

**Office of River Protection  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
May 16, 2013**

Approval: Jane Hedges  
by EP Skinnarland Date: 6/13/13  
J.A. Hedges  
Ecology IAMIT Representative

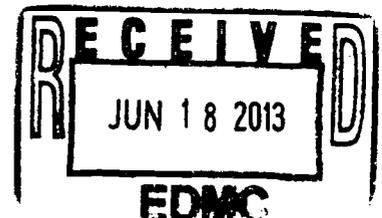
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DOE IAMIT Representative

Approval: D.A. Faulk Date: 18 Jun 2013  
EPA IAMIT Representative

Minutes Prepared by: T.W. Noland Date: 6/18/13  
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\*Attendees



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Tri-Party Agreement Quarterly Milestone Review  
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**Administrative Items/Milestone Status**

ORP provided the TPA and Consent Decree (CD) list of agreements, issues and actions that were updated during the dry run meeting held May 14, 2013. The TPA monthly report lists the milestones for fiscal years 2013, 2014 and 2015. ORP noted that TPA milestone M-045-91F-T01 was missed, and several other target milestones are to be missed. A draft change package was submitted to Ecology several months ago with revised dates for the target milestones associated with M-045-91. ORP stated that the dates were revised before sequestration (federal budget cuts) was implemented, and the target dates will be reevaluated. ORP announced that the request to reprogram funding was approved yesterday (5/15/13), and that efforts toward finalizing the draft change package should continue. ORP noted that milestones M-045-61, M-045-62 and M-045-82 are reported as to be missed since the WMA-C Performance Assessment (PA) hasn't been funded. Discussions at the project management level are being held to discuss an alternative path forward for the scope of work under M-045-61/62. Separate project management meetings will be held to discuss the scope of work under M-045-82.

ORP stated that the FY13, 14 and 15 milestones are listed in the Consent Decree (CD) monthly report, and noted that Ecology had inquired about the coordination for milestone D-006-00-A, which is to meet approximately every three years to review requirements of the CD. ORP stated that the Department of Justice (DOJ) and the state Attorney Generals will be coordinating the meeting. Ecology asked if there is a time frame for the three-year meeting. ORP responded that the end of October 2013 is the approximate time frame for the meeting, although with the current issues with funding and milestones, the time frame for the meeting would likely be later than three years.

Ecology noted that the CD milestone D-00A-05 for LAB construction substantially complete is listed as completed, and that Ecology has not yet determined that the milestone has been met. It was noted that the CD report is a single-party report reflecting ORP's view only, whereas the TPA report is a joint report that reflects both ORP and Ecology's views.

Ecology stated that during a recent financial briefing for FY14, the CD milestone D-00A-07 for the LAW facility construction substantially complete was declared to be in jeopardy. Ecology requested that the CD monthly summary be updated to reflect the milestone is in jeopardy. ORP responded that the challenges to meeting near-term milestones are being analyzed. ORP stated that notification about a milestone being in jeopardy will be done through the proper CD channels, and no decision has been made regarding the LAW milestone. ORP indicated that an internal discussion will be held to further assess the capability of meeting the LAW milestone. Ecology noted that different signals are being received in various forums, not only on the LAW milestone but on other milestones as well, and asked that consistent information be provided.

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

ORP reported that the System Plan information was updated to reflect that a meeting was held with Ecology on April 30, 2013. The significant actions planned are the joint planning meetings for System Plan 7 in the July/August 2013 time frame. ORP reiterated Ecology's concern that realistic scenarios need to be identified for the System Plan.

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

ORP reported that funding is anticipated in 2014 for M-090-13 and M-047-07, and the milestones are on track to meet the September 30, 2014 due date. The work scope includes submittal to Ecology of Critical Decision 1 (CD-1) and a TPA change request for CD-2 for both milestones.

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

M-062-40ZZ/M-062-45ZZ - ORP stated that a draft change package was submitted to Ecology in February 2013, and comments were recently received from Ecology. The change package proposes moving the dates out for these two milestones. ORP indicated that a response to Ecology's comments will be provided within a week.

**242-A Evaporator Status**

ORP reported that the first campaign is estimated to start in late September 2013, and two passes will be done to achieve the waste volume reduction (WVR). ORP noted that a specific start date is not provided due to sequestration and the ongoing Documented Safety Analysis (DSA) equipment upgrades. The contractor is experiencing some long-lead time for receipt of some of the equipment. The second campaign, or what is being called the back-to-back No. 2 campaign, will begin approximately three to four weeks after the completion of the first campaign. ORP noted that the three new operators needed at the facility to run the campaigns are being trained.

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

ORP noted that the impacts from sequestration on target milestones were discussed at the beginning of today's meeting. ORP stated that M-045-91D-T01 is on schedule to submit the report to Ecology by May 31, 2013. ORP added that the testing of the concrete and rebar samples from the C-107 dome plug supports the structural analysis of record that is being conducted with PNNL. ORP noted that the structural analysis results were above design specification.

ORP asked Ecology about the status of the draft change package associated with M-045-91. Ecology responded that a hold was put on its legal review of the change package until ORP decided on a path forward for the proposed dates, and that typically reviews are not conducted on a document that ORP will not be signing. ORP indicated that the review should proceed since

reprogramming has been approved, and there should not be any major deltas with the proposed dates. ORP noted that some of the dates in the change package won't be the same. ORP agreed to resubmit the draft change package to Ecology.

ORP noted that EPA has requested receipt of the transmittal letters only and to not include the full reports. All of the reports are submitted to the Administrative Record (AR) and are available for viewing via letter number. Ecology requested one hard copy and a CD copy of the reports.

### **In Tank Characterization and Summary**

ORP reported that two samples have been taken this quarter. A grab sample was taken from tank AY-101, and an offriser sample was taken from C-109. ORP noted that an action was taken to provide Ecology with the DQOs for the solubility model and the C-112 hard heel dissolution. ORP stated that there are two more actions, which are to notify Ecology when the retrieval data report (RDR) sampling is being conducted, and that Ecology and WRPS will discuss the C-110 RDR sampling and methodology.

Ecology initiated a discussion regarding management of the chemistry in the tanks that are leaking or could possibly leak, and the sampling program of double-shell tanks (DSTs). Ecology noted that the Hanford Advisory Board (HAB) has submitted draft advice to ORP on the DST system regarding concerns about the chemistry of the surface of tank AY-102 and how the leak developed. Ecology asked if ORP has considered additional sampling of any of the tanks to determine what effects the chemistry are having or what is different around the surface of the DSTs that may be causing the leak. Ecology requested a briefing on ORP's chemistry management program. ORP stated that an action could be established to provide Ecology a briefing on the chemistry control program and how it ties into the sampling for chemistry control. Ecology suggested expanding the action to include discussion about alternatives to the chemistry control program that Ecology has addressed. ORP noted that the corrosion probes are layered throughout the entire tank, and the probes are tested for loss of material. Ecology expressed uncertainty about whether the coupons would address the issue, stating that was another reason for a briefing on the program.

Ecology raised the issue of intrusion in the single-shell tanks (SSTs), and asked if the chemistry program considers the impacts of intrusion into the tank waste and what effect it might have on liner corrosion, etc. Ecology expressed concern about intrusion and the change in chemistry as a result of intrusion. Ecology requested that the briefing on the chemistry control program also include discussion regarding intrusion, and noted that the concern regarding intrusion will continue to be an ongoing discussion for some time. ORP stated that a holistic look has not been done in all 149 SSTs to see what intrusion may do, and results of the inspections will likely be the basis for how to proceed. ORP noted that it is just now in the process of getting footage from the videos that are being done for intrusion, and that will be an ongoing effort. If intrusion is noted in the videos, an evaluation will be done on the effects it may have on a specific tank. ORP added that intrusion is part of the discussions with Ecology for the SST leak detection monitoring document. ORP summarized the two actions, which are to provide a briefing to Ecology on the chemistry control process for the DST systems, including the AY-102 surface and

the layers within AY-102, and to provide a briefing on the SST intrusion and its potential effect on the liner and other considerations. ORP indicated that monthly discussions could be held to update Ecology on the DST chemistry control and SST intrusion.

Ecology raised a concern regarding integration, noting that a representative from integration was not present for today's meeting and a representative needs to be present. Ecology stated that the President's budget request speaks to the idea of continuing to plan for direct feed LAW. Ecology asked what plans are in place and what the discussions are in terms of integrating tank farms' needs with WTP in order for tank farms to be able to support direct feed LAW. Ecology noted that direct feed LAW cannot occur without support from tank farms, and expressed concern about the lack of integration. ORP responded that a new Secretary of Energy is slated for confirmation as soon as today, and the Secretary will be having discussions with the governor and be making decisions at the DOE-HQ level before ORP can go forward.

Ecology stated that before funding is sought from Congress or contracts are changed, the Department of Ecology and the state of Washington need to agree to a change in process for starting up the WTP. Ecology added that over the last year or so, there have been a variety of technical discussions, and apparently ORP has given informal direction to the contractors on changing the process at WTP and tank farms without consulting Ecology. ORP responded that no direction has been given to WTP or tank farms contractors to do any modifications, with the exception of not precluding any action that would prevent developing a business case for direct feed LAW. Ecology stated that the budget language talks about direct feed LAW as the path forward, and continuing planning for direct feed LAW at WTP and essentially continuing planning for care and maintenance only at the Pretreatment Facility (PT) and High Level Waste (HLW). Ecology noted it had not been consulted regarding those budget requests. Ecology asked if the business case analysis will ever be provided. ORP responded that the business case for direct feed LAW is in legal review up to the DOJ level, and when the new Secretary of Energy is on board, that discussion will take place with the Secretary, the governor, the DOJ and the AGs as a starting point. Ecology summarized the status is that the technical conversations that need to occur at the local level in order to move forward will not occur until the legal and political discussions take place. ORP indicated that that is a possibility. Ecology expressed concern with how long it is taking for decisions to be made, which delays getting work done and understanding how long the tanks will last. ORP responded that it is constrained by the CD process, which is being driven by the board at EM-1. ORP noted that it shares Ecology's concern, and the parties would have to give the new Secretary of Energy time to weigh in on the process.

Ecology brought up another discussion point, stating that when Governor Gregoire left office, a statement was made that a plan would be in place for moving forward with the WTP and associated issues, which did not happen. It was also reported that when Secretary of Energy Chu left office, a plan would be in place, which did not happen. Ecology asked where the plan was. ORP responded that as part of a review with Secretary Chu, a plan was presented. The decision was made that the new secretary would be making the final determination on the plan. ORP stated that it is supposed to brief the new secretary the first week in office, which would most likely be next week. Following that would be the starting point of the conversations with the

Secretary, the state and DOE. Ecology asked if a status could be provided once the new secretary has been briefed. ORP responded that the status could be provided after approval from the DOJ.

Ecology asked if the CD milestones are still considered on schedule. ORP responded that there has been notification of serious risk, and if milestones are deemed in jeopardy, Ecology will be notified through the proper channels. Ecology asked if the new secretary will decide the path forward for the CD milestones that are currently in place. ORP responded that the Secretary will at least weigh in on any decision that is made. Ecology asked if a reasonable time frame for a decision on the path forward is within two months. ORP indicated that the time frame shouldn't be that long.

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

ORP reported that as of March 2013, the contractor maintained over 6.9 million safe work hours, with one recordable case in March. The schedule performance index (SPI) for the current month, fiscal year and contract-to-date were maintained between .90 and .99. ORP stated that the negative schedule variance for retrieval was in part due to the delay with the C-105 dome cut and the MARS vacuum installation while the differing professional opinion (DPO) was being resolved. The DPO has been resolved, allowing the C-105 dome cut and MARS vacuum installation to move forward. Ecology inquired about the C-107 and C-109 sampling delays due to resource availability. ORP stated that there is one sampling crew, and it was moved to conduct some DST work. ORP noted that the C-109 sampling was completed last week, although it was planned to be done in early April 2013.

ORP stated that for waste feed delivery (WFD), per Ecology's request, additional information was included for the variances. ORP noted that the AY/AZ ventilation system upgrade design has been completed, but direction has been given to the contractor to stop any further work on the AY/AZ ventilation system upgrades. Ecology asked about the AY-102 mixing demonstration design. ORP responded that it is the 400 hp mixer pumps that will do the mixing within the million gallon tanks. ORP stated that the plan had been to go from the small-scale mixers into a full-scale mixing demonstration within AY-102, which will not be done. Ecology expressed the concern that if direct feed LAW occurs, the work being done in WFD would have to be changed or redone. Ecology added that ORP needs to have a plan for going forward in the most efficient and effective way to complete the work to prepare for what will be needed for feed delivery at WTP. ORP agreed with Ecology's comments.

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

M-045-61/62 - ORP reported that meetings were held with Ecology on March 14, 2013 and May 13, 2013, and a meeting is scheduled later today to continue negotiations on ORP's proposal for a path forward for these two milestones.

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

SST Retrieval and Closure Program TPA - ORP stated that M-045-82 is to be missed due to the

lack of funding for the WMA-C Performance Assessment (PA). ORP noted that submittal of a portion of the Tier 1 permit mod could be done by utilizing the practicability evaluation from the EIS work. ORP added that with the reprogramming authorization, the WMA-C PA could be initiated between now and October 2013. ORP noted that if the PA is started up, that won't allow the milestones impacted by the PA to get back on schedule.

