$3,764.2	\$3,316.5	\$3,912.1	0.88	0.85	\$11,204.4	\$11,258.8	\$12,268.9	1.00	0.92
Jan-13	\$3,476.4			0.00		\$14,680.8			0.00	
Feb-13	\$2,991.4			0.00		\$17,672.2			0.00	
Mar-13	\$3,183.1			0.00		\$20,855.3			0.00	
Apr-13	\$3,354.2			0.00		\$24,209.5			0.00	
May-13	\$4,153.5			0.00		\$28,363.0			0.00	
Jun-13	\$3,727.7			0.00		\$32,090.7			0.00	
Jul-13	\$3,945.8			0.00		\$36,036.5			0.00	
Aug-13	\$5,937.2			0.00		\$41,973.7			0.00	
Sep-13	\$6,262.4			0.00		\$48,236.1			0.00	
<b>CTD</b>	<b>\$224,641.2</b>	<b>\$221,308.3</b>	<b>\$190,096.4</b>	<b>0.99</b>	<b>1.16</b>					

**Waste Feed Delivery/Treatment/DST Retrieval Closure**

**Schedule Variance (\$797K):**

The unfavorable schedule variance is primarily due to:

- WFD System Performance due to late completion of the scaled performance testing on the small-scale mixing demonstration platform because of equipment failures and having to repeat testing due to simulant mixing issues. Consequently, the start of the solids accumulation testing was delayed, compounded by the update of the analytic procedures due to changing the testing location to save on costs.
- AY/AZ Farm Infrastructure, The CM unfavorable SV is due to direction from DOE-ORP to suspend Waste Feed Delivery Systems projects as a result of the leak in AY-102. RPP-13-026, "ORP Direction for WFD Project FY13 Workslope," is being prepared to defer the FY 2013 workslope into FY 2014.
- AY-102 Tech Maturation Mixing/Sampling Demonstration, The CM unfavorable SV is due to DOE-ORP letter 12-CPM-0167, "Contract No. DE-AC27-08RV14800 – Direction to Stop Safety Significant (SS) Design Development on Tank AY-102 in Tank Upgrades." RPP-13-026, "ORP Direction for WFD Project FY13 Workslope," will be implemented to defer this scope to FY 2014.



Earned Value Month	BCWS	BCVP	ACVP	SPI	CPI	FYBCWS	FY BCVP	FY ACVP	FY SPI	FY CPI
Oct-12	\$136.6	\$266.4	\$245.6	1.95	1.08	\$136.6	\$266.4	\$245.6	1.95	1.08
Nov-12	\$212.9	\$169.2	\$705.1	0.79	0.24	\$349.5	\$435.6	\$950.7	1.25	0.46
Dec-12	\$835.7	\$1,150.7	\$487.7	1.38	2.36	\$1,185.2	\$1,586.3	\$1,438.4	1.34	1.10
Jan-13	\$1,067.8			0.00		\$2,253.0			0.00	
Feb-13	\$1,001.5			0.00		\$3,254.5			0.00	
Mar-13	\$1,108.8			0.00		\$4,363.3			0.00	
Apr-13	\$1,014.3			0.00		\$5,377.6			0.00	
May-13	\$1,234.8			0.00		\$6,612.4			0.00	
Jun-13	\$1,013.5			0.00		\$7,625.9			0.00	
Jul-13	\$921.5			0.00		\$8,547.4			0.00	
Aug-13	\$1,218.8			0.00		\$9,766.2			0.00	
Sep-13	\$1,222.5			0.00		\$10,988.7			0.00	
<b>CTD</b>	<b>\$16,365.3</b>	<b>\$16,639.6</b>	<b>\$14,070.0</b>	<b>1.02</b>	<b>1.18</b>					

**Supplemental Treatment**

Schedule Variance \$315K:

The favorable schedule variance is primarily due to:

- Immobilization – Maturation, is due to the ability to correct unclaimed past performance, as BCR RPP-13-019, “Deletions/Modifications from Estimate Reviews,” was implemented this month.

## **WBS 5.2 Retrieve and Close Single Shell Tanks**

**M-045-20, Submit Interim Measure Investigation Work Plan to Ecology, Due: 12/31/12, Status: Completed on 12/06/12.** ORP will submit to Ecology for review and approval an interim measures investigation work plan for to vadose zone characterization at 241-TX Farm and 241-U Farm, and soil desiccation/contaminant removal proof-of-principal test at 241-SX Farm. The work plan will also be submitted with a TPA Change Package to establish milestone due date for M-045-22 and target dates for submittal of three secondary documents, see M-045-22-T01, -T02, and -T03. Added per TPA change package M-45-12-04. ORP submitted this work plan and a draft TPA change package for dates for M-045-22 and its targets on 12/06/12 via letter 12-TF-0054. Ecology responded via 12-NWP-190 authorizing ORP to begin field work while Ecology completed their review of the Work Plan. Ecology provided comments on the Work Plan in the January 2013 TPA Project Managers' meeting. Comments have been resolved and revision to the Work Plan is underway.

**M-045-21, Submit for Review and Approval a Sampling and Analysis Plan to Ecology for Soil Samples for 241-TX Tank Farm Investigation, Due: 03/31/2013, Status: On Schedule.** Added per TPA change package M-45-12-04.

**M-045-22, Review M-045-22-T03 Report and Determine Path Forward, Due: TBD based on M-045-20 TPA Change Package Submittal, 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 remaining work in Milestone M-045-92 should be modified. Added per TPA change package M-45-12-04. ORP submitted a draft TPA change package for dates for M-045-22 and its targets on 12/06/12 via letter 12-TF-0054.

**M-045-22-T01, Submit Results of Vadose Zone Characterization of 241-TX to Ecology, Due: TBD based on M-045-20 TPA Change Package Submittal, Status: On Schedule.**

**M-045-22-T02, Submit Results of Vadose Zone Characterization of 241-U to Ecology, Due: TBD based on M-045-20 TPA Change Package Submittal, Status: On Schedule.**

**M-045-22-T03, Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology, Due: TBD based on M-045-20 TPA Change Package Submittal, Status: On Schedule.**

**M-045-56I, Complete Implementation of Agreed to Interim Measures, Due: 07/31/13, Status: On Schedule**

**M-045-59, Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST WMAS (pending the CMS report, milestone M-45-58, and implementation of other interim corrective measures), Due: TBD, 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: 12/31/2014, Status: At Risk. 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: 06/30/2015, Status: At Risk. 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: 09/30/2017, 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: 10/31/15, 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: 06/30/15, 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:**

- Provided the interim measures investigation Work Plan for M-045-20 and draft TPA change package for M-045-22 and its targets via ORP letter 12-TF-0054 on 12/06/12.
- Automated data collection systems for T-Farm and TY Farm interim barrier monitoring continue gathering data.
- Ground penetrating radar was performed in C farm near the C-200s to support direct push work.
- Ground penetrating radar was performed in U farm, TX farm, and south of SX farm to support interim measures investigation described in the M-045-20 work plan.
- Direct push field work was initiated south of SX farm under the M-045-20 work plan.

