

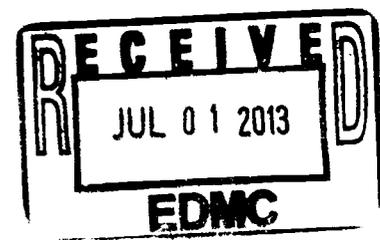
ORP Project Managers Meeting  
 April 23, 2013  
 2440 Stevens Ctr.  
 Richland, Washington  
**Meeting Minutes Transmittal**

**Distribution:**

W. Abdul	ORP	H6-60
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J. J. Lynch	ORP	H6-60
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G. B. Olsen	ORP	H6-60
S. C. Stubblebine	ORP	H6-60
G. D. Trenchard	ORP	H6-60
J.D. Young	ORP	H6-60
D. Becker	Ecology	H0-57
R.K. Biyani	Ecology	H0-57
A.S. Carlson	Ecology	H0-57
T.Z. Gao	Ecology	H0-57
J. J. Lyon	Ecology	H0-57
J. D. McDonald	Ecology	H0-57
J. Price	Ecology	H0-57
H.M. Bowers	WRPS	H6-14
J.W. Donnelly	WRPS	H3-26
J. J. Luke	WRPS	H6-14
S. E. Killoy	WRPS	H6-14
R. J. Skwarek	WRPS	H3-28
R. A. Kaldor	MSA	H7-28
R. E. Piippo	MSA	H7-28

ADMINISTRATIVE RECORD – Heather Childers: H6-08

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



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LT Kemp  
Chris Kemp, DOE-ORP

Date: 6-25-13

B. T. H.  
for Wahed Abdul, DOE-ORP

Date: 6-25-13

J. Young  
Jason Young, DOE-ORP

Date: 6/25/13

Jeff Bruggeman  
Jeff Bruggeman, DOE-ORP

Date: 6/25/13

J. Lyon  
J. Lyon, Project Manager,  
Washington State Department of Ecology

Date: 6-25-13

J. D. McDonald  
J. D. McDonald, Project Manager,  
Washington State Department of Ecology

Date: 6-25-13

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Purpose: ORP Project Managers Meeting

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**1.0 Administrative Items**

Recent Items Entered/To Be Entered into the TPA Administrative Record - ORP noted several documents were entered into the AR.

**2.0 Agreements, Issues, Actions**

ORP provided an updated agreements, issues and actions list.

Action No. TF-13-03-05 - ORP provided Ecology a handout with general descriptions of samples taken from the requested tanks. Ecology will review the information and then contact ORP to indicate the information meets the action or to request additional information. This action remains open.

Action No. TF-13-03-04 - The draft change package is in Ecology review. This action remains open.

Action No. TF-13-03-03 - ORP stated that once the impracticability demonstration document that was prepared by SAIC is obtained and shared with WRPS, a discussion with Ecology will be initiated. This action remains open.

Action No. TF-13-03-02 - ORP stated that several meetings have been held with Ecology to discuss the evaluation plan for the 20 tanks identified to have decreasing levels. ORP noted that there are more concrete schedules to evaluate the 20 tanks, and a meeting will be scheduled with Ecology to discuss the schedules, including tank T-111. Ecology noted that a meeting will be held within two weeks to discuss RPP-9937, and it was agreed that the response action for T-111 would be discussed during the meeting.

Action No. TF-13-03-01 - ORP provided a three-page response to Ecology's emails that were received on 3/19/13 and 3/21/13. ORP noted that in response to the 3/21/13 email, a briefing on the FY14 budget and tank farm work scope will be provided to Ecology in May 2013. ORP's responses to Ecology's emails will be entered into the AR. Ecology agreed to close this action, noting that it will be responding to some of ORP's responses.

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Action No. TF-13-02-04 - Ecology initiated a discussion regarding low activity waste (LAW) direct feed to the Waste Treatment Plant (WTP), noting that the DOE-ORP FY14 budget request includes a line item for LAW direct feed. Ecology indicated that if LAW direct feed is funded and starts moving forward, there will be requirements for both tank farms and WTP. Ecology added that the need for integration between tank farms and WTP would become even more important, and the expectation is that paths forward for integration will be provided as soon as possible. Ecology referred to the TPA process that allows for regulator input before budget requests are made, and noted that ORP requested funds for LAW direct feed without discussion with Ecology. Ecology asked why a request for LAW direct feed would be made since there are no TPA or CD milestones for LAW direct feed. Ecology noted that ORP has not formally presented alternatives to the current TPA and CD, and the expectation is that the TPA and CD would be followed unless formal notification is provided otherwise. Ecology expressed surprise about the inclusion of LAW direct feed in the FY14 budget, and noted its concern about ORP requesting funding for activities that don't have milestones and conversely, not spending money for activities that have milestones.

ORP responded that the discussion between ORP and Ecology regarding budget requests is at a higher level of management than is present at the project managers meeting (PMM), and a definitive response to Ecology's questions and concerns could not be provided in the PMM forum. Ecology noted that the PMM discusses work plans, compliance, and paths forward, and the potential for LAW direct feed is an activity that needs to be discussed in the PMM. ORP stated that the TPA provides for the process to elevate issues or concerns to upper management. Ecology noted that there are changes being alluded to, including LAW direct feed, but there has been no discussion in the TPA forum and questioned how well the process is working. The parties agreed to include Ecology's concern in the issues portion of the agreements, issues and actions list, and took an action to elevate the issue to the Inter-Agency Management Integration Team (IAMIT). The next IAMIT is scheduled May 16, 2013. ORP suggested the possibility of bringing up the issue at the SEC meeting scheduled next week, and an attempt will be made to include the topic on the SEC agenda. Ecology stated that it will inquire internally with upper management about the issue of LAW direct feed and the associated budget request.