Tank Waste Retrieval Work Plan (TWRWP) Status - ORP noted that resolution of the DPO and Ecology approval to use either a water abrasive or a rotary coring system allowed the C-105 dome cut to be completed.

Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria - ORP stated that there was no change in status. Ecology asked if ORP, in its reprogramming effort, has discussed NRC involvement with the PA. Ecology noted that the EPA also used to be involved. ORP responded that the NRC was deployed through an interagency agreement, which continues to be active via biweekly phone calls, along with other DOE sites. ORP added that the intent is to get funding for EPA involvement, although discussions with EPA have not been initiated.

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

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

D-00B-01 - Ecology asked if ORP is on schedule to complete retrieval in WMA-C by 9/30/2014. ORP responded that there are significant risks, and efforts are under way to mitigate the risks. ORP cited the challenge with sequestration impacts, resulting in 2 ½ months without two retrieval crews, and the deep sludge issue as part of the evaluation that is being done. Ecology asked when ORP will know whether or not the milestone is in jeopardy. ORP indicated that the goal is to make a determination about the milestone in the near term, once all the pieces of information are evaluated and reprogramming is in place. Ecology referred to the reprogramming effort, and asked if ORP currently has a schedule for retrieval. ORP responded that there is a schedule for retrieval, and the schedule will have to be redone once the two retrieval crews are started back up (see issue No. 3 below). Ecology asked again if ORP has a schedule. ORP responded that there is a baseline schedule, which shows completion by 2014, and the baseline schedule is currently on schedule.

ORP reiterated that there are potential impacts, including the deep sludge issue, which could impact the schedule if it is not resolved at the beginning of FY14 as planned. Under the current Justification for Continuing Operations (JCO), retrieval operations are allowed to continue until June 2014, and if the issue is not resolved by that time, the schedule could be derailed from a safety perspective. ORP noted that the deep sludge is not a technical issue but needs to be resolved from a safety perspective. Ecology asked if ORP is examining the safety characterization for deep sludge. ORP responded that an assigned team and the contractor are working on the safety characterization, and that resolution of the issue is a high priority. ORP stated that it should be recognized that the issue is not the ability to retrieve from a tank, but it is an issue of safety from a hydrogen generation or hydrogen release aspect. Ecology asked if the sludge height is the new JCO for sludge height. ORP responded that it is the new JCO that

allows operations to continue through June 2014.

ORP noted another aspect to the three-prong approach (see issue No. 2 below) is the design for a third receiver tank that is being done in parallel with the efforts to resolve the deep sludge issue. Ecology asked if the reprogramming efforts will be setting aside enough funds for the potential contingency of a third receiver tank. ORP responded that the third receiver tank design is not a contingency and the design process is being pursued. ORP noted that a third receiver tank will be needed in the future, and it is not considered to be lost funds. The clarification was made that the third receiver tank design will be for an equipment addition to an existing DST (AY-101) and not to design and build another tank.

Ecology asked if ORP has considered the space requirements for removing waste from AY-102 and if there will be tank space available. ORP responded that both the sludge height and the need for AY-102 have been blocked off in the space model. Ecology asked if the model run has been completed that considers AY-102. ORP stated that the calculations are being done using the amount of space from the previous model run.

Issue No. 1 - ORP stated that the DPO was resolved, and that Ecology requested a review of the DPO material. ORP indicated that the material is available for Ecology review in ORP's office.

Issue No. 2 - ORP stated that the C Farm tanks are being retrieved to two DSTs, AN-101 and AN-106. ORP added that with the limitation to the sludge height, it is proceeding with a three-prong approach: 1) PNNL is evaluating the deep sludge gas release calculation and reviewing the conservatism; 2) PNNL is conducting column testing with sludge simulants; 3) a pump penetrometer will be brought in in early FY14 to take shear strength measurements. ORP indicated that these approaches will help refine the calculation of deep sludge in AN-101 and AN-106. Currently ORP is approved to go just above 190 inches on deep sludge in the tanks.

Issue No. 3 - ORP noted that as reported earlier today, reprogramming has been approved, which will allow rehiring of two trained operating crews for retrieval.

TWRWP Status - ORP noted that the TWRWP status is identical to the table in TPA summary reports.

### **Waste Treatment and Immobilization Plant (WTP) Project**

#### **WTP Overall TPA and CD Summary and Milestone Status; M-62-01; M-62-49; D-00A-01, -06, -17**

ORP reported that the reprogramming request has been authorized, although the details or the funding have not yet been received. ORP noted that assuming the reprogramming funding comes through as anticipated, that will probably eliminate the need to go into the furlough scenario later this year. ORP added that avoiding the furloughs would be a primary benefit of the reprogramming, since one of the key priorities at the WTP is to maintain the stability in the work force, particularly the craft and manual workers. Another aspect of preserving a steady work

force is to maintain the safety and quality performance. ORP noted that the WTP was not as challenged by the sequestration aspects as tank farms, and the reprogramming allowed WTP to move funds from the control points that weren't needed to the control points that are needed.

Ecology asked if ORP now has enough funding in the Low Activity Waste facility (LAW) control point to move forward. Ecology noted that there had been issues about funding in certain control points that precluded getting the priority work done, and asked if there is enough flexibility now in the different control points to move money to do the priority work. ORP responded that there will be enough funding to continue with the LAW, BOF and LAB (LBL) construction activities. ORP clarified that once the reprogramming is done, there won't be any flexibility to move funds without going back to Congress. Ecology asked if the control point changes do not accommodate what is needed, whether there would be flexibility to move funds. ORP responded that a reprogramming request would have to be made to Congress to get a change. EPA asked if there are two control points in the WTP project, and ORP concurred. Ecology asked if ORP believes the reprogramming will allow for the two control points to move forward. ORP responded that the reprogramming is consistent with the planning to move forward for the rest of this fiscal year, with the emphasis on LBL. ORP noted that efforts are continuing to bind the two control points into a single control point, and that message is being heard up to the senior management levels.

Ecology referred to a line item in the FY14 budget request that speaks to continuing planning for direct feed LAW and to put PT and HLW into care and maintenance mode, and asked if the reprogramming will accommodate the continuation of direct feed LAW. ORP responded that most of the impacts of the direct feed decision, in terms of cost, is the feed preparation at tank farms, and that the current baseline includes modifications of systems that do not preclude the option of direct feed. Ecology inferred that part of the issue or problem to be equipped for direct feed resides in tank farms. ORP stated that the initiative for direct feed will require the use of an ion exchange and a filtration tube to provide the direct feed. Ecology asked if ORP is seeking a capital acquisition for the initiative. ORP responded that it would most likely be capital acquisition but expense funded.

ORP stated that since today's discussion is not following the agenda, the issue with the LAW facility construction substantially complete milestone would be addressed at this point. The impacts resulting from the control point alignment issues has created a challenge to meeting the D-00A-07 milestone due date of 12/31/14. Ecology asked if the milestone is in jeopardy. ORP responded that there are challenges to the milestone based on the reprogramming. Ecology stated that during an ORP financial briefing, the statement was made that the milestone was in jeopardy. ORP stated that the milestone has been flagged that there are impacts from reprogramming that are providing challenges to the milestone, and ORP will use the Consent Decree (CD) process if it is determined that formal notification is required that the milestone is at risk. ORP added that it is not in a position to make formal notification at this time, and the milestone is being identified, per the requirements, that challenges exist due to the delay in reprogramming. Ecology noted that there have been different stories from two different entities in ORP as to the status of the milestone. ORP stated that the status given in the budget briefing and the status given today are not inconsistent. ORP noted that there is documentation from the

contractor that says the milestone is at risk, but that was based on pre-reprogramming direction that was given to the contractor.

Ecology asked about the status of Pretreatment (PT) and High Level Waste (HLW). ORP stated that the status could be discussed separately to follow the agenda, and noted that PT and HLW continue to work to the two-year plan. ORP stated that none of the CD milestone challenges are inconsistent with the previous discussion, that if the decision is made for direct feed LAW, the WTP is still positioned to be able to support that.

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

ORP stated that production engineering and construction work remain suspended, with essentially no production design or construction work being done. The focus remains on technical issue resolution and its associated work. The material and equipment continue to be maintained in a safe condition. Ecology asked about the status of the presentation regarding ORP's maintenance protocols. ORP stated that it will follow up on getting the briefing to Ecology scheduled.

Significant Past Accomplishments - ORP noted that the design completion team effort for the erosion/corrosion testing is more focused in HLW. There is a risk plan and associated activities in HLW to ensure the erosion/corrosion impacts are understood and how to proceed with mitigation.

ORP noted that the initial full-scale testing effort in the RLD-8 vessel is in support of HLW, and the purpose of the testing is to allow confirmation of the vessel design. The testing will provide the confidence to go forward in PT and provide the ability to look at the control system and conduct some outside-the-boundary testing. Ecology asked when testing will start that will affect the HLW vessels. ORP responded that the plan is to get the testing started in the next six months and be completed within the December 2013 to February 2014 time frame. Ecology pointed out that adequate funding was not received in FY13 for full-scale integrated testing in PT. ORP concurred, and stated that the first phase of testing will be the RLD-8 testing in HLW.

Ecology stated that in some of the reprogramming that was done, there were holdbacks that were applied elsewhere or at tank farms that significantly reduced the full-scale integrated testing. ORP responded that there were holdbacks that went to tank farms, not to other DOE sites. ORP noted the alignment that is necessary between tank farms and WTP, which Ecology has been advocating for some time, poses the need for adequate funding in tank farms. ORP added that there is new communication regarding integration between tank farms and WTP that allowed funds to be transferred from WTP to tank farms, and that transfer would not have been possible in the past. Ecology responded that its feedback will be that funding is needed for all of the projects to meet all of ORP's obligations, and funding should not be taken from one project on the Hanford Site to fund another project. ORP acknowledged Ecology's expectation.

Significant Planned Actions in the Next Six Months - Ecology stated its expectation to be involved early in the new calculations, design and development of an erosion/corrosion testing

plan. Ecology referred to a paper on its website that goes through the history, and the Defense Nuclear Facilities Safety Board (DNFSB) history, regarding the erosion/corrosion issues. Ecology noted that it had placed a hold on vessels, removed the hold when ORP solved the issues, and then another hold was placed when the erosion/corrosion calculations were called into question. ORP acknowledged and agreed with Ecology's expectation of early involvement. Ecology added that there is an issue with buckling on the bottom heads of the lag storage vessels. Ecology stated that the current design permit has cooling jackets underneath the bottom heads, and information was received two to three years ago that the heads may buckle, resulting in the potential to remove the cooling jackets from the design. Ecology stated that it needs to be involved in any changes to a permit design. ORP stated that it will work through an open and appropriate permitting process with Ecology. Ecology expressed the concern that an open and early communication process will not happen. ORP ensured Ecology that its concerns regarding early involvement will be shared with the WTP projects.

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

There were some discussions regarding HLW during the WTP overall status and the PT status. ORP stated that the near-term focus in HLW is defining and resolving testing and technical issue resolution in order to remove restrictions on construction towards the end of this calendar year. There is limited construction in HLW, mostly in rebar and civil work.

Ecology asked if the technical case for HLW direct feed has been authorized to become a business case. ORP confirmed that a business case is being considered. Ecology asked if ORP will look at the LAW business case and HLW business case and make a decision which is the best way to proceed, or if ORP will consider LAW direct feed first, as stated in the FY14 budget. ORP responded that HLW and LAW direct feed are separate decisions on different time scales, and LAW direct feed is the more near-term decision that needs to be made. ORP noted that the design modifications to LAW direct feed are fairly minor, and the physical aspects are in the baseline not to preclude the possibility. ORP stated that from a project perspective, HLW has not been evaluated nearly as in depth as LAW, and the time line to make the decision is not the same as the LAW decision. Ecology asked if ORP is suggesting that HLW and LAW will not be competing priorities. ORP responded that they are separate decisions and their time frames are offset and will be done in a phased manner.

Ecology expressed concern that HLW and LAW direct feed will be on the table as equal and opposite initiatives that will force ORP to make a priority decision. ORP noted that from a construction perspective, LAW is moving forward with full construction, and HLW is doing very little construction activities. ORP added that HLW will depend on where PT lands in the schedule and the benefits of doing the direct feed scenario versus tying HLW to PT. ORP indicated that from its perspective, it will be a one-two decision, and the decision regarding LAW direct feed needs to be made in the near term. Where PT falls in the schedule will inform the value added to considering the HLW direct feed scenario. Ecology asked if HLW direct feed and PT are considering the one-two phased sequence. ORP responded that the scenarios being considered are all integrated, and all of the decision points will be communicated to the new Secretary of Energy. Ecology expressed the concern that if a decision is made for HLW before

LAW direct feed, that both tank farms and WTP would be significantly impacted. ORP agreed with Ecology's concern if that decision were made. ORP added that LAW first is consistent with the priorities that were established two years during the funding constraint scenario, and no direction has been received to alter those priorities, with LBL being the first priority.

Ecology initiated a discussion regarding a commitment made by departing Governor Gregoire and Secretary of Energy Chu for a path forward to resolution of the technical issues at WTP. Ecology stated that Gregoire and Chu committed to providing a plan before leaving office, which did not happen, and asked about the status of the plan. ORP responded that there is a plan in place for the path forward for HLW in the December 2013 - February 2014 time frame. Ecology stated that the expectation was a document addressing the five facilities at WTP. ORP stated that it is preparing to get alignment with the new Secretary of Energy, and a power point presentation is being prepared to present to the Secretary of Energy in a briefing. Ecology noted that there is a plan in the power point format, but not in written text form. ORP concurred, and stated that it is working toward the commitment made to the previous Secretary of Energy for a path forward for the HLW technical issues slated for December 2013 - February 2014.