#### **Significant Planned Actions in the Next Six Months:**

- Revise the TY Interim Surface Barrier Monitoring Plan, per approved TPA Change Notice 2012-09.
- Provide the Sample Analysis Plan for 241-TX Farm for M-045-21.
- Initiate direct push field work in TX farm under the M-045-20 work plan.
- Initiate electrical resistivity field work in U farm under the M-045-20 work plan.
- Perform direct push/electrical resistivity field work near the C-200 tanks per the WMA C Phase 2 RFI/CMS Work Plan.

## SST Retrieval and Closure Program

**M-045-82, Submit complete permit mod requests for Tiers 1, 2, & 3 of the SST, Due: 9/30/2015 Status: At Risk. Please see Issues.**

**M-045-84, Complete negotiations of TPA interim MS for closure of second WMA, Due: 1/31/2017, Status: On Schedule**

**M-045-83, Complete the closure of WMA C, Due: 6/30/2019, Status: On Schedule**

**M-045-85, Complete negotiations of TPA interim MS for closure of remaining WMAs, Due: 1/31/2022, Status: On Schedule**

**M-045-70, Complete waste retrieval from all remaining SSTs, Due: 12/31/2040, Status: On Schedule**

**M-045-00, Complete Closure of all Single Shell Tank Farms, Due: 1/31/2043, Status: On Schedule**

**M-045-86, Submit retrieval data report to Ecology for 19 tanks retrieved, Due: TBD (12 months after retrieval certification), Status: On Schedule**

### Significant Past Accomplishments:

- Completed post-retrieval sampling, analysis and reporting of results for tank C-108 in support of the M-045-86 retrieval data report.
- See discussions above and related discussions in Consent Decree report.

### Significant Planned Activities in the Next Six Months:

- Perform post-retrieval logging of drywells near C-108 in support of the M-045-86 retrieval data report.
- See discussions above and related discussions in Consent Decree report.

### Issues:

The WMA-C performance assessment is not funded currently in fiscal year 2013. ORP needs to restart the WMA-C performance assessment by March 31, 2013 or milestone M-45-82 will be missed, and will require that other existing data be utilized for M-45-61 and M-45-62 to keep the their existing milestone dates. ORP is working to identify funding to restart the WMA-C performance assessment on or before March 31, 2013.

### Tank Waste Retrieval Work Plan (TWRWP) Status

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 7	Complete	MRS (per 10/7/10 agreement, to be Modified Sluicing)	High-Pressure Water with ERSS	-
C-102	RPP-22393, Rev. 6A	In Process	Modified Sluicing	High-Pressure Water with ERSS	-
C-104	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution	-
C-105	RPP-22520, Rev. 7	Complete	MARS-V	MARS-High Pressure Water	-
C-107	RPP-22393, Rev. 6A	Complete	MARS-S	MARS-High Pressure Water	-
C-108	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Dissolution	-
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	None	-
C-112	RPP-22393, Rev. 6A	In process	Modified Sluicing	Chemical Dissolution	-

#### Significant Accomplishments

C-110 TWRWP modification 2012-13 approved.

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

Work with Ecology on updates to TWRWPs RPP-22393, RPP-22520 and RPP-37739 for tanks C-105, C-111, and C-112.

#### Issues:

None.

## **Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria Tank 241-C-106**

### **Significant Past Accomplishments:**

None

### **Significant Planned Activities in the Next Six Months:**

Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A Request for Additional Information (RAI) 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: 9/30/22 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 09/30/2022.

**M-045-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**, Due: 9/30/22, Status: On schedule. Updated with tank A-103 and due date of 9/30/22 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: 9/30/22, Status: On Schedule. Updated with A-103 tank and due date of 9/30/22 per M-45-11-04 Change Package.

### **Significant Past Accomplishments:**

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

### **Significant Planned Activities in the Next Six Months and Issues:**

None

### **Tank 241-S-112**

**M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**, Due: TBD (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: TBD 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.

### **Significant Planned Activities in the Next Six Months or Issues:**

None.

**WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) PROJECT**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
M-062-01Z	Submit Semi-Annual TPA Project Compliance Report	01/31/2013	Complete
M-062-01AA	Submit Semi-Annual TPA Project Compliance Report	7/31/2013	On Schedule

**\*SEE THE FEBRUARY 2013 ORP CONSENT DECREE 08-5085-FVS  
MONTHLY SUMMARY REPORT FOR WTP FACILITY-SPECIFIC  
INFORMATION**



FINAL

Office of River Protection  
Consent Decree 08-5085-FVS

Monthly Summary Report

February 2013

**Office of River Protection****Consent Decree 08-5085-FVS  
Monthly Summary Report****February 2013 (Project EVMS reflects December 2012)**

<b>Page</b>	<b>Topic</b>	<b>Leads</b>
1	Statistics / Status	James Lynch / Dan McDonald / Jeff Lyon
2	SST Retrieval and Closure – D-00B-01, -02, -03, -04	Chris Kemp / Jeff Lyon
3	Tank Waste Retrieval Work Plan (TWRWP) Status – Consent Decree Appendix C	Chris Kemp / Jeff Lyon
4	SST Retrieval Monthly and Fiscal Year EVMS Data	Dan Knight / Jeff Lyon
5	WTP - Immobilization Plant Project – D-00A-06, D-00A-17, D-00A-01	Delmar Noyes / Dan McDonald
7	WTP Pretreatment (PT) Facility – D-00A-18, -19, -13, -14, -15, 16	Wahed Abdul / Dan McDonald
10	High-Level Waste (HLW) Facility – D-00A-20, -21, 02, 03	Wahed Abdul / Dan McDonald
13	Low-Activity Waste (LAW) Facility – D-00A-07, -08, -09	Jeff Bruggeman / Dan McDonald
15	Balance of Facilities (BOF) – D-00A-12	Jason Young / Dan McDonald
17	Analytical Laboratory (LAB) – D-00A-005	

Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2013</b>				
D-00C-02X	Submit to Ecology & State of Oregon Monthly Summary Report	10/31/2012	10/31/2012	Completed
D-00C-02Y	Submit to Ecology & State of Oregon Monthly Summary Report	11/30/2012	11/20/2012	Completed
D-00C-02Z	Submit to Ecology & State of Oregon Monthly Summary Report	12/31/2012	12/26/2012	Completed
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 EL. 37' in HLW Fac.	12/31/2012	10/24/2012	Completed
D-00C-01F	Submit to Ecology & State of Oregon Semi-Annual Report	01/31/2013	01/31/2013	Completed
D-00C-02AA	Submit to Ecology & State of Oregon Monthly Summary Report	01/31/2013	01/24/2013	Completed
D-00C-02AB	Submit to Ecology & State of Oregon Monthly Summary Report	02/28/2013		On-going
**D-00C-02AC	Submit to Ecology & State of Oregon Monthly Summary Report	03/31/2013		On-going
** Future Monthly Reports will be added as necessary to maintain a two-months ahead activity.				
D-00C-01G	Submit to Ecology & State of Oregon Semi-Annual Report	07/31/2013		On-going
D-006-00-A1	Provide State of Oregon Notice of Meetings	09/25/2013		On-going
<b>Fiscal Year 2014</b>				
D-006-00-A	Meet Approximately Every 3 Years to Review Requirements of CD	10/25/2013		On-going
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	08/22/2011	Completed

## Reports

**D-00C-01 series, Submit to Ecology & State of Oregon Semi-Annual Report, Due: Semi-Annually – January 31<sup>st</sup> and July 31<sup>st</sup> of each year. Status: On-going**

**D-00C-02 series, Submit to Ecology & State of Oregon Monthly Summary Report Documenting Progress During Previous Month, Due: End of Each Month, Status: On-going**

## SST Retrieval Program

**D-00B-01, Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C, Due:** 9/30/2014, Status: On-going

**D-00B-01A thru J, Submit Tank Retrieval Complete Certification, Due:** TBD

Pursuant to the requirement in Section IV-B-5 of the Consent Decree (CD), DOE must submit to Ecology a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix "C", Part 1, of the CD.

**D-00B-02, Advise Ecology of the 9 SSTs from which Waste Will Be Retrieved by 2022, Due:** 9/30/2014, Status: Completed on 08/24/2011.

**D-00B-03, Initiate Startup of Retrieval in At Least 5 of 9 SSTs in D-00B-02, Due:** 12/31/2017, Status: On-going

**D-00B-04, Complete Retrieval of Tank Wastes from the 9 SSTs in D-00B-02, Due:** 9/30/2022, Status: On-going

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

### Significant Past Accomplishments:

1. Completed start up of the modified sluicing system in C-101 using ERSS.
2. Continued field activities associated with repair of the C-107 high pressure spray water nozzle leak.
3. Continued training for the Fold-Track at the Cold Test Facility for future use at C-110 SST.

### Significant Planned Activities in the Next Six Months:

1. Continued field activities for replacement of failed pump for AN-106.
2. Begin start-up of the modified sluicing system in C-102.
3. Complete installation of the MARS-V in C-105.
4. Complete C-107 hard heel retrieval.
5. Submit retrieval certificates of completion for C-104, C-108, and C-109 to Ecology.
6. Begin start-up of hard heel retrieval in C-110 using the Fold-Track.

### Issues:

1. DOE-ORP has delayed dome cut activities using the water/abrasive cutting technique for tank C-105 and has experienced delays to the planned schedule while resolution of an issue through the Differing Professional Opinion process DOE O 442.2 is completed. DOE-ORP and its Contractor are evaluating the schedule impacts and possible mitigation actions for alternative cutting techniques.

2. DOE-ORP and its Contractor are reviewing whether the amount of sludge being stored in the tanks causes additional hazards due to gas generation and the potential that gas could be released within the headspace of the tank safely. While this issue is under review, controls have been put in place to limit the amount of sludge being added to the DSTs during C Farm retrieval. The Contractor is conducting analysis of the best way to release the limitations on retrieval and provide safe storage for sludge in the DSTs.

### Tank Waste Retrieval Work Plan (TWRWP) Status

Tank	TWRWP	Expected Revisions	Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 7	Complete	MRS (per 10/7/10 agreement, to be Modified Sluicing)	High-Pressure Water with ERSS	-
C-102	RPP-22393, Rev. 6A	In Process	Modified Sluicing	High-Pressure Water with ERSS	-
C-104	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution	-
C-105	RPP-22520, Rev. 7	Complete	MARS-V	MARS-High Pressure Water	-
C-107	RPP-22393, Rev. 6A	Complete	MARS-S	MARS-High Pressure Water	-
C-108	RPP-22393, Rev. 6A	Complete	Modified Sluicing	Chemical Dissolution	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Dissolution	-
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	None	-
C-112	RPP-22393, Rev. 6A	In process	Modified Sluicing	Chemical Dissolution	-

#### Significant Accomplishments

C-110 TWRWP modification 2012-13 approved.

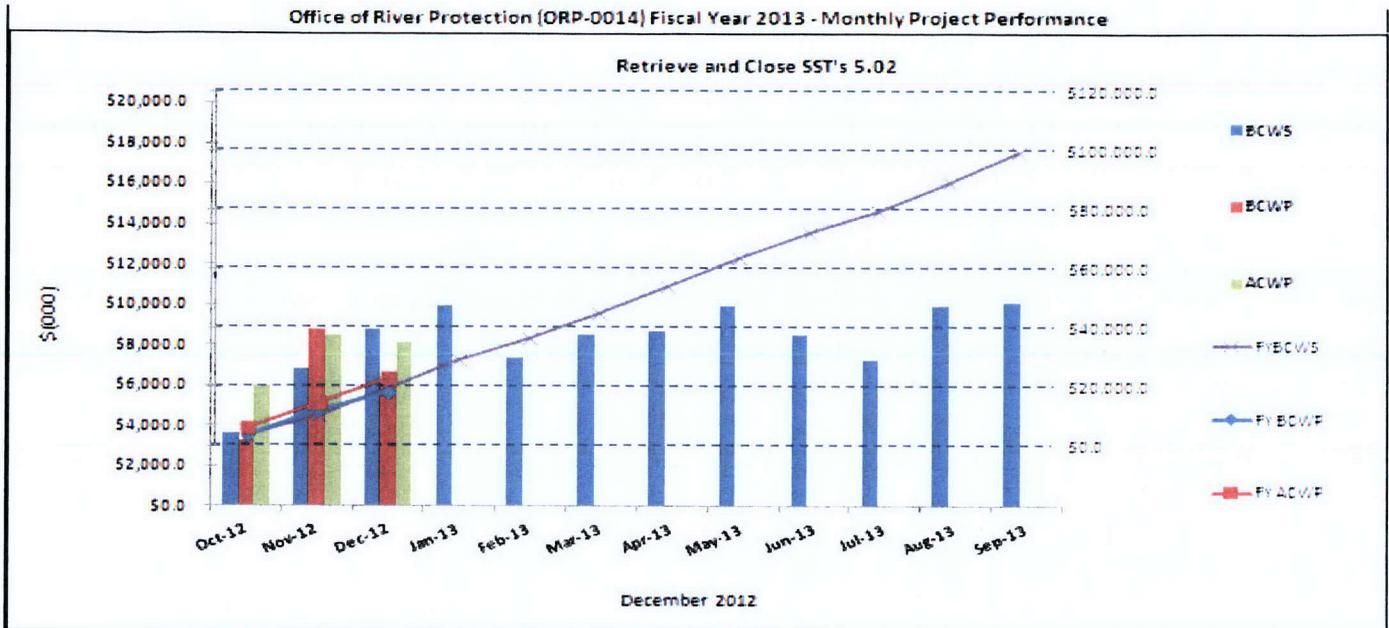
#### Significant Planned Activities in the Next 6 Months:

Work with Ecology on updates to TWRWPs RPP-22393, RPP-22520 and RPP-37739 for tanks C-105, C-111, and C-112.

#### Issues:

None.

### SST Retrieval Monthly and Fiscal Year EVMS Data



Earned Value Month	BCWS	BCVP	ACVP	SPI	CPI	FYBCVS	FY BCVP	FY ACVP	FY SPI	FY CPI
Oct-12	\$3,620.6	\$3,262.2	\$6,009.2	0.90	0.54	\$3,620.6	\$3,262.2	\$6,009.2	0.90	0.54
Nov-12	\$6,822.3	\$8,789.7	\$8,503.5	1.29	1.03	\$10,442.9	\$12,051.9	\$14,512.7	1.15	0.83
Dec-12	\$8,754.6	\$6,086.6	\$8,117.5	0.70	0.75	\$19,197.5	\$18,138.5	\$22,630.2	0.94	0.80
Jan-13	\$9,897.3			0.00		\$29,094.8			0.00	
Feb-13	\$7,352.9			0.00		\$36,447.7			0.00	
Mar-13	\$8,549.1			0.00		\$44,996.8			0.00	
Apr-13	\$8,677.0			0.00		\$53,673.8			0.00	
May-13	\$9,896.3			0.00		\$63,570.1			0.00	
Jun-13	\$8,470.0			0.00		\$72,040.1			0.00	
Jul-13	\$7,298.8			0.00		\$79,338.9			0.00	
Aug-13	\$9,902.0			0.00		\$89,240.9			0.00	
Sep-13	\$10,128.5			0.00		\$99,369.4			0.00	
<b>CTD</b>	<b>\$358,896.5</b>	<b>\$359,047.6</b>	<b>\$356,626.0</b>	<b>1.00</b>	<b>1.01</b>					

**Single-Shell Tanks**

**Cost Variance (853K):**

The unfavorable cost variance is primarily due to:

- Costs incurred for idle operation crews due to delays in declaring startup and readiness and C-101 retrieval operations.
- Installation and startup and readiness activities of the SST C-102 waste retrieval system.

The favorable CV was partially offset by:

- Cost savings by modifying the existing Fold-Track system instead of procuring a new hard heel removal unit for the next technology to be used in SST C-110.

**Schedule Variance (\$497K):**

The unfavorable schedule variance is primarily due to:

- Weather delays and resource availability issues that prevented the completion of AN-106 pump removal in December.
- One week of schedule delay was incurred because key resources for the pump removal were working on S-Complex HIHTL removals.
- High winds and associated cleanup work in mid-December resulted in another 1-week delay.

## Waste Treatment and Immobilization Plant (WTP) Project

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

The project currently employs approximately 2205 Full-Time Equivalent (FTE) contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel, including 608 craft, 477 non-manual, and 126 subcontractor personnel FTEs working at the WTP construction site (all facilities). As of December 2012, the Low-Activity Waste, Analytical Laboratory and Balance of Facilities were 60 percent complete combined, design and engineering was 75 percent complete, procurement was 80 percent complete, construction was 67 percent complete, and startup and commissioning was 9 percent complete. In October 2012, the Baseline Change Proposal that implemented the LBL replan was incorporated into the project over target baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. The percent complete values for PT and HLW are frozen at September rates due to the implementation of the 2 year interim work plan.

The cumulative-to-date WTP Project schedule variance in December 2012 was a positive \$1.5 M. The cumulative-to-date WTP Project cost variance was a negative \$63.5 M. The most recent contribution to the cumulative-to date schedule variance is due to early plant equipment deliveries and construction activities. The most recent contribution to the cumulative-to-date cost variance is the carryover negative cost variances from the LBL replan.

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

### Significant Past Accomplishments:

- Issued 12 off-gas isometric drawings for the LAW Secondary Offgas/Vessel Vent Process (LVP) system (LAW)
- Issued request for quote for the ammonia safety valves and vaporizer root valves (BOF)
- Completed installation of facility control valves (LAB)

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

- Complete the HPAV HGR rate calculations (PT)
- Award contract(s) for prototype design/fabrication for HEPA filter redesign (HLW)
- Complete installation of melter power supplies (LAW)
- Complete installation of Auto Sampling (ASX system) (LAW)
- Complete construction of the WTP Cooling Tower (BOF)
- Complete construction of WTP Chiller Compressor Plant (BOF)
- Completion of the high purity gas system layup (LAB)

**Issues:**

\* Technical issues relevant to the PTF and HLW facilities include, among others, pulse jet mixers, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues.

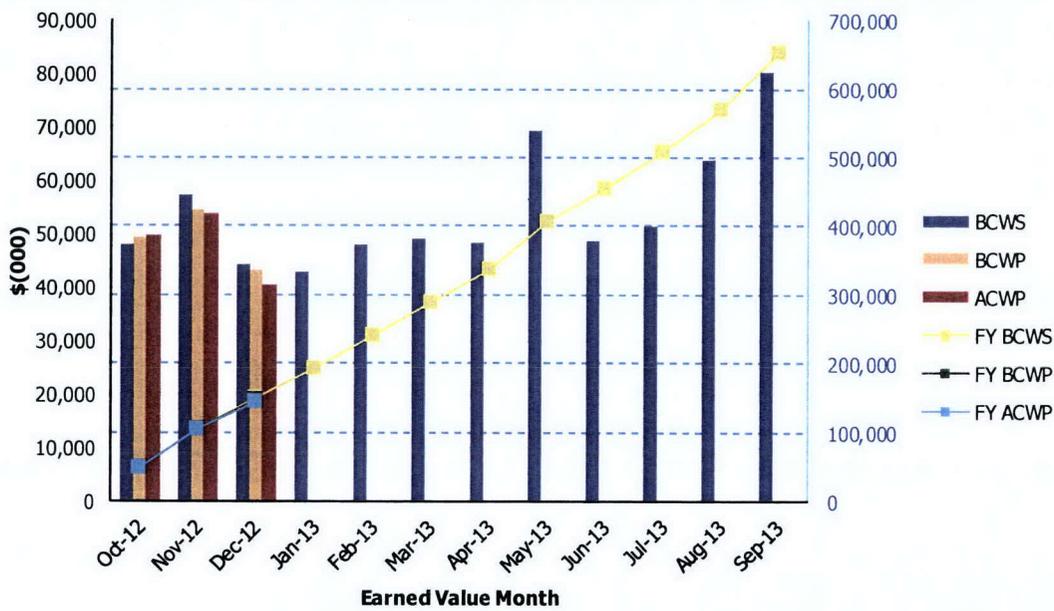
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2013 Earned Value Data