Action No. TF-13-02-03 - ORP reported that a meeting was held with Ecology on 3/14/13, and Ecology comments have been incorporated into a draft agreement which has been prepared for

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signature. Ecology referred to its question about the tier 1, 2 and 3 milestones. ORP responded that a discussion would be held after the impracticability demonstration is provided to WRPS, since it is in the scope of WRPS's contract and is also an element of the tier 1 submittal. ORP stated that the intent of the agreement with Ecology is to continue the RFI/CMS Phase 2 work, and that there is risk data that can be used to complete the work and to continue the field work through FY14 and FY15. ORP noted that the WMA-C performance assessment (PA) is needed for the tier 2 and tier 3 submittals. ORP provided Ecology with the draft agreement for review, and Ecology will contact ORP when it is ready to sign the agreement. This action remains open.

Action No. TF-13-02-02 - ORP stated that a request has been made to the legal department to release the Differing Professional Opinion (DPO) information to Ecology. This action remains open. ORP provided a summary of the DPO for the C-105 dome cut. The DPO was appealed, and the original findings to the DPO were upheld that no negligible erosive wear would be added to the system by doing the water olivine cuts. ORP is preparing a letter to WRPS that lifts the stop work on water olivine cuts. ORP stated that another potential cutting method has been identified by using a large bow saw, but it hasn't been tested yet on the test dome. ORP's position is to use the method that can be employed the quickest, and the goal is to complete the C-105 dome cut by early June 2013. ORP noted that Ecology has signed a tank waste retrieval work plan (TWRWP) modification for either the water olivine or rotary core cut.

Action No. TF-13-02-01 - DOE-RL reported that the groundwater quarterly monitoring reports will be provided to Ecology on a monthly basis starting in May 2013. Ecology requested that ORP place Ecology on the distribution list on the back of the report to ensure receipt. DOE-RL noted that the Tri-Parties had agreed to limit the amount of hard copies in an effort to reduce costs. Ecology stated that receipt of the reports on a CD or electronically would be acceptable. Ecology noted that the report issued in February 2013 was received last week, and that was not an acceptable time frame. DOE-RL responded that by the end of May 2013, the reports should be on track for timely delivery to Ecology. This action remains open.

Action No. TF-12-12-03 - ORP will meet with Ecology to discuss impacts from sequestration (federal budget cuts). The current change package for SST Integrity was drafted before sequestration was implemented. Ecology noted the status for this action is that the change package is in Ecology review. Ecology stated that the review was halted when ORP indicated

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that the dates in the change package would not be relevant due to sequestration. ORP agreed with Ecology, and the status will be revised to state that a meeting to discuss impacts to the change package is TBD until the current assessment of sequestration impacts is completed. This action remains open.

Action No. TF-12-12-01 - ORP stated that a discussion was held regarding Ecology's questions regarding Tc-99, Uranium and Iodine-129 increased groundwater trending at WMA-C wells. Ecology agreed that this action could be closed.

Action No. TF-12-10-05 - ORP reported that a meeting has been scheduled with Ecology on April 30, 2013 to discuss the September 2009 report. Ecology noted that it received a plan from ORP that was associated with the report recommendations.

Action No. TF-12-10-04 - ORP stated that this action remains on hold.

Action No. TF-12-10-02 - ORP will review the questions Ecology submitted and will contact Ecology by the end of this week to schedule a meeting. This action remains open.

TPA and CD Milestone Status - ORP stated that FY15 milestones have been added to the milestone table in the TPA and CD monthly report. ORP noted that the TPA milestones and targets to be missed in FY13 and FY14 are listed.

### **3.0 Review of the ORP Summary**

#### **Tank Farms**

System Plan - ORP stated that there are no updates for the System Plan. A meeting was held with the Hanford Advisory Board (HAB) on April 10, 2013, and a general schedule for System Plan 7 was provided. At Ecology's request, the HAB was informed that the WTP baseline may not be established by the end of October 2013, and there is a possibility that the selection of the three scenarios will be delayed. The HAB was given a time frame of late September 2013 to provide input on the scenarios that ORP and Ecology select.

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

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ORP stated that the Interim Hanford Storage and the Secondary Liquid Waste projects are on hold until FY14. Milestone M-047-07 is on schedule for submittal of Critical Decision 1 documents for the Secondary Liquid Waste Treatment project and the TPA change request for submittal to Ecology regarding the Preliminary Design Report package (Critical Decision 2).

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

Ecology noted that the draft change package to move out milestones M-062-40ZZ and M-062-45ZZ is still in Ecology review (action No. TF-13-03-04).

242-A Evaporator Status - ORP noted that responses were provided to Ecology's questions regarding the Evaporator in today's handout (see Action No. TF-13-03-01).

M-045-91, SST Integrity Assurance:

ORP stated that target milestone M-045-91D-TO1 is on schedule to provide the report on the C-107 testing by the end of May 2013. ORP noted that a meeting will be scheduled with Ecology to discuss the draft change package and new dates for milestones that are to be missed after the sequestration impacts have been assessed.

In Tank Characterization and Summary - ORP reported that offriser sampling in C-109 was scheduled for April 2013, and the sampling is