ORP noted that there is not a plan for getting through PT technical issue resolution at the level of detail for HLW. ORP added that it is scheduled to brief the new Secretary of Energy within three days of the Secretary's confirmation, and that briefing is anticipated to take place next week. ORP noted that if the decision is made to not do LAW direct feed, the critical path will become technical issue resolution at PT and the focus of prioritization will change dramatically. Ecology agreed with ORP, and expressed the concern that there is no dedicated funding for either an interim pretreatment system or technical issue resolution in PT. ORP disagreed with Ecology's assessment, stating that it is actively working with the Secretary of Energy to get a decision made, but that ORP is not in a position to make a decision. ORP added that the alignment with the Secretary and the key decisions are critical to how the parties proceed.

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

ORP noted milestone D-00A-07 is flagged with the issue of impacts from control points (see discussions under WTP project overall and HLW). ORP addressed the issue regarding the thermal catalytic oxidizer (TCO). The TCO vendor went bankrupt, and a team was mobilized to retrieve the equipment and intellectual property, which is in ORP's possession. ORP stated that it is in the process of setting up a contractual mechanism for a new vendor to pick up and complete the work on the TCO. ORP stated that the vendor has successfully produced the same type of components for other facilities in the past, and Bechtel will be in the shop continually during the operation. The vendor will assess the material that was repossessed and ensure that the quality documentation is valid, evaluate the work it will take to complete the TCO, and then provide the final product. Once the vendor completes its evaluation, any new challenges will be identified. Ecology asked if there will be design changes. ORP responded that there will be no design changes, and the main challenge is to identify how much of the design work and equipment have been repossessed. ORP added that it believes all of the material was repossessed, but it needs to be confirmed.

Ecology requested a briefing when the vendor has completed its evaluation. ORP responded that an action was established to discuss the TCO issue on a monthly basis. ORP noted that milestone D-00A-07 is not being flagged due to the issue with the TCO, and that it is due to the reprogramming and available funding.

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

ORP stated that the activities in BOF continue to move forward.

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

ORP stated that activities continue to move forward from the substantially complete milestone. Ecology noted that it is still reviewing the documentation for the LAB construction substantially complete milestone and has not agreed that the milestone is complete. ORP responded that it is working with Ecology staff to ensure any and all information requested is provided. ORP stated that the contract was awarded to repair RLD vessels 163, 164 and 165, and the contractor is doing the weld repairs of the vessels in place.



**Agenda**  
**May 16, 2013**  
**Office of River Protection Quarterly Milestone Review Meeting**  
 Ecology Offices, Conference Room 3A/B  
**Chairperson: Tom Fletcher**

<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	Kathy Higgins/ 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  
May 16, 2013

<u>Name</u>	<u>Organization</u>
Terry Noland	MSA TPA
Kathy Knox	Knox Court Reporting
Rob Phipps	DDSP TPA
James Lynch	DOE-ORP
Kathy Higgins	ORP
Billie Mauss	ORP
Steve Killoy	WRPS
GILIN TRENKARD	ORP
Chris Kemp	ORP
Stanley Kiman	ORP
Dan Mc Donald	ECY
Steve Platt	ORP
Tom Hercules	ORP
John Price	ECY
Jeff Lyon	Washington State
Cheryl Whalen	Ecology
Dave Einar	EPA



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**FINAL**

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



**Office of River Protection  
Tri-Party Agreement Milestone Review  
May 2013 (Project EVMS reflects March 2013 information)**

<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	Kathy Higgins / Jeff Lyon
14	Single-Shell Tank Corrective Action; M-45, -50, -60	Chris Kemp / Jeff Lyon
15	Single-Shell Retrieval and Closure Program TPA Milestones Status; M-45-00 series	Chris Kemp / Jeff Lyon
17	Tank Waste Retrieval Work Plan Status	Chris Kemp / Jeff Lyon
17	Tank in TPA Appendix H Status Tank Retrievals with Individual Milestones	Chris Kemp / Jeff Lyon
18	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	3/11/2013	Completed
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	5/02/2012	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
<b>Fiscal Year 2015</b>				
M-062-40D	Submit System Plan	10/31/2014		On Schedule
M-062-40ZZ	Submit One Time Tank Waste Supp Treatment Technologies Report	10/31/2014		On Schedule
M-045-61	Phase 2 RCRA Facility Investigation/Corrective Measures Study	12/31/2014		To Be Missed

Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2015 Continued</b>				
M-062-45-T01	Comp. Neg's 6-Mo After Last Issuance of System Plan	04/30/2015		On Schedule
M-062-45-ZZ	Negotiate a One Time Supplemental Treatment Selection	04/30/2015		On Schedule
M-062-45-ZZ-A	Convert M-062-31-T01 Thru M-062-34-T01 to Interim Milestones	04/30/2015		On Schedule
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA C	06/30/2015		To Be Missed
M-045-92O	Barrier 3 Design/Monitoring Approval From Ecology	06/30/2015		On Schedule
M-045-56K	Ecology And DOE Agree, At A Minimum, To Meet Yearly (By July)	07/31/2015		On Schedule
M-045-91H	Submit Change Pkg (if necessary) to est. Additional Milestones	07/31/2015		On Schedule
M-045-82	Submit Comp. Permit Modification Request for Tiers 1,2,3	09/30/2015		To Be Missed

## 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:

ORP and Ecology met on April 30, 2013 for the WRPS presentation on 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." No actions and no additional issues were identified as a result of the meeting.

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

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:

None.

## Acquisition of New Facilities

**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.** Created by TPA Change Control Form M-90-12-02, signed by ORP and Ecology on 11/19/12, to "Submit to Ecology, a Conceptual Design Report Package (Critical Decision-1) for the Interim Hanford Storage Project (storage of the first two years of Hanford Site Immobilized High-Level Waste from WTP operations) and a TPA Change Request (in accordance with TPA Action Plan Section 12.0) to submit to Ecology, a Preliminary Design Report package (Critical Decision-2)."

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

**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.** Created by TPA Change Control Form M-47-12-02, signed by ORP and Ecology on 11/19/12, to "Submit to Ecology, a Conceptual Design Report package (Critical Decision-1) for the Secondary Liquid Waste Treatment Project and a TPA Change Request (in accordance with TPA Action Plan Section 12.0) to submit to Ecology, a Preliminary Design Report package (Critical Decision-2).

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

### Significant Past Accomplishments:

On November 19, 2012, Ecology and ORP signed TPA Change Control Forms M-47-12-02 and M-90-12-02 establishing M-047-07 and M-090-13, respectively. ORP letter 12-ECD-0225 notified Ecology of 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 2013 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).

ORP provided a draft change package for these milestones on February 12, 2013. Ecology provided comments on May 9, 2013. ORP is vetting these internally for response.

## 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.

<b>Fiscal Year</b>	<b>Campaign No.</b>	<b>Feed Source</b>	<b>Slurry Tank</b>	<b>Comments</b>
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 late September 2013. Requires two (2) passes to achieve waste volume reduction.
FY13	13-02	AW-106	AP-107	Estimated start late October 2013.
FY14	14-01	AN-106 AZ-102 AW-106	AP-103	Estimated start June 2014.
FY15	15-01	AY-101 AZ-102	AP-103	Estimated start July 2014
FY15	15-02	AY-101	AP-103	Estimated start March 2015

## 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:**

None.

**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. As a result of sequestration, additional impacts to SST integrity work are being identified and ORP is re-evaluating the change package.

## **In Tank Characterization and Summary**

For the period from April 1 – April 30, 2013:

**Accomplishments:**

- Completed RPP-PLAN-54804, Rev. 0, Tank 241-AY-101 Grab Sampling and Analysis Plan.
- Completed RPP-RPT-43992, Rev. 7, Derivation of Best-Basis Inventory for Tank 241-AN-106 as of January 1, 2013.
- Completed RPP-RPT-48639, Rev. 6, Derivation of Best-Basis Inventory for Tank 241-AP-104 as of January 1, 2013.
- Completed RPP-RPT-43979, Rev. 11, Derivation of Best-Basis Inventory for Tank 241-AY-101 as of January 1, 2013.
- Completed RPP-RPT-44637, Rev. 6, Derivation of Best-Basis Inventory for Tank 241-AZ-101 as of January 1, 2013.
- Completed RPP-RPT-45147, Rev. 2, Derivation of Best-Basis Inventory for Tank 241-C-108 as of January 1, 2013.
- Completed RPP-RPT-44643, Rev. 3, Derivation of Best-Basis Inventory for Tank 241-SY-102 as of January 1, 2013.

- Completed RPP-RPT-44814, Rev. 10, Derivation of Best-Basis Inventory for Tank 241-AN-101 as of January 1, 2013.
- Completed RPP-RPT-54440, Rev. 0, Derivation of Best-Basis Inventory for Tank 241-C-101 as of January 1, 2013.
- RPP-RPT-54847, Rev. 0, Final Report for Tank 241-SY-102 Grab Samples in Support of Corrosion Mitigation after Caustic Addition was released on April 9, 2013.
- RPP-RPT-54847, Rev. 0A, Final Report for Tank 241-SY-102 Grab Samples in Support of Corrosion Mitigation after Caustic Addition was released on April 24, 2013.

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

- Tank Sampling
  - Tank 241-C-109 ORSS sampling for closure is currently scheduled for May 2013 (completed 05/08/13).
  - Tank 241-AY-101 grab sampling for chemistry control is currently scheduled for May 2013.
  - Tank 241-AN-102 grab sampling for chemistry control is currently scheduled for July 2013.
  - Tank 241-C-107 Mobile Arm Retrieval System (MARS) Drag Sampling for closure is currently on hold until post-retrieval.
- BBI Updates
  - The tanks identified for updates in FY13 Quarter 3 are still being approved by ORP. The BBI updates will be issued in July 2013.
- Data Quality Objectives (DQO)
  - A DQO on a Solubility Model is due to be released in June 2013.
  - A DQO for Tank C-112 Hard Heel Dissolution is due to be released in May 2013.
  - A revision to the Tank Farms Waste Compatibility Program DQO is due to be released in May 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.

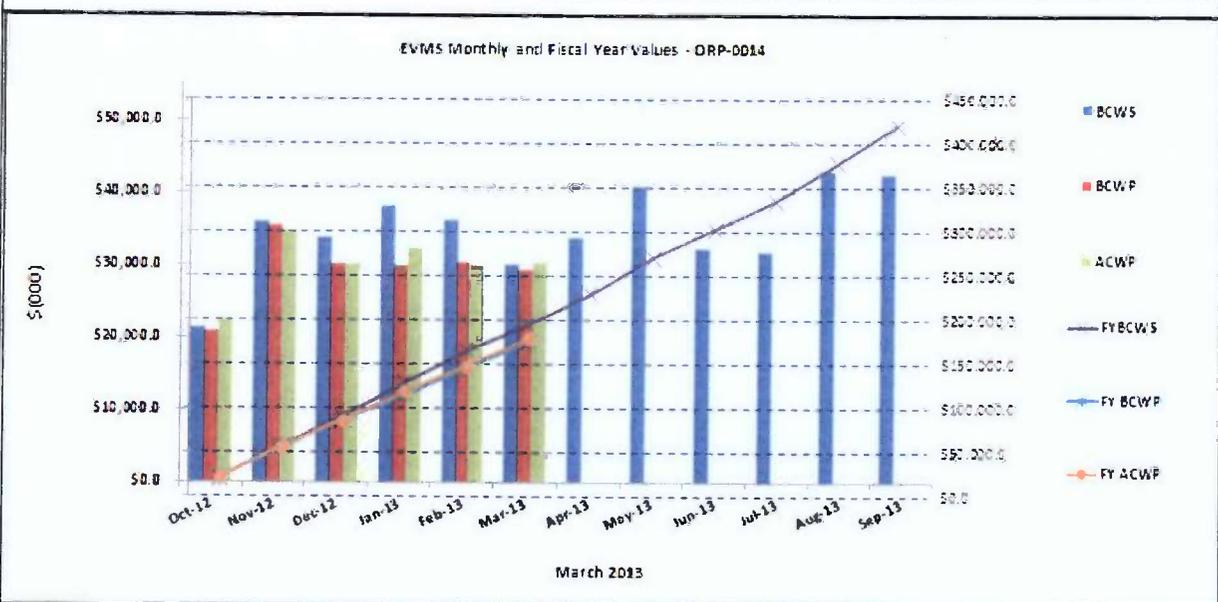
As of March 31, 2013, Washington River Protection Solutions LLC (WRPS) worked 6,943,061 hours (720 days) without a Lost Time Workday Injury and (23 days) with one recordable case in March

	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CMI	30,026.2	29,261.1	30,306.9	(765.1)	(1,045.8)	0.97	0.97			
FYTD	195,430.1	175,594.0	179,381.6	(19,836.1)	(3,787.6)	0.90	0.98	411,626.0	355,113.0	56,512.6
CTD	1,799,530.1	1,774,470.1	1,704,527.2	(25,060.0)	69,942.9	0.99	1.04	7,015,162.4	6,927,830.3	87,332.1