Data as of: December 2012

**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	\$42,828					\$192,415				
Feb 2013	\$47,838					\$240,253				
Mar 2013	\$48,918					\$289,171				
Apr 2013	\$48,297					\$337,468				
May 2013	\$69,312					\$406,780				
Jun 2013	\$48,818					\$455,598				
Jul 2013	\$51,392					\$506,990				
Aug 2013	\$63,898					\$570,888				
Sep 2013	\$80,281					\$651,169				
PTD	\$7,290,197	\$7,291,648	\$7,355,172	1.00	0.99					

**PRETREATMENT (PT) FACILITY**

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

The Pretreatment (PT) Facility will separate radioactive tank waste into High Level Waste (HLW) and Low-Activity Waste (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. Additional work-scope is required to resolve outstanding technical issues, which will impact the engineering design percent complete status and schedule for completion.

**Significant Past Accomplishments:**

The key on-going activities in PT are resolution of technical issues, hazard analyses and safety evaluations for process systems.

Due to the 2 year interim work plan construction, procurement, and production engineering is on hold, resulting in no change to the percent complete status since September.

The Design Completion Team continues to have discussions on resolution of open technical issues to ensure the design changes are required and requirements are finalized. All of the 13 committed deliverables have been released for review by DOE. Some of the key deliverables include: Full- scale test strategy, Design criteria for in-service inspection (ISI), Corrosion/erosion test strategy and Sensitivity assessment of erosion calculation.

Construction of the mixing test platform continues as part of preparations for full-scale testing. Engineering studies are being performed to determine full-scale test objectives, vessel selections, and instrument functions to support full scale testing in late 2013.

Evaluations are ongoing to understand the available redundancy in case of failures in the black cells. At the same time, available technology is being reviewed to support in-service inspection.

Engineering solutions have been developed by BNI and recommendation is to modify the Bottom Head and Bottom Head Cooling Jacket on the High Level Waste Lag Storage HLP

Vessels (HLP-VSL-0027A, HLP-VSL-0027B, and HLP-VSL-0028). Draft study has been submitted to the Design Completion Team for review.

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

- Complete the HPAV HGR rate calculations
- Determine a path forward on vessel mixing
- Independent review of potential for Criticality in Vessels
- Review of Flammable Gas Generation, Retention, and Release from sediments in vessels
- Decision process for Vessel Structural Modifications
- Develop vessel specific particle characteristics report for erosion/corrosion
- Complete HAZOP for PVP system
- Key activities for resolution of technical issues

**Issues:**

\* Technical issues relevant to the PTF and HLW facilities include, among others, pulse jet mixers, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues.

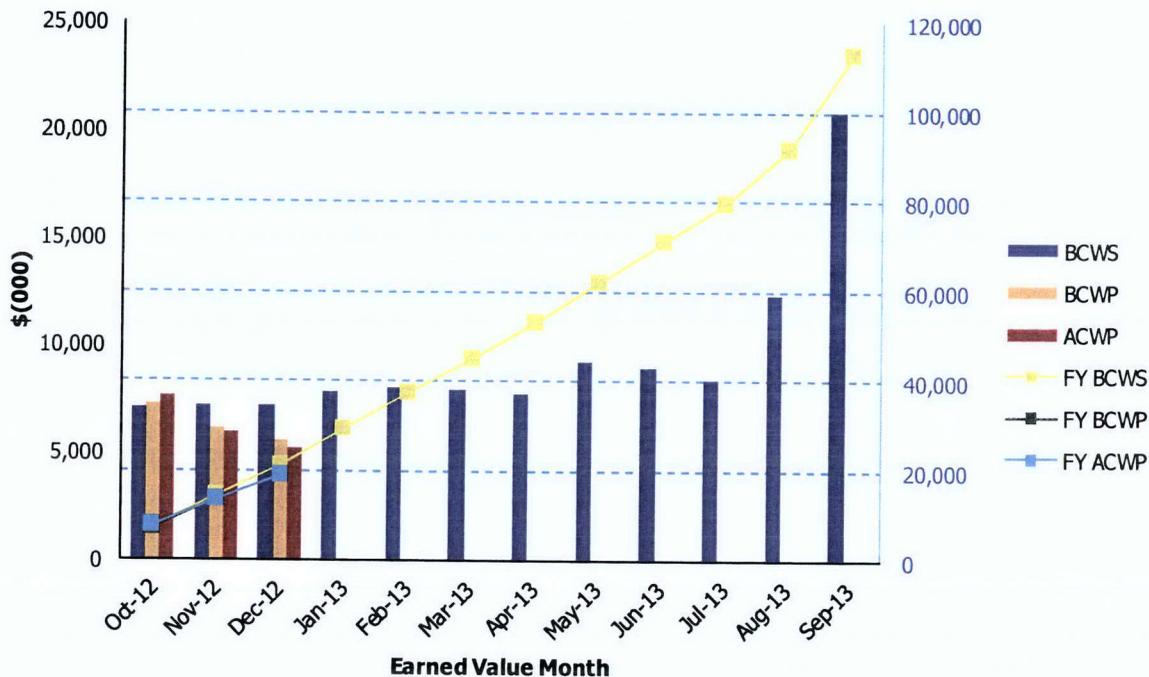
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: December 2012

**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	\$7,828					\$29,268				
Feb 2013	\$8,023					\$37,291				
Mar 2013	\$7,948					\$45,239				
Apr 2013	\$7,707					\$52,946				
May 2013	\$9,246					\$62,192				
Jun 2013	\$8,933					\$71,125				
Jul 2013	\$8,400					\$79,525				
Aug 2013	\$12,325					\$91,850				
Sep 2013	\$20,839					\$112,689				
PTD	\$1,431,907	\$1,429,484	\$1,429,331	1.00	1.00					

**HIGH-LEVEL WASTE (HLW) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
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	On-going *
D-00A-03	Start HLW Facility Cold Commissioning	6/30/2018	On-going *
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2019	On-going *

The High Level Waste (HLW) Facility will receive the separated high-level waste concentrate from the Pretreatment (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 prior to 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 is 4 percent complete.