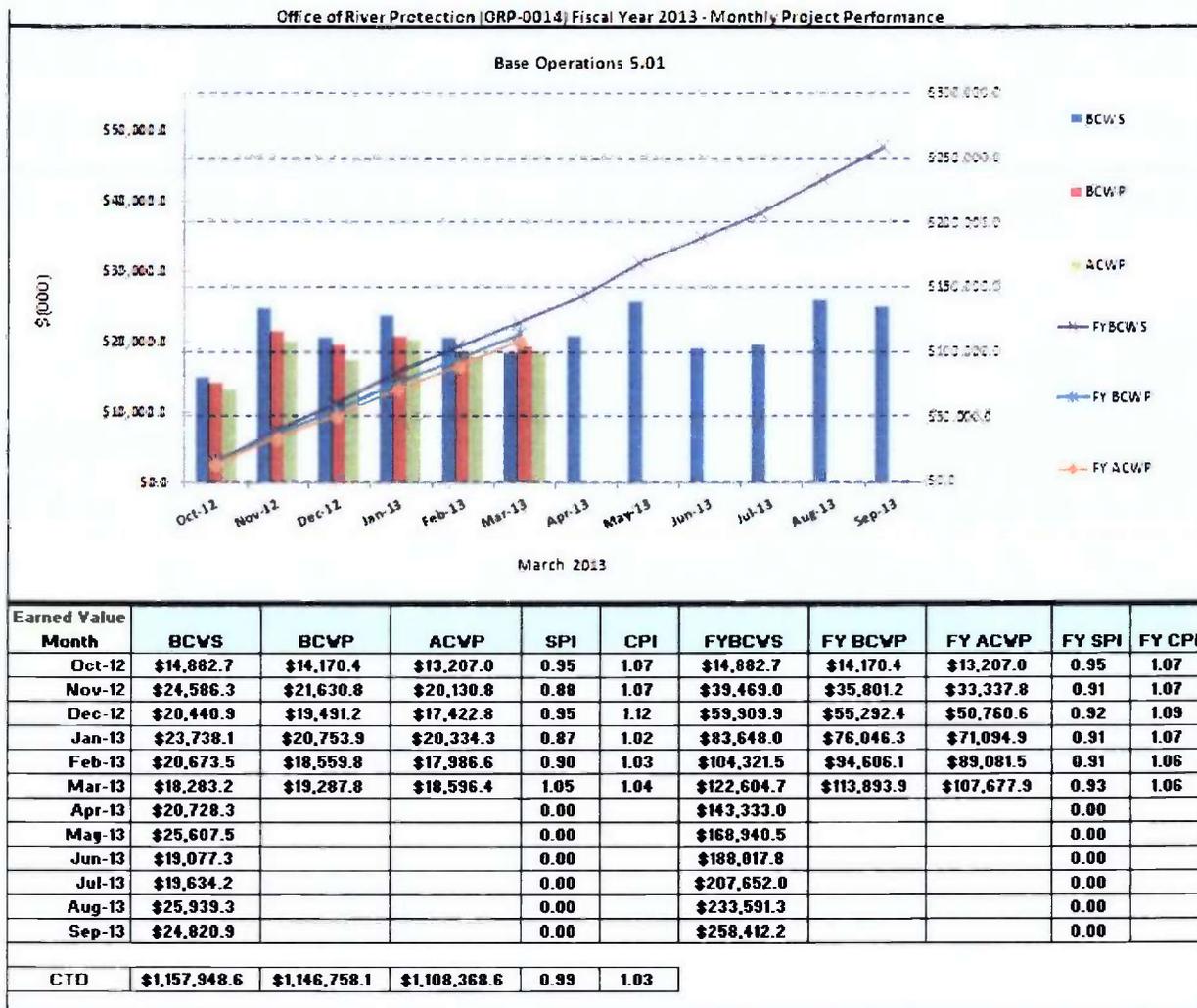
Red shaded cells indicates a SPI/CPI less than .90;

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	\$29,766.1	\$32,202.8	0.78	0.92	\$129,236.3	\$116,041.9	\$119,300.9	0.90	0.97
Feb-13	\$36,167.5	\$30,290.9	\$29,773.7	0.84	1.02	\$165,403.8	\$146,332.8	\$149,074.6	0.88	0.98
Mar-13	\$30,026.2	\$29,261.1	\$30,306.9	0.97	0.97	\$195,430.0	\$175,593.9	\$179,381.5	0.90	0.98
Apr-13	\$33,773.8			0.00		\$229,203.8			0.00	
May-13	\$40,892.1			0.00		\$270,095.9			0.00	
Jun-13	\$32,288.5			0.00		\$302,384.4			0.00	
Jul-13	\$31,800.4			0.00		\$334,184.8			0.00	
Aug-13	\$42,997.4			0.00		\$377,182.2			0.00	
Sep-13	\$42,434.3			0.00		\$419,616.5			0.00	
<b>CTD</b>	<b>\$1,799,530.1</b>	<b>\$1,774,470.1</b>	<b>\$1,704,527.2</b>	<b>0.99</b>	<b>1.04</b>					



**Base Operations**

**Schedule Variance \$1,005K**

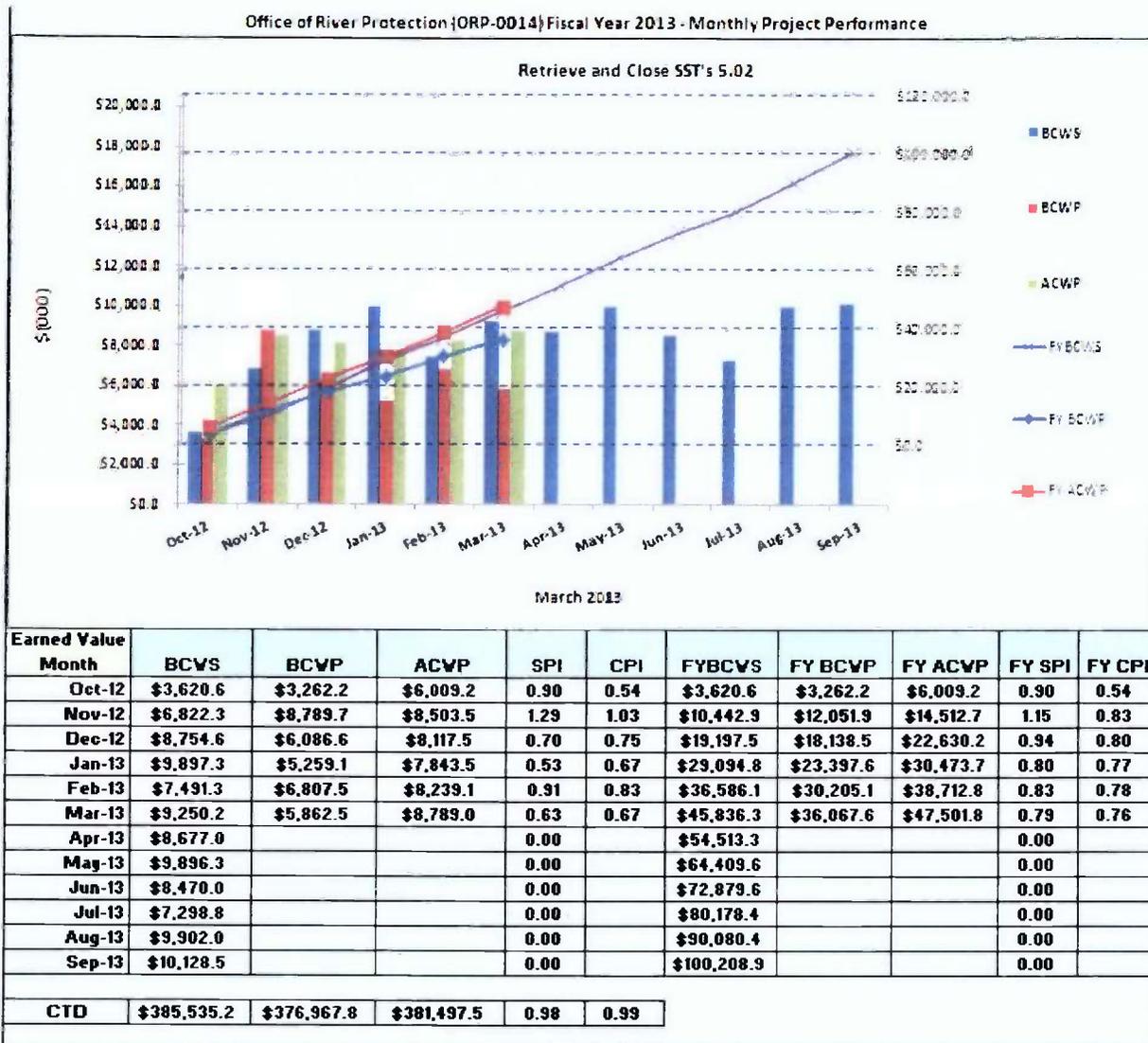
The favorable schedule variance is primarily due to:

- Deferral of AY/AZ Infrastructure Upgrades work scope being deferred due to the AY-102 leak assessment.

**Cost Variance \$691K:**

The favorable cost variance is primarily due to:

- Deferral of AY/AZ Infrastructure Upgrades work scope being deferred due to the AY-102 leak assessment.



**Retrieval and Close Single-Shell Tanks**

Schedule Variance (\$3,388K):

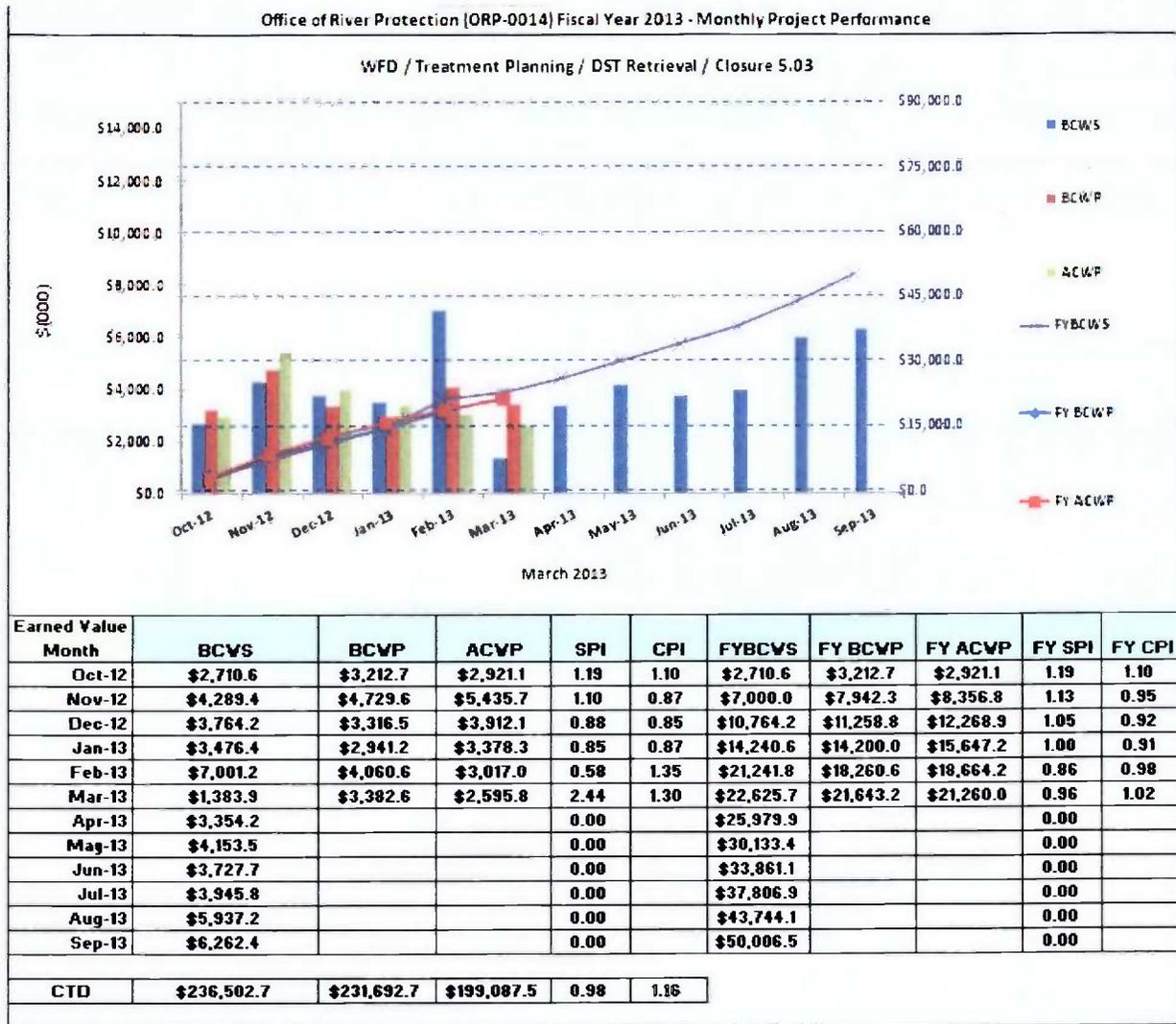
The unfavorable schedule variance is primarily due to:

- C-102 no longer being retrieved in parallel with C-101 due to a shift in labor resource skills resulting from sequestration funding reductions.
- C-105 dome cut and MARS Vacuum installation due to the DPO.
- C-107 and C-109 sampling delay due to resource availability.

Cost Variance (\$2,926K):

The unfavorable cost variance is primarily due to:

- Additional resources required to complete retrieval of C-101.
- Additional resources and material required for single-shell tank C-110 retrieval activities.
- Additional field and operations crews needed to perform conduit installation.
- Higher costs required to resolve issues with the MARS-V system.



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

Schedule Variance \$1,999K:

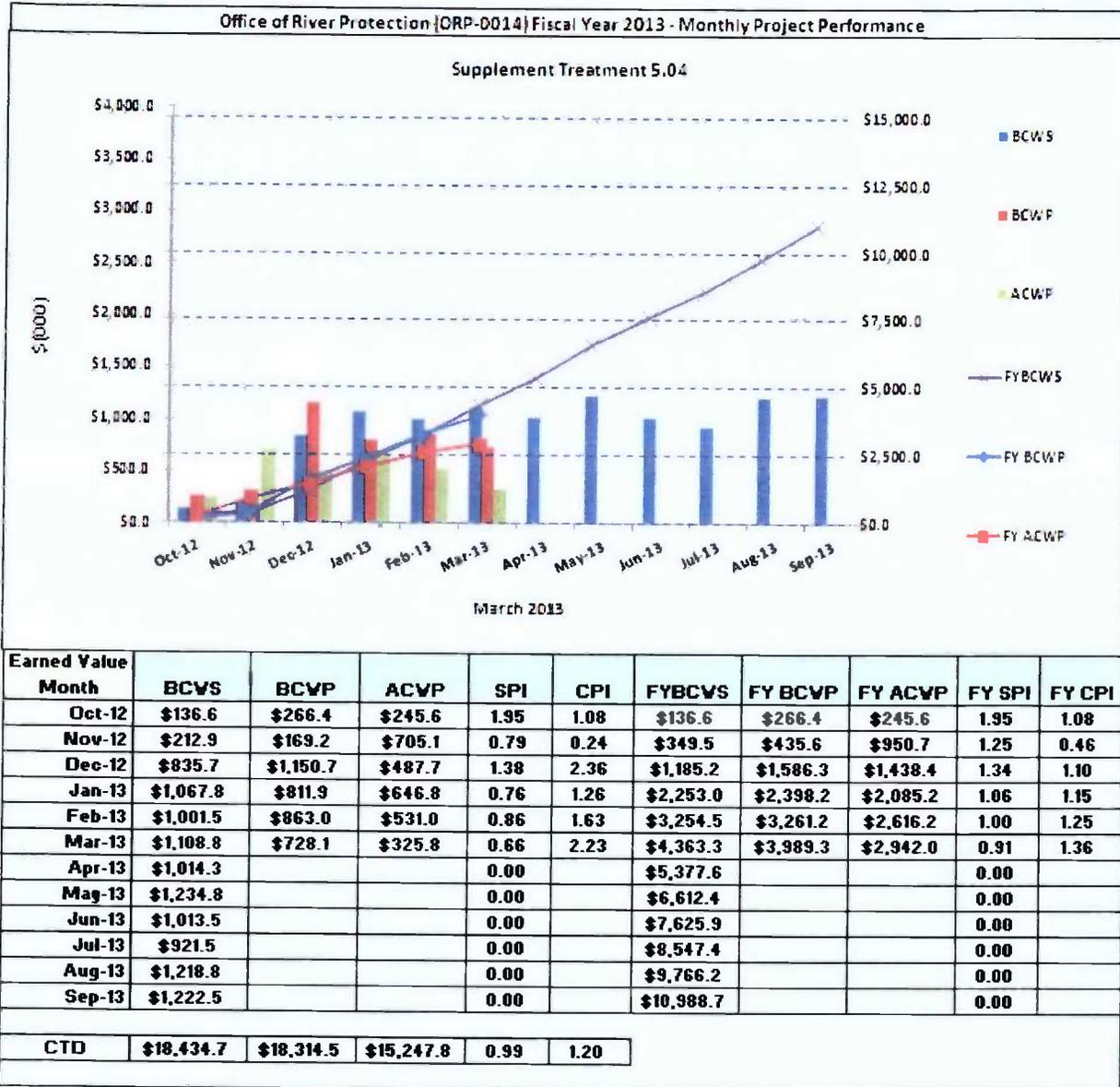
The favorable schedule variance is primarily due to:

- Direction from ORP to stop the AY/AZ Ventilation System Upgrade procurements, construction and safety basis activities due to issues related to the AY-102 leak assessment. This directed change also affected AY-102 equipment upgrades and mixing demonstration design. A baseline change request was implemented in the April timeframe to remove these activities from the baseline.

Cost Variance \$787K

The favorable cost variance is primarily due to:

- Direction from ORP to stop the AY/AZ Ventilation System Upgrade procurements, construction and safety basis activities due to issues related to the AY-102 leak assessment. This directed change also affected AY-102 equipment upgrades and mixing demonstration design. A baseline change request was implemented in the April timeframe to remove these activities from the baseline.



**Supplemental Treatment**

- Nothing to report.

## **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.** Comments have been resolved and the revised Work Plan and final TPA change package were transmitted to Ecology via 13-TF-0014. Ecology approved the Work Plan via 13-NWP-030 on 03/27/13 and provided a signed TPA change package to ORP for M-045-22 and its associated target dates on 04/01/13.

**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: 03/31/13, Status: Completed on 03/11/13.** The Sample Analysis Plan was finalized and was transmitted to Ecology via ORP letter 13-TF-0013 on 03/11/13. Ecology provided comments in the April TPA PMM, and these comments are being addressed.

**M-045-22, Review M-045-22-T03 Report and Determine Path Forward, Due: 09/30/2014** based on M-045-20 TPA Change Package M-45-12-05, Status: On Schedule. This ORP/Ecology decision point will determine whether to continue with soil desiccation/contaminant removal testing and other interim measures, and if remaining work in Milestone M-045-92 should be modified. ORP submitted TPA change package M-45-12-05 adding dates for M-045-22 and its targets with the revised Work Plan via letter 13-TF-0014. Ecology approved the TPA change package on 04/01/13.

**M-045-22-T01, Submit Results of Vadose Zone Characterization of 241-TX to Ecology, Due: 09/30/2014** based on M-045-20 TPA Change Package M-45-12-05, Status: On Schedule.

**M-045-22-T02, Submit Results of Vadose Zone Characterization of 241-U to Ecology, Due: 04/30/2014** based on M-045-20 TPA Change Package M-45-12-05, Status: On Schedule.

**M-045-22-T03, Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology, Due: 07/31/2014** based on M-045-20 TPA Change Package M-45-12-05, Status: On Schedule.

**M-045-56I, Complete Implementation of Agreed to Interim Measures, Due: 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: To Be Missed.** Please see Issues.

**M-045-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Study Implementation Plan for WMA C, Due: 06/30/2015, Status: To Be Missed.** Please see Issues.

**M-045-92, DOE and Ecology will establish selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due:** 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:**

- Automated data collection systems for T-Farm and TY Farm interim barrier monitoring continue gathering data.
- The test site was selected for the pore water extraction test south of SX farm under the M-045-20 work plan.
- The Sample Analysis Plan for 241-TX Farm was transmitted to Ecology via ORP letter 13-TF-0013 on 03/11/13.
- Direct push of 4 boreholes near the C-200 tanks has been completed. The boreholes are being logged, and will be decommissioned to place deep electrodes for resistivity evaluations.
- The TY Interim Surface Barrier Monitoring Plan was revised per approved TPA Change Notice 2012-09.
- Set-up of the electrodes in U farm for electrical resistivity characterization was started.

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

- Provide a summary report of the 2012 T and TY barrier monitoring data.
- Initiate direct push field work in TX farm under the M-045-20 work plan.
- Complete electrical resistivity field work in U farm under the M-045-20 work plan.
- Complete direct push field work near the C-200 tanks per the WMA C Phase 2 RFI/CMS Work Plan.
- Perform 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: To Be Missed. 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.** The CD Retrieval Completion Certification for SST Tank C-104 was sent to Ecology on 03/21/13 via ORP letter 13-TF-0018.

#### **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.
- Completed post-retrieval sampling of tank C-104 in support of the M-045-86 retrieval data report.
- Completed 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.

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

- Continue analysis of the post-retrieval samples from tank C-104.
- Issue a Retrieval Data Report for C-108.
- See discussions above and related discussions in Consent Decree report.

#### **Issues:**

The WMA-C performance assessment (PA) is not currently funded in fiscal year 2013. ORP has reported previously that the WMA-C PA would need to be funded by March 31, 2013 in order to maintain milestone schedule. As a result of the continued non-funding of the WMA-C PA, TPA Milestones M-045-61, M-045-62, and M-045-82 are now To Be Missed.

ORP began discussions with Ecology about a TPA project manager-level agreement to determine an alternative path forward for M-045-61 and M-045-62 on 03/14/13. ORP has provided a draft TPA project manager agreement to Ecology for their review and approval.

ORP and Ecology will meet separately to discuss TPA milestone M-045-82 for the Tier 1, 2, and 3 WMA C SST closure submittal. ORP and Ecology will discuss impacts to this work scope and the potential for a Tier 1 submittal.

### 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:

Modification notice 2013-04 for TWRWP RPP-22520 was approved by ORP and Ecology allowing the C-105 dome cut to be made with olivine abrasive or a rotary coring system.

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

Work with Ecology on update to TWRWP RPP-37739 for C-111.

#### 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

Number	Title	Due Date	Status
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 MAY 2013 ORP CONSENT DECREE 08-5085-FVS MONTHLY SUMMARY REPORT FOR WTP FACILITY-SPECIFIC INFORMATION**

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**FINAL**

Office of River Protection  
Consent Decree 08-5085-FVS

Monthly Summary Report

May 2013

**Office of River Protection****Consent Decree 08-5085-FVS  
Monthly Summary Report****May 2013 (Project EVMS reflects March 2013 information)**

<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	Kathy Higgins / Jeff Lyon
5	WTP - Immobilization Plant Project – D-00A-06, D-00A-17, D-00A-01	Delmar Noyes / Dan McDonald
8	WTP Pretreatment (PT) Facility – D-00A-18, -19, -13, -14, -15, 16	Wahed Abdul / Dan McDonald
11	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	02/25/2013	Completed
D-00C-02AC	Submit to Ecology & State of Oregon Monthly Summary Report	03/31/2013	03/29/2013	Completed
D-00C-02AD	Submit to Ecology & State of Oregon Monthly Summary Report	04/30/2013	04/25/2013	Completed
**D-00C-02AE	Submit to Ecology & State of Oregon Monthly Summary Report	05/31/2013		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	TBD		On-going
<b>Fiscal Year 2014</b>				
D-006-00-A	Meet Approximately Every 3 Years to Review Requirements of CD	TBD		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
<b>Fiscal Year 2015</b>				
D-00A-07	LAW Facility construction Substantially Complete	12/31/2014		On-going
D-00A-19	Complete EL. 98' Concrete Floor Slab Placements in PT Facility	12/31/2014		On-going

### 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 Section IV-B-5 of the 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. Completed for SST C-104 on 03/21/13 via ORP letter 13-TF-0018. Completed for SST C-108 on 05/01/13 via ORP letter 13-TF-0025.

**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 C-Farm quarterly electrical cord inspections which impacted restart of C-107 MARS retrieval system.
2. Continued with installation of support equipment for C-110 Fold Track and Construction Acceptance Testing.
3. Continued with installation of equipment for C-112 Hard Heel removal.

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

1. Complete installation of the MARS-V in C-105.
2. Complete C-107 hard heel retrieval.
3. Submit retrieval certificates of completion for C-108 and C-109 to Ecology.
4. Begin start-up of hard heel retrieval in C-110 using the Fold-Track.
5. Begin start-up of hard heel retrieval in C-112 using caustic dissolution.

**Issues:**

1. DOE-ORP delayed dome cut activities using the water/abrasive cutting technique for tank C-105 while resolution of an issue through the Differing Professional Opinion process DOE O 442.2 was completed. DOE-ORP and its Contractor are evaluating the schedule impacts due to delays in planned cutting of the C-105 dome.
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.
3. DOE-ORP and its Contractor are reviewing the impacts of sequestration on retrieval and Consent Decree Milestone B-1.

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

<b>Tank</b>	<b>TWRWP</b>	<b>Expected Revisions</b>	<b>Retrieval Technology</b>	<b>Second Technology</b>	<b>Third Technology</b>
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:**

Modification notice 2013-04 for TWRWP RPP-22520 was approved by ORP and Ecology allowing the C-105 dome cut to be made with olivine abrasive or a rotary coring system.