**Significant Past Accomplishments:**

All concrete slabs at 37' elevation have been placed. Key ongoing Construction activities are: limited placement of walls at 37' elevation; installation of structure steel at 58' elevation; installation of cable tray supports and HVAC ducts at 14' elevation.

Due to the 2 year interim work plan construction, procurement, and production engineering has significantly slowed down, resulting in minimal change to the percent complete status since September.

Key ongoing Engineering and ENS activities are: support construction, procurement, Reliability Validation Process (RVP) towards resolution of level 1 findings and Preliminary Documented Safety Analysis (PDSA) update.

The Design Completion Team continues to have discussions on resolution of open technical issues to ensure the design changes are required and requirements are finalized. Most of the committed deliverables have been released for review by DOE. Some of the key deliverables include: Full- scale test strategy, Design criteria for in-service inspection (ISI), Corrosion/erosion test strategy and Sensitivity assessment of erosion calculation.

To resolve the HEPA filter issue, a schedule to procure a redesigned filter that will meet plant operating conditions has been developed. The HEPA filter test strategy is complete. Specifications for the fabrication of HEPA filter prototype and testing are issued. Once the vendors are selected, the redesigned filters will be tested and the best option selected; the successful design will then go through qualifying testing for use in WTP.

The current Plant Wash and Drain Vessel (RLD-VSL-08) will be repurposed for use in full-scale testing and a new vessel will be procured to replace it. The new RLD-VSL-08 along with the Acidic Waste Vessel (RLD-VSL-07) will be modified from the current design to incorporate changes recommended by the S-1 Team.

First phase of RVP (Wave 1) is almost complete with the findings being categorized and recorded. BNI is in the process of initiating review and analysis of the issues identified to develop path forward for resolutions. BNI has started the second phase of RVP (Wave 2) that includes review of the C5V system.

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

- Award contract(s) for prototype design/fabrication for HEPA filter redesign
- Complete RVP reviews
- Complete the first of the two Authorization Basis Amendment Requests (ABARs) to support Preliminary Documented Safety Analysis (PDSA) upgrade – focus of the first ABAR is to incorporate changes in the facility and control descriptions
- Complete review of fabrication of the Thermal Catalytic Oxidizer
- Develop plan to close all technical issues (e.g., vessel mixing, corrosion, redundancy, in-service inspection) and other issues (e.g., safety basis compliance, QA issues and design defensibility) to support ramp-up of HLW construction

**Issues:**

\* Technical issues relevant to the PTF and HLW facilities include, among others, pulse jet mixers, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues.

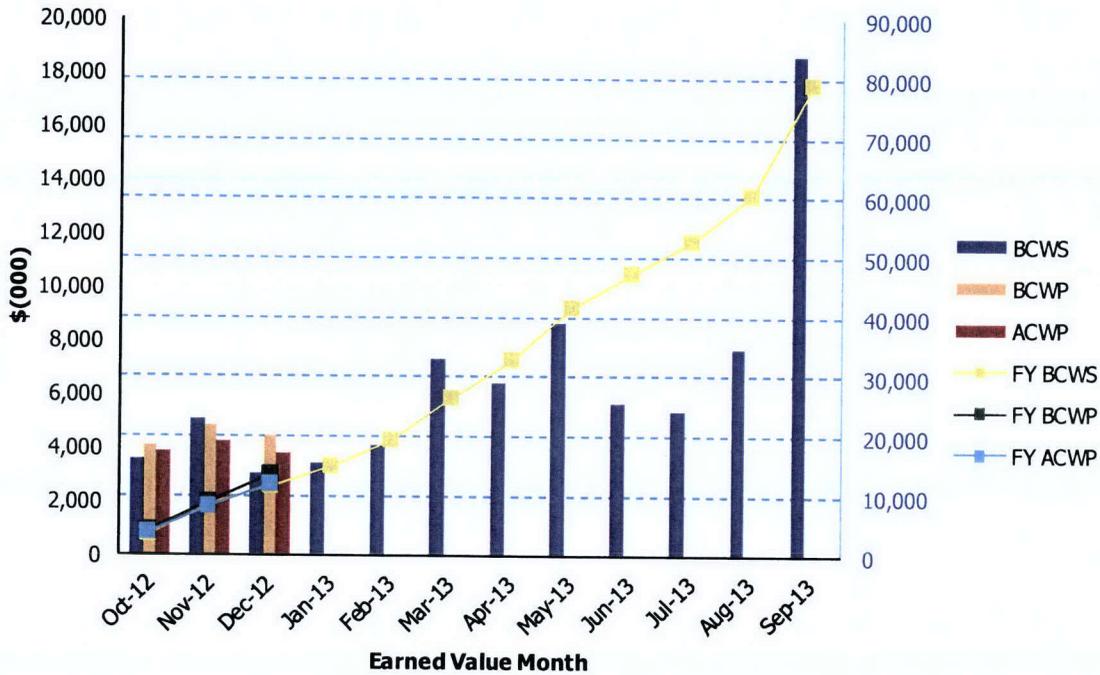
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: December 2012

**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	\$3,388					\$15,066				
Feb 2013	\$4,069					\$19,135				
Mar 2013	\$7,292					\$26,427				
Apr 2013	\$6,451					\$32,878				
May 2013	\$8,700					\$41,578				
Jun 2013	\$5,688					\$47,266				
Jul 2013	\$5,378					\$52,644				
Aug 2013	\$7,657					\$60,301				
Sep 2013	\$18,609					\$78,910				
PTD	\$933,811	\$935,582	\$934,079	1.00	1.00					

**LOW-ACTIVITY WASTE (LAW) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014	On-going
D-00A-08	Start LAW Facility Cold Commissioning	12/31/2018	On-going
D-00A-09	LAW Facility Hot Commissioning Complete	12/31/2019	On-going

The Low-Activity Waste (LAW) Facility will vitrify LAW from the Pretreatment (PT) Facility. Waste 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 on the Hanford Site in the Integrated Disposal Facility. As of December 2012, the LAW Facility is 61 percent complete overall, with engineering design 76 percent complete, procurement 84 percent complete, construction 61 percent complete, and startup and commissioning is 4 percent complete.