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

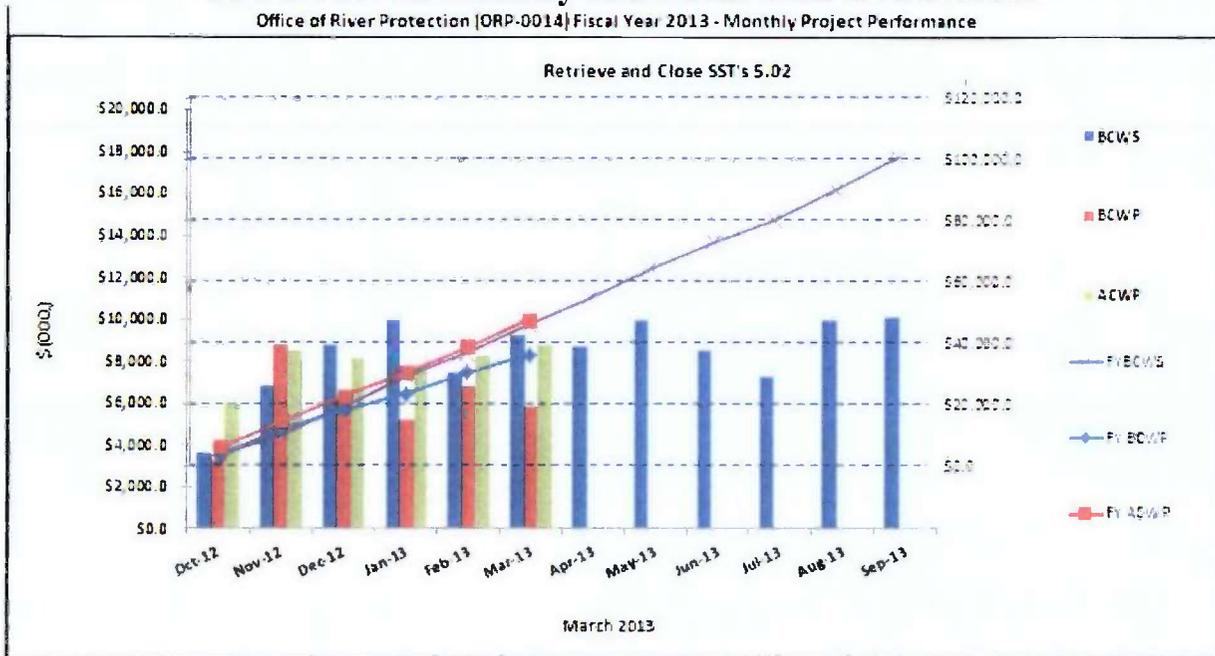
Work with Ecology on update to TWRWP RPP-37739 for C-111.

**Issues:**

None.

### SST Retrieval Monthly and Fiscal Year EVMS Data

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



Earned Value Month	BCWS	BCVP	ACWP	SPI	CPI	FYBCWS	FY BCVP	FY ACWP	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	\$5,259.1	\$7,843.5	0.53	0.67	\$29,094.8	\$23,397.6	\$30,473.7	0.80	0.77
Feb-13	\$7,491.3	\$6,807.5	\$8,239.1	0.91	0.83	\$36,586.1	\$30,205.1	\$38,712.8	0.83	0.78
Mar-13	\$9,250.2	\$5,862.5	\$8,789.0	0.63	0.67	\$45,836.3	\$36,067.6	\$47,501.8	0.79	0.76
Apr-13	\$8,677.0			0.00		\$54,513.3			0.00	
May-13	\$9,896.3			0.00		\$64,409.6			0.00	
Jun-13	\$8,470.0			0.00		\$72,879.6			0.00	
Jul-13	\$7,298.8			0.00		\$80,178.4			0.00	
Aug-13	\$9,902.0			0.00		\$90,080.4			0.00	
Sep-13	\$10,128.5			0.00		\$100,208.9			0.00	
<b>CTD</b>	<b>\$385,535.2</b>	<b>\$376,967.8</b>	<b>\$381,497.5</b>	<b>0.98</b>	<b>0.99</b>					

#### Retrieval and Close Single-Shell Tanks

Schedule Variance (\$3,388K):

The unfavorable schedule variance is primarily due to:

- C-102 no longer being retrieved in parallel with C-101 due to a shift in labor resource skills resulting from sequestration funding reductions.
- C-105 dome cut and MARS Vacuum installation due to the DPO.
- C-107 and C-109 sampling delay due to resource availability.

Cost Variance (\$2,926K):

The unfavorable cost variance is primarily due to:

- Additional resources required to complete retrieval of C-101.
- Additional resources and material required for single-shell tank C-110 retrieval activities.
- Additional field and operations crews needed to perform conduit installation.
- Higher costs required to resolve issues with the MARS-V system.

### Waste Treatment and Immobilization Plant Project

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

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 2,262 full-time equivalent (FTE) contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 583 craft, 478 non-manual and 115 subcontractor FTE personnel working at the WTP construction site (all facilities). As of March 2013, the combined Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) were 62 percent complete; design and engineering was 76 percent complete; procurement was 83 percent complete; construction was 69 percent complete; and startup and commissioning was 11 percent complete. In September 2012, the Baseline Change Proposal that implemented the LAW, BOF, and LAB (LBL) Replan was incorporated into the project over-target baseline (OTB), resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the Pretreatment (PT) and High-Level Waste (HLW) Facilities 2-year Interim Work Plan was incorporated into the project over-target baseline and the percent completion values for PT and HLW were frozen at the September 2012 rate. The WTP Project continues to progress in accordance with the LBL Replan and PT/HLW 2-year Interim Work Plan.

In March 2013, the cumulative-to-date WTP Project schedule variance was a positive \$3M, and the cumulative-to-date WTP Project cost variance was a negative \$40.9M. The recent contribution to the cumulative-to-date schedule variance is due to early deliveries of plant equipment and early completion of construction activities. The major contribution to the cumulative to-date cost variance is the negative cost variance carried over from the LBL replan.

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

#### Significant Past Accomplishments:

- Completed structural evaluation of vessel bottom heads for HLP-27A/B and 28 (PT)
- Received the prototype design and testing proposals for the HEPA filters (HLW)
- Initiated installation of 58-ft structural steel (HLW)
- Completed placement of the castable refractory in Melters 1&2 (LAW)
- Startup accepted switchgear building 91 Medium Voltage Electrical (MVE-B-02) turnover from construction (BOF)

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

- Perform testing of pulse jet mixing control strategy using the 8-ft vessel mixing test platform (PT)

- Award contract(s) for prototype design/fabrication of high-efficiency particulate air (HEPA) filters (HLW)
- Complete installation of melter power supplies (LAW)
- Complete installation of Auto Sampling (ASX) system (LAW)
- Complete construction of the Glass Former Storage Facility (BOF)
- Complete construction of WTP Chiller Compressor Plant (BOF)
- Completion of the high purity gas system layup (LAB)

**Issues:**

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

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

Data Set: FY 2013 Earned Value Data

Data as of: March 2013

**River Protection Project**  
**WTP Project - Shared Services (WBS 1.90)**

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	\$22,207	\$22,137	\$21,513	1.00	1.03	\$22,207	\$22,137	\$21,513	1.00	1.03
Nov 2012	\$28,798	\$28,557	\$26,165	0.99	1.09	\$51,005	\$50,694	\$47,678	0.99	1.06
Dec 2012	\$22,243	\$20,850	\$18,372	0.94	1.13	\$73,248	\$71,544	\$66,050	0.98	1.08
Jan 2013	\$22,610	\$21,881	\$12,429	0.97	1.76	\$95,858	\$93,425	\$78,479	0.97	1.19
Feb 2013	\$22,175	\$21,381	\$18,987	0.96	1.13	\$118,033	\$114,806	\$97,466	0.97	1.18
Mar 2013	\$21,236	\$21,368	\$17,162	1.01	1.25	\$139,269	\$136,174	\$114,628	0.98	1.19
Apr 2013	\$21,384					\$160,653				
May 2013	\$30,150					\$190,804				
Jun 2013	\$20,822					\$211,625				
Jul 2013	\$21,213					\$232,839				
Aug 2013	\$20,788					\$253,627				
Sep 2013	\$21,834					\$275,461				
PTD	\$3,771,894	\$3,768,799	\$3,747,251	1.00	1.01					

**PRETREATMENT 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	Ongoing *
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2015	Ongoing *
D-00A-14	PT Facility Construction Substantially Complete	12/31/2017	Ongoing *
D-00A-15	Start PT Facility Cold Commissioning	12/31/2018	Ongoing *
D-00A-16	PT Facility Hot Commissioning Complete	12/31/2019	Ongoing *

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

The Design Completion Team continues to evaluate open technical issues for resolution. Construction of the mixing test platform continues in preparation for full-scale testing. Engineering specifications for the full-scale testing have been prepared and are undergoing a multi-discipline review, and the national labs are developing a test plan, simulant, and instrumentation requirements. Evaluations are ongoing to determine the existing redundancy in case of failures in the black cells, and available technologies to support in-service inspection are being reviewed.

DOE has asked BNI to perform an impact evaluation for a potential change to the natural phenomenon hazards design criteria that would double the ashfall criteria. This design criteria revision has the potential to impact facility and HVAC system design.

**Significant Past Accomplishments:**

- Design Completion Team activities completed:
  - Statement of Work (SOW) for initial erosion testing
  - Review of national laboratory plans for full-scale vessel testing (RLD-8)
  - Quality Assurance MOU between DOE, BNI, and National Laboratories approved
- Completed structural evaluation of the vessel bottom heads for HLP-27A/B and 28, which recommends only minor changes to the vessel bottom heads
- Completed independent review of the seismic design of the grooved coupling for firewater piping that may require some piping span modification

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

- Perform independent review of the potential for criticality in vessels
- Review flammable gas generation, retention, and release from sediments in vessels
- Develop decision process for vessel structural modifications
- Develop vessel specific particle characteristics report for erosion/corrosion
- Perform testing of pulse jet mixing control strategy using the 8-ft vessel mixing test platform
- Issue engineering specification for vessel testing
- Complete update of the 2-Year Interim Work Plan to incorporate path forward

**Issues:**

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

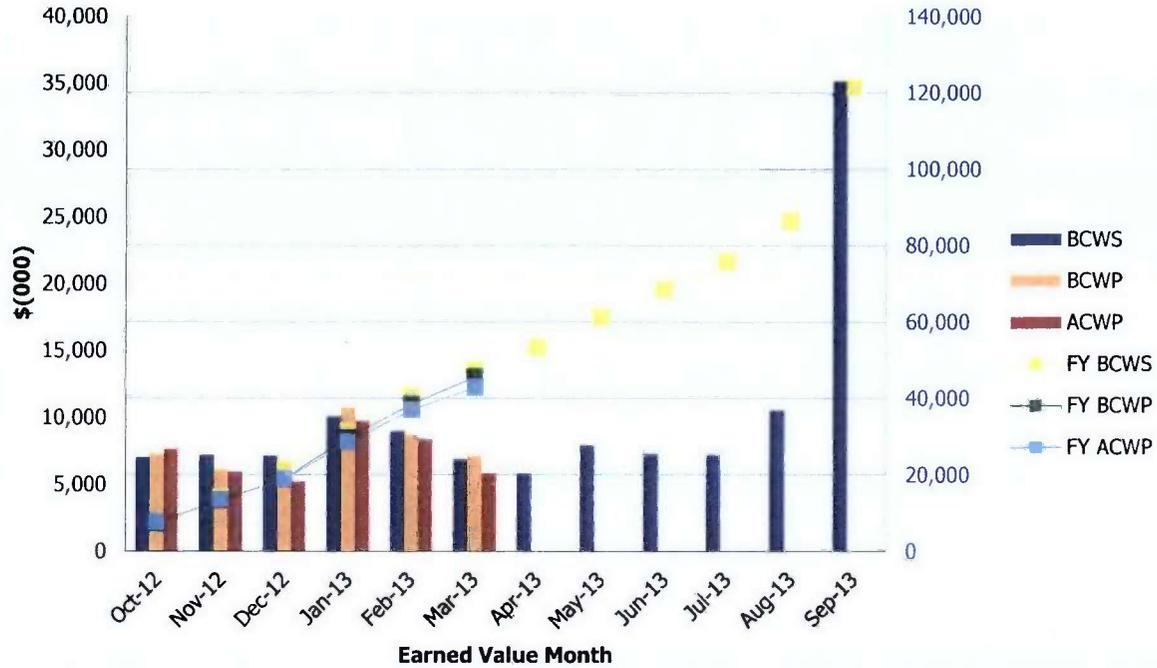
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: March 2013

#### River Protection Project Pretreatment Facility

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2012	\$7,077	\$7,269	\$7,660	1.03	0.95	\$7,077	\$7,269	\$7,660	1.03	0.95
Nov 2012	\$7,200	\$6,130	\$5,974	0.85	1.03	\$14,277	\$13,399	\$13,634	0.94	0.98
Dec 2012	\$7,163	\$5,619	\$5,230	0.78	1.07	\$21,440	\$19,018	\$18,864	0.89	1.01
Jan 2013	\$10,097	\$10,759	\$9,756	1.07	1.10	\$31,537	\$29,777	\$28,620	0.94	1.04
Feb 2013	\$8,994	\$8,716	\$8,382	0.97	1.04	\$40,531	\$38,493	\$37,002	0.95	1.04
Mar 2013	\$6,839	\$7,142	\$5,831	1.04	1.22	\$47,370	\$45,635	\$42,833	0.96	1.07
Apr 2013	\$5,798					\$53,168				
May 2013	\$7,928					\$61,096				
Jun 2013	\$7,266					\$68,362				
Jul 2013	\$7,235					\$75,597				
Aug 2013	\$10,547					\$86,143				
Sep 2013	\$35,145					\$121,288				
PTD	\$1,457,836	\$1,456,102	\$1,453,300	1.00	1.00					

**HIGH-LEVEL WASTE 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	Ongoing *
D-00A-03	Start HLW Facility Cold Commissioning	6/30/2018	Ongoing *
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2019	Ongoing *

The High Level Waste (HLW) Facility will receive the separated high-level waste concentrate from the PT Facility. This concentrate will be blended with glass formers and converted into molten glass in one of the two HLW melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated 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 4 percent complete. Construction, procurement, and production engineering activities have significantly slowed down, resulting in minimal change to the percent completion status since September. BNI continues to focus on resolving technical issues, performing hazard analyses, and completing safety evaluations for process systems in accordance with the 2-year Interim Work Plan.