**Significant Past Accomplishments:**

- Issued 17 off-gas isometric drawings for the LAW Secondary Offgas/Vessel Vent Process (LVP) system
- Issued 35 control logic diagrams
- Issued 73 instrument datasheets
- Began installation of Melter #1 Refractory
- Completed mica installation on the bottom of the melter
- Completed installation of electrical conduit outside the melter bays

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

- Complete installation melter power supplies
- Complete installation of Auto Sampling (ASX) system
- Receive HEPA Pre-heaters for LVP system
- Receive TCO for LVP system
- Complete software development and testing

**Issues:**

No major issues at this time.

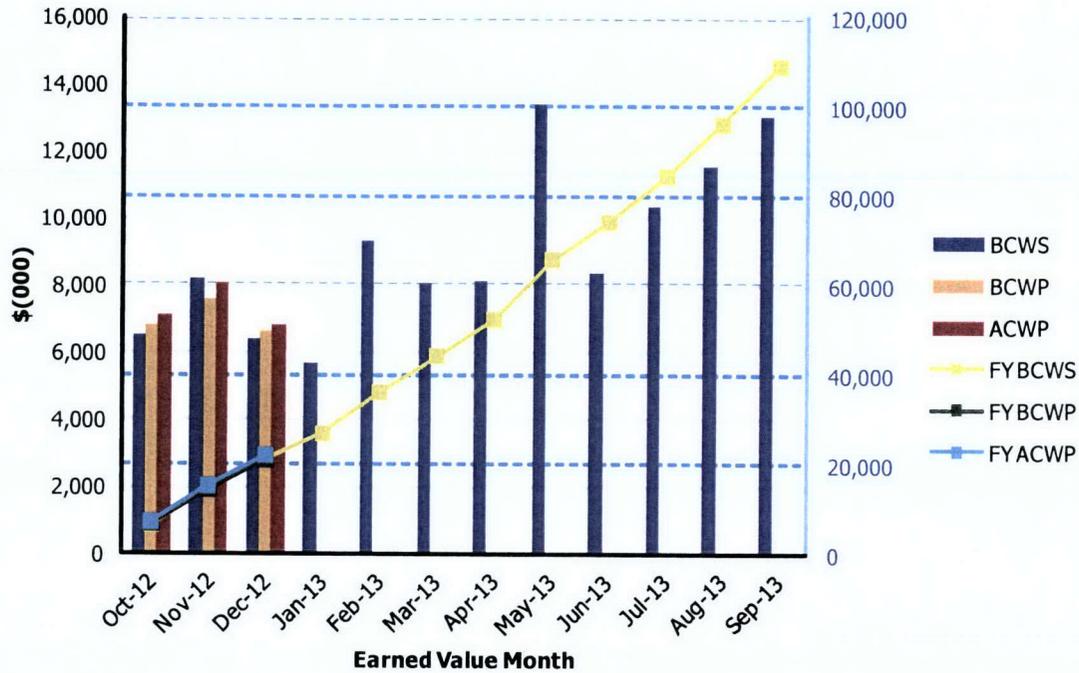
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: December 2012

**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	\$5,684					\$26,850				
Feb 2013	\$9,307					\$36,157				
Mar 2013	\$8,089					\$44,246				
Apr 2013	\$8,151					\$52,397				
May 2013	\$13,419					\$65,816				
Jun 2013	\$8,357					\$74,173				
Jul 2013	\$10,335					\$84,508				
Aug 2013	\$11,564					\$96,072				
Sep 2013	\$13,020					\$109,092				
PTD	\$714,877	\$718,026	\$770,573	1.00	0.93					

**BALANCE OF FACILITIES (BOF)**

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

The Balance of Facilities (BOF) provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. As of December 2012, the BOF is 53 percent complete overall, with engineering design 76 percent complete, procurement 67 percent complete, construction 71 percent complete, and startup and commissioning is 9 percent complete.

**Significant Past Accomplishments:**

Activities within BOF to support facility completion, and turnover to the startup organization are on-going. Each facility will be evaluated to verify the adequacy of design and readiness for operation. The first stage of this validation will occur as part of the turnover from construction to the startup organization for component level testing.

The WTP contractor continues to conduct bi-weekly meetings to support facility construction completion. These meetings focus on schedule reviews, punch list development for remaining construction activities, and startup and operations activities.

A concern has been raised about the effectiveness of the design for the cathodic protection system. BNI is designing and installing test stations to improve the understanding of the effectiveness of the system.

**Recent accomplishments for the BOF team are:**

- Issued request for quote for the ammonia safety valves and vaporizer root valves.
- Completed installation of the DC Electrical System (DCE) batteries and temperature elements in Switchgear Building 91.
- Completed mobilization to site of the metering and calibration subcontractor.
- Construction turned over to startup the Medium Voltage Electrical (MVE) system in Switchgear Building 87.

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

- Complete Construction of the WTP Chiller Compressor Plant
- Complete the component and functional testing of the low and medium voltage (LVE/MVE) and fire detection (FDE) systems in the switchgear building (bldg 87).
- Complete construction of the Glass Former Storage Facility

**Issues:**

No major issues at this time.

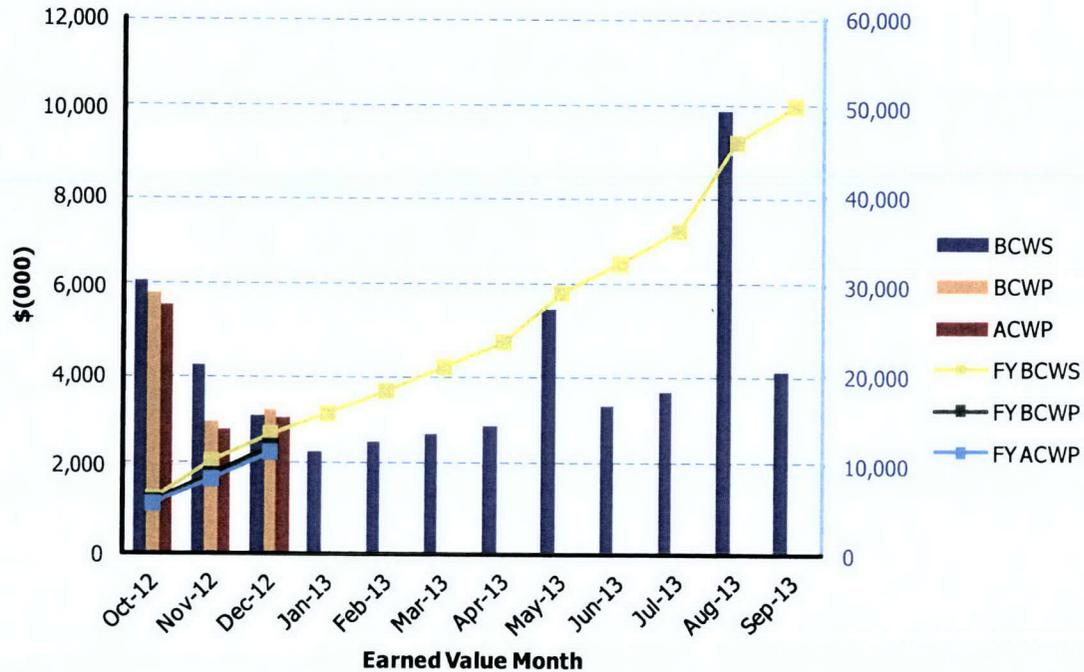
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: December 2012