The Design Completion Team continues to evaluate open technical issues for resolution. Construction activities include the placement of walls at the 37-ft elevation, installation of structural steel at the 58-ft elevation, and installation of cable tray supports and ventilation ducts at the 14-ft elevation. Engineering efforts are focused on resolution of Priority Level 1 findings and support for the Reliability Validation Process (RVP). Environmental and Nuclear Safety continue to update the Preliminary Documented Safety Analysis (PDSA).

BNI is reviewing and analyzing the issues identified in RVP (Wave 1) to develop a path forward for issue resolution. Project issue evaluation reports (PIER) are developed to track resolution of the issues and corrective actions are being identified. BNI has started the second phase of RVP (Wave 2), which includes review of the HLW C5V system.

**Significant Past Accomplishments:**

- Received the prototype design and testing proposals for the HEPA filter
- Initiated installation of 58-ft structural steel
- Developed corrosion/erosion risk evaluation process for HLW black cell equipment

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

- Award contract(s) for prototype design/fabrication of HEPA filters
- Award contract for HEPA filter testing
- Complete RVP reviews
- Complete review of fabrication of the thermal catalytic oxidizer

- Develop plan to close technical issues and other issues (e.g., safety basis compliance, quality assurance issues, and design defensibility) of HLW in calendar year 2013

**Issues:**

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

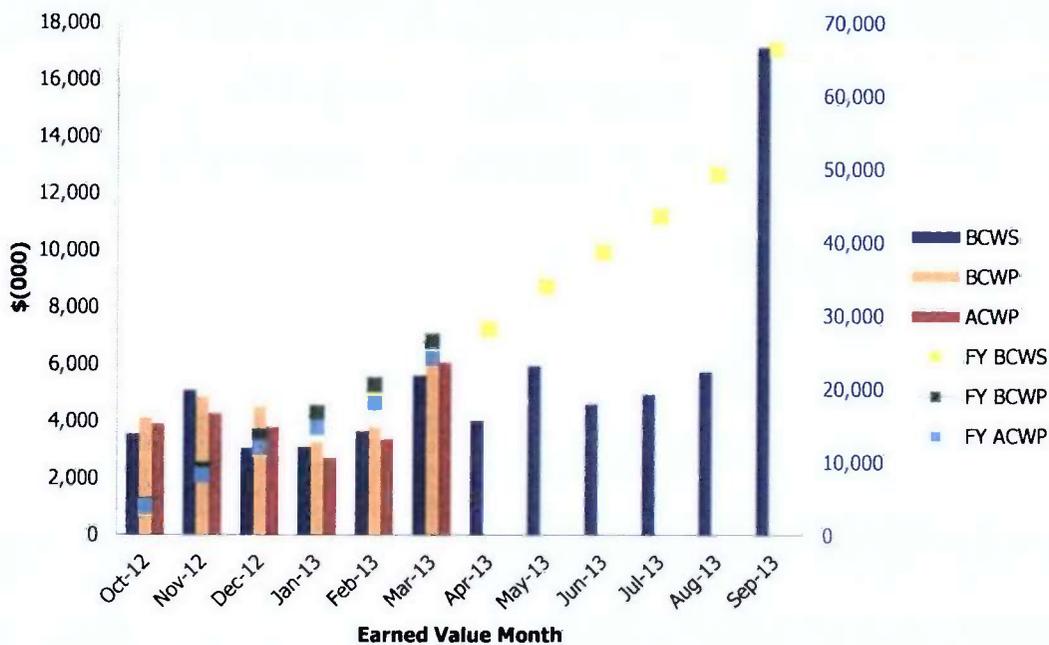
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2013 Earned Value Data

Data as of: March 2013

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2012	\$3,545	\$4,105	\$3,895	1.16	1.05	\$3,545	\$4,105	\$3,895	1.16	1.05
Nov 2012	\$5,079	\$4,852	\$4,256	0.96	1.14	\$8,624	\$8,957	\$8,151	1.04	1.10
Dec 2012	\$3,054	\$4,496	\$3,795	1.47	1.18	\$11,678	\$13,453	\$11,946	1.15	1.13
Jan 2013	\$3,092	\$3,266	\$2,714	1.06	1.20	\$14,770	\$16,719	\$14,660	1.13	1.14
Feb 2013	\$3,639	\$3,791	\$3,362	1.04	1.13	\$18,409	\$20,510	\$18,022	1.11	1.14
Mar 2013	\$5,595	\$5,953	\$6,053	1.06	0.98	\$24,004	\$26,463	\$24,075	1.10	1.10
Apr 2013	\$4,009					\$28,013				
May 2013	\$5,943					\$33,956				
Jun 2013	\$4,594					\$38,550				
Jul 2013	\$4,941					\$43,491				
Aug 2013	\$5,722					\$49,213				
Sep 2013	\$17,135					\$66,348				
PTD	\$946,137	\$948,592	\$946,207	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	Ongoing** (see issues below)
D-00A-08	Start LAW Facility Cold Commissioning	12/31/2018	Ongoing
D-00A-09	LAW Facility Hot Commissioning Complete	12/31/2019	Ongoing

The 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 March 2013, the LAW Facility is 63 percent complete overall, with engineering design 77 percent complete, procurement 85 percent complete, construction 64 percent complete, and startup and commissioning is 5 percent complete.

**Significant Past Accomplishments:**

- Completed placement of the castable refractory in Melter 1 & 2
- Completed 25% of piping hydro testing
- Installed the adjustable speed drives for the C5 exhaust fans
- Installed the transport bogie power supply panels

**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 LAW Secondary Offgas/Vessel Vent Process (LVP) system
- Continue refractory brick installation in the melters
- Complete hazard analysis for the melter and container handling systems

**Issues:**

\*\*Impacts resulting from fiscal control point alignment issues for the LAW facility.

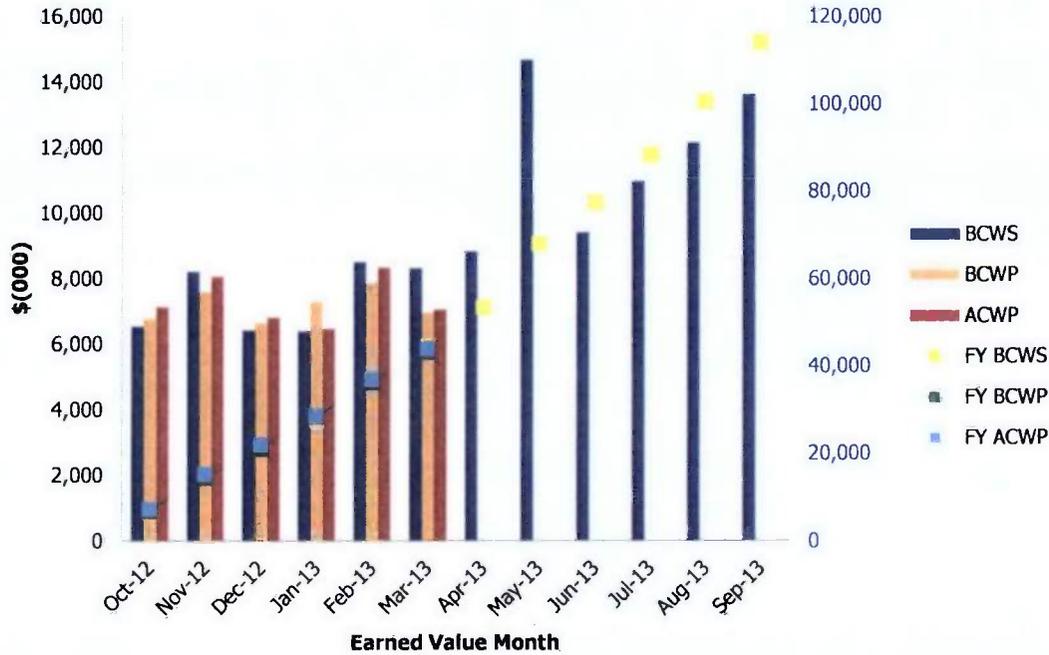
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: March 2013

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2012	\$6,536	\$6,787	\$7,142	1.04	0.95	\$6,536	\$6,787	\$7,142	1.04	0.95
Nov 2012	\$8,212	\$7,602	\$8,071	0.93	0.94	\$14,748	\$14,389	\$15,213	0.98	0.95
Dec 2012	\$6,418	\$6,648	\$6,814	1.04	0.98	\$21,166	\$21,037	\$22,027	0.99	0.96
Jan 2013	\$6,392	\$7,303	\$6,469	1.14	1.13	\$27,558	\$28,340	\$28,496	1.03	0.99
Feb 2013	\$8,503	\$7,873	\$8,338	0.93	0.94	\$36,061	\$36,213	\$36,834	1.00	0.98
Mar 2013	\$8,316	\$6,966	\$7,054	0.84	0.99	\$44,377	\$43,179	\$43,888	0.97	0.98
Apr 2013	\$8,826					\$53,202				
May 2013	\$14,674					\$67,876				
Jun 2013	\$9,402					\$77,279				
Jul 2013	\$10,967					\$88,246				
Aug 2013	\$12,145					\$100,391				
Sep 2013	\$13,606					\$113,997				
PTD	\$738,087	\$740,168	\$792,434	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 March 2013, the BOF is 55 percent complete overall, with engineering design 77 percent complete, procurement 72 percent complete, construction 72 percent complete, and startup and commissioning is 10 percent complete.

**Significant Past Accomplishments:**

- Startup accepted BOF switchgear building 91 Medium Voltage Electrical (MVE-B-02) turnover from Construction
- Installed cathodic protection stations B2 and B3

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

- Complete construction of WTP Chiller Compressor Plant
- Complete the component and functional testing of the low voltage, medium voltage, and fire detection systems for Switchgear Buildings 87 and 91
- Complete construction of the Glass Former Storage Facility

**Issues:**

No major issues at this time

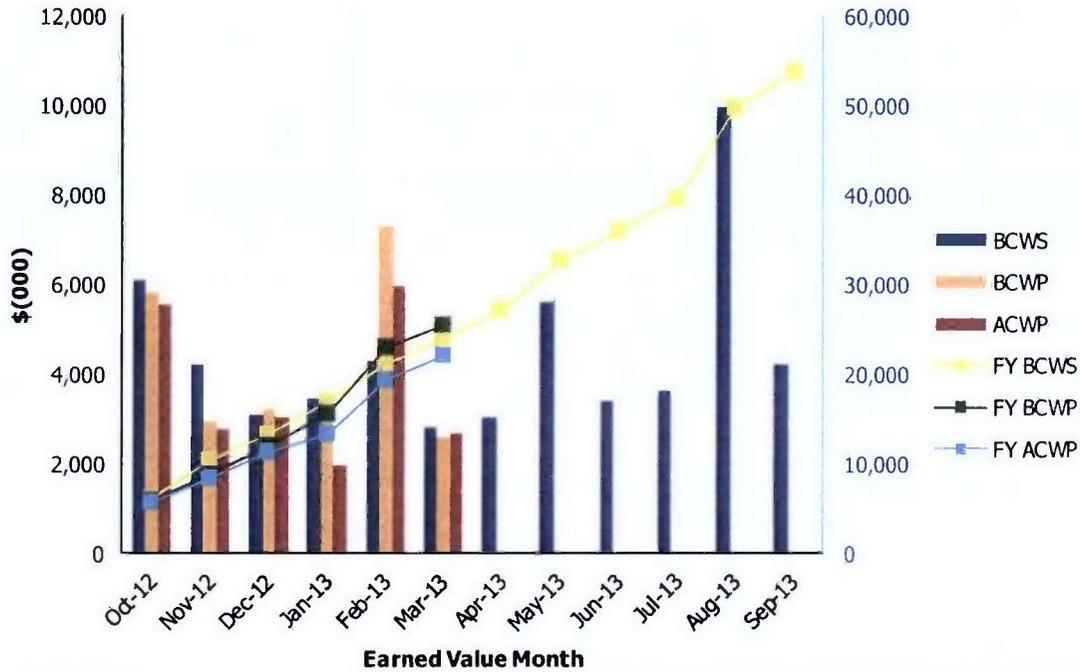
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: March 2013

**River Protection Project  
Balance of Facilities**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2012	\$6,106	\$5,820	\$5,580	0.95	1.04	\$6,106	\$5,820	\$5,580	0.95	1.04
Nov 2012	\$4,226	\$2,955	\$2,775	0.70	1.06	\$10,332	\$8,775	\$8,355	0.85	1.05
Dec 2012	\$3,077	\$3,213	\$3,026	1.04	1.06	\$13,409	\$11,988	\$11,381	0.89	1.05
Jan 2013	\$3,452	\$3,559	\$1,970	1.03	1.81	\$16,861	\$15,547	\$13,351	0.92	1.16
Feb 2013	\$4,286	\$7,315	\$5,963	1.71	1.23	\$21,147	\$22,862	\$19,314	1.08	1.18
Mar 2013	\$2,799	\$2,588	\$2,675	0.92	0.97	\$23,946	\$25,450	\$21,989	1.06	1.16
Apr 2013	\$3,054					\$27,000				
May 2013	\$5,611					\$32,611				
Jun 2013	\$3,418					\$36,029				
Jul 2013	\$3,638					\$39,667				
Aug 2013	\$9,955					\$49,622				
Sep 2013	\$4,223					\$53,846				
PTD	\$299,694	\$301,035	\$295,921	1.00	1.02					

**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 March 2013, the LAB is 68 percent complete overall, with engineering design 75 percent complete, procurement 85 percent complete, construction 81 percent complete, and startup and commissioning is 22 percent complete.