**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	\$2,276					\$15,685				
Feb 2013	\$2,521					\$18,206				
Mar 2013	\$2,670					\$20,876				
Apr 2013	\$2,875					\$23,751				
May 2013	\$5,462					\$29,213				
Jun 2013	\$3,316					\$32,529				
Jul 2013	\$3,637					\$36,166				
Aug 2013	\$9,908					\$46,074				
Sep 2013	\$4,092					\$50,166				
PTD	\$289,156	\$287,573	\$285,313	0.99	1.01					

**ANALYTICAL LABORATORY**

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

The Analytical Laboratory (LAB) will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of December 2012, the LAB is 66 percent complete overall, with engineering design 73 percent complete, procurement 82 percent complete, construction 78 percent complete, and startup and commissioning is 21 percent complete.

**Significant Past Accomplishments:**

Following completion of the interim milestone "LAB Construction Substantially Complete", efforts are focused on construction completion in June 2014. Work continues on weld repair for the Radioactive Liquid Waste Disposal System (RLD) vessels and installation of Hot Cell commodities.

RLD Vessels 163 & 164 welds require significant rework.

**Recent accomplishments for the LAB team are:**

- Completed installation of facility control valves
- Completed installation of the high purity gas systems
- Started work on testing the high-purity gas system by subcontractor crews (65% complete)

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

- Completion of the high purity gas system layup
- Pulling cable for the C2 ventilation (C2V) system adjustable speed drive (ASD) equipment
- Terminating cable for the HVAC air-handling units and ASDs
- Completion and closeout of the HVAC subcontract
- Complete repairs to RLD vessels

**Issues:**

No major issues at this time.

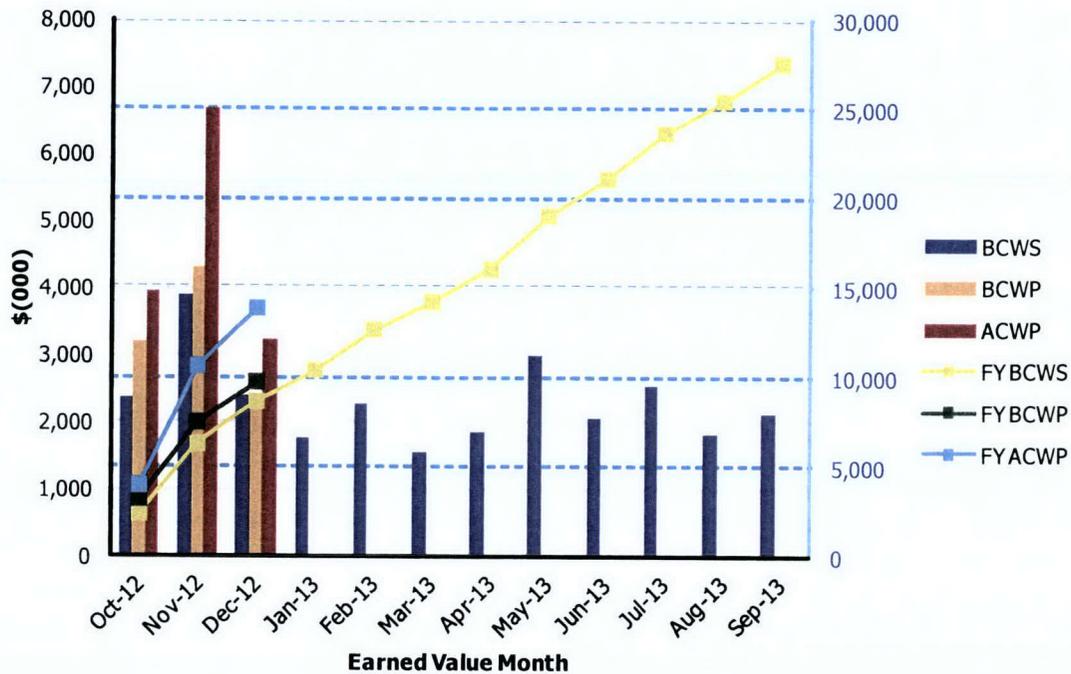
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: December 2012

**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	\$1,751					\$10,398				
Feb 2013	\$2,264					\$12,662				
Mar 2013	\$1,541					\$14,203				
Apr 2013	\$1,835					\$16,038				
May 2013	\$2,998					\$19,036				
Jun 2013	\$2,067					\$21,103				
Jul 2013	\$2,542					\$23,645				
Aug 2013	\$1,809					\$25,454				
Sep 2013	\$2,111					\$27,565				
PTD	\$214,573	\$216,814	\$237,202	1.01	0.91					

Waste Treatment Plant Project - (LBL) Percent Complete Status Through December 2012															
(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	1,175.8	718.0	61%	293.6	222.4	76%	259.4	216.8	84%	445.1	271.1	61%	177.7	7.7	4%
Analytical Lab	329.2	216.8	66%	69.7	51.0	73%	56.2	45.9	82%	134.4	105.3	78%	68.8	14.6	21%
Balance of Facilities	539.0	287.6	53%	90.5	68.5	76%	71.6	47.8	67%	223.8	158.2	71%	153.1	13.1	9%
<b>Total LBL</b>	<b>2,044.0</b>	<b>1,222.4</b>	<b>60%</b>	<b>453.8</b>	<b>341.9</b>	<b>75%</b>	<b>387.2</b>	<b>310.4</b>	<b>80%</b>	<b>803.4</b>	<b>534.6</b>	<b>67%</b>	<b>399.7</b>	<b>35.4</b>	<b>9%</b>
<b>PTHLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)</b>															
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%
Pretreatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%
Shared Services	4,726.9	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%
Total 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
<b>Total WTP</b>	<b>n/a</b>	<b>n/a</b>	<b>67%</b>	<b>n/a</b>	<b>n/a</b>	<b>87%</b>	<b>n/a</b>	<b>n/a</b>	<b>73%</b>	<b>n/a</b>	<b>n/a</b>	<b>62%</b>	<b>n/a</b>	<b>n/a</b>	<b>15%</b>

Sources: Preliminary WTP Contract Performance Report - Format 1, Data for December 2012

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 PTHLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PTHLW/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 PTHLW/SS is \$1,983M.