**Significant Past Accomplishments:**

- Awarded contract for repairs of Radioactive Liquid Waste Disposal System (RLD) vessels 163, 164, and 165 to Chicago Bridge & Iron (CBI)
- 38% complete on flushing pipe spools
- 22% complete on pulling cable for LAB

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

- Receive instrument and transport lines for the exhaust stack monitors
- Complete electrical engineering design for the analytical laboratory
- Terminating cable for the HVAC air-handling units and adjustable speed drives (ASDs)
- Complete repairs to RLD vessels

**Issues:**

No major issues at this time.

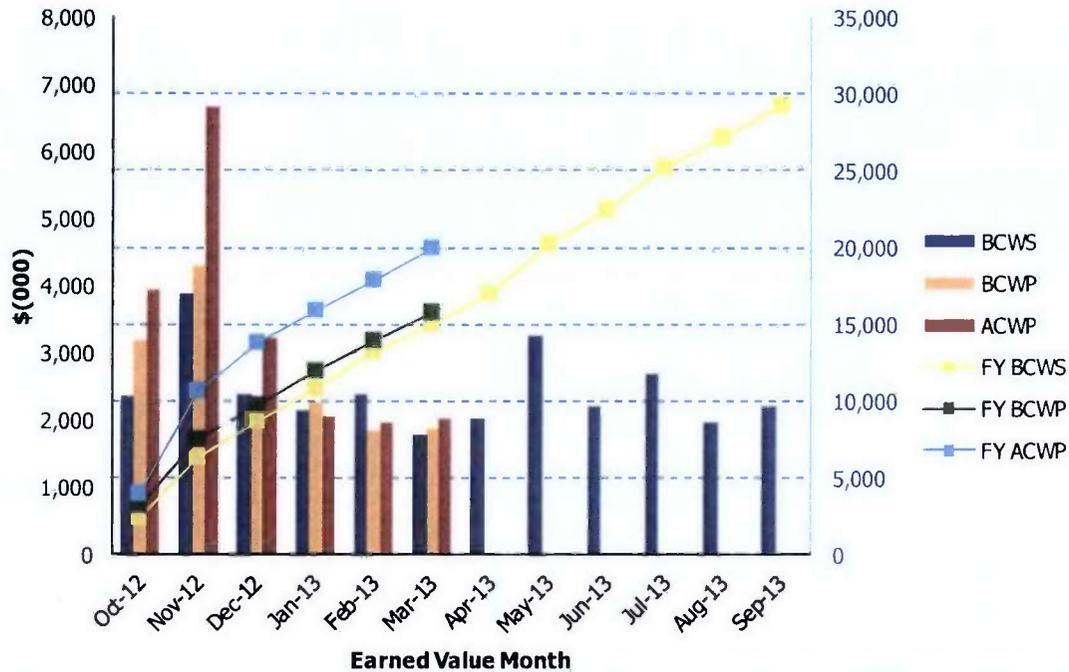
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: March 2013

**River Protection Project  
Analytical Laboratory**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2012	\$2,370	\$3,183	\$3,952	1.34	0.81	\$2,370	\$3,183	\$3,952	1.34	0.81
Nov 2012	\$3,896	\$4,303	\$6,675	1.10	0.64	\$6,266	\$7,486	\$10,627	1.19	0.70
Dec 2012	\$2,381	\$2,257	\$3,219	0.95	0.70	\$8,647	\$9,743	\$13,846	1.13	0.70
Jan 2013	\$2,137	\$2,270	\$2,052	1.06	1.11	\$10,784	\$12,013	\$15,898	1.11	0.76
Feb 2013	\$2,387	\$1,852	\$1,977	0.78	0.94	\$13,171	\$13,865	\$17,875	1.05	0.78
Mar 2013	\$1,783	\$1,879	\$2,044	1.05	0.92	\$14,954	\$15,744	\$19,919	1.05	0.79
Apr 2013	\$2,021					\$16,975				
May 2013	\$3,258					\$20,232				
Jun 2013	\$2,212					\$22,444				
Jul 2013	\$2,688					\$25,132				
Aug 2013	\$1,964					\$27,096				
Sep 2013	\$2,220					\$29,316				
PTD	\$220,880	\$222,815	\$243,275	1.01	0.92					

Waste Treatment Plant Project - (LBL) Percent Complete Status

Through March 2013

(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars		
	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Facilities															
Low-Activity Waste	1,180.1	740.2	63%	297.5	228.1	77%	259.2	220.4	85%	445.7	283.3	64%	177.7	8.4	5%
Analytical Lab	327.9	222.8	68%	69.9	52.4	75%	54.5	46.4	85%	134.7	109.1	81%	68.8	14.9	22%
Balance of Facilities	542.5	301.0	55%	91.6	70.6	77%	71.3	51.6	72%	224.8	161.2	72%	154.7	15.7	10%
<b>Total LBL</b>	<b>2,050.5</b>	<b>1,264.0</b>	<b>62%</b>	<b>459.0</b>	<b>351.1</b>	<b>76%</b>	<b>385.0</b>	<b>318.4</b>	<b>82%</b>	<b>805.3</b>	<b>553.6</b>	<b>69%</b>	<b>401.2</b>	<b>39.0</b>	<b>10%</b>
<b>PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)</b>															
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%
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>

Source: Preliminary WTP Contract Performance Report - Format 1. Data for Mar 2013

Note: In September 2012, the LBL Replan was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB value for the project for PT/HLW/SS is \$1,983M.

## ORP/Ecology TPA and CD Agreements, Issues, and Actions for May 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.
3. T-111 and Other Single Shell Tank Decreases in Liquid Level: The Department of Energy has determined based on data gathered through the single shell tank monitoring program that there are six tanks at the Hanford site in eastern Washington State, including the one announced last week, that show declining levels of fluid. There is no immediate public health risk. The Department is working with the State of Washington and other key stakeholders to address the issues associated with these tanks.
4. Ecology TPA Project Managers expressed concerns with a line item in the ORP FY2014 budget request for planning for the direct-feed of the WTP Law Facility, and why there has been no discussion with Ecology prior to this being included in the budget request. The ORP and Ecology TPA PMs have agreed to raise this issue to their respective management for discussion/resolution.

### Actions:

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
<b>Tank Farms Actions</b>					
TF-13-05-01	05/14/13	ORP will provide two DQOs to ECY (Mike Barnes) for a Solubility Model and Tank C-112 Hard Heel Dissolution	<b>Open.</b>	Billie Mauss	
TF-13-04-01	04/23/13	ECY would like to gain a better understanding of the WFD pulse jet mixing change request for implementation of DNFSB 2010-2.	<b>Open.</b>	Steve Pfaff	

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

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
TF-13-03-05	03/26/13	ECY would like ORP to provide a table outlining the previous DST Core Sampling done for AY/AZ/SY tanks, their sampling spec results, and any follow-up actions (i.e. chemicals added to maintain DST Acceptance criteria).	<b>Open.</b> ORP provided tables of sampling efforts.	Billie Mauss	
TF-13-03-04	03/26/13	ECY will review the draft TPA Chg Pckg for M-062-40ZZ and M-062-45ZZ (regarding work on the one-time Supplemental Treatment Technologies Report) provided by ORP and will provide any comments before the Parties agree to finalize any changes.	<b>Open.</b> ORP provided a draft change package for these milestones on 02/12/13. Comments were received on 05/09/13.	Steve Pfaff	
TF-13-03-03	03/26/13	ORP will meet with ECY to discuss M-045-82 regarding work on the Tier 1, 2, 3 submittal for WMA C.	<b>Open.</b>	Chris Kemp	
TF-13-03-02	03/26/13	ORP will meet with ECY to provide response actions for T-111 and other SST Decreases in Liquid Levels.	<b>Closed.</b> This discussion was held along with the RPP-9937 updates on 05/08/13. Will continue to be tracked as Issue 3 above.	Jeremy Johnson	05/08/13
TF-13-03-01	03/19/13	ORP will address ECY (Jeff Lyon) questions provided via email on 03/19/13 and 03/21/13 regarding 242-A Evaporator, AY-102, SST Integrity, and Tank Farm Priorities.	<b>Closed.</b> These emails were provided for the TPA Admin Record on 03/26/13. ORP provided responses 04/23/13.	Ron Koll / Jeremy Johnson / Tom Fletcher	04/23/13
TF-13-02-04	02/21/13	ECY has requested a meeting with ORP to discuss the ongoing efforts and studies for the potential direct-feed of the WTP-LAW facility.	<b>Open.</b> This item will need to be carried as a TBD as information is still in development and under a pre-decisional, non-disclosure agreement.	Chris Harrington / Janet Diediker	
TF-13-02-03	02/21/13	ECY would like to meet with ORP in March to discuss work on the WMA C PA and other options for M-045-61/-62. Update: ORP met with ECY on 03/14/13 and 05/13/13. ORP provided meeting minutes and a revised TPA PM Agreement to Ecology for review and signature at the 04/23/13 PMM meeting. An additional meeting is scheduled for 05/16/13.	<b>Open.</b>	Chris Kemp	

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

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
TF-13-02-02	02/21/13	ECY would like to know more about the technical issues in the DPO for the dome cut on C-105 if this information can be released.	<b>Closed.</b> (per 04/30/13 email) ORP has a file available for ECY to review DPO actions.	Chris Kemp	04/30/13
TF-13-02-01	02/19/13	ECY would like to be added to the Groundwater Quarterly Monitoring Report distribution list (and on the list located on the report itself) and be notified of the months when groundwater sampling is scheduled to occur for the seven Tank Farms WMAs.	<b>Open.</b> ECY 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	
TF-12-12-03	12/20/12	ORP will complete the updates on the draft SST Integrity TPA change package and meet with ECY to discuss.	<b>Open.</b> ECY and ORP will meet to discuss additional impacts before finalizing the TPA change package.	Jeremy Johnson	
TF-12-12-01	12/20/12	ECY has questions about Tc-99, Uranium, and Iodine-129 increased groundwater contamination trending in WMA C wells.	<b>Closed.</b> ORP and WRPS met with ECY to address these questions.	Chris Kemp	04/23/13
TF-12-10-05	10/23/12	ORP will set up a meeting with ECY 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>Closed.</b> This meeting was held on 04/30/13. No actions and no additional issues were identified as a result of the meeting.	DaBrisha Smith	04/30/13
TF-12-10-04	10/16/12	ECY would like to discuss C-107 and considerations for Tc-99 concerns with tank residuals and technology selection.	<b>Open.</b> On hold until after C-107 RDR sampling has occurred.	Chris Kemp	
TF-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> ECY has provided questions for the water purveyor. ORP sent a response email to ECY on 05/14/13 and will set up a meeting to discuss.	Chris Kemp	

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

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
TF-12-09-02	09/25/12	ECY PMs would like to set up a meeting with ORP PMs to define the purpose and scope of the PMM meetings (roles, responsibilities, objectives). This meeting was held on 11/13/12.	Open. ECY will review these results for discussion at a follow-up overall ORP/ECY Comms Improvements meeting.	Jeff Lyon	
<b>WTP Actions</b>					
WTP-13-04-03	04/23/13	ORP will update ECY on a monthly basis on the path forward for the TCO vendor concerns.	Open.	Jeff Bruggeman	
WTP-13-04-02	04/23/13	ORP will meet with ECY to provide a briefing to ECY on the testing and physical preparations for the LSIT.	Closed.	Wahed Abdul	05/14/13
WTP-13-04-01	04/23/13	ORP will meet with ECY to discuss status on the RVP Wave I and path forward for RVP Wave II.	Open.	Gary Olsen	
WTP-13-02-02	02/21/13	ORP will meet with ECY to discuss the schedule and status of RLD Vessels 163 and 164 welding rework.	Open.	Jason Young	
WTP-13-02-01	02/21/13	ORP will meet with ECY to discuss the PT and HLW facility maintenance program.	Open.	Wahed Abdul	
WTP-12-10-04	10/23/12	ORP will determine the status of the updated G2 Run and provide to ECY.	Closed. CD of the G2 Run given to ECY during the April Special Topics Meeting	Wahed Abdul	05/14/13
WTP-13-01-01	01/22/13	ORP will get back to ECY on a briefing to discuss the LAB cathodic protection issue.	Open.	Jason Young	

**Recent Items Entered/To Be Entered into the TPA Administrative Record** (see <http://www.5.hanford.gov/arpir/?content=advancedSearch> - search EDMC File Number)

Item Description	TPA/CD Topic Milestone Tie	TPA Admin Record - EDMC File Number
April 2013 ORP TPA Monthly Report	All	1220247
April 2013 ORP CD Monthly Report	All	1220248
Retrieval Completion Certification and Report for Tank 241-C-108, ORP letter 13-TF-0025 dated 05/01/13	CD Retrievals	1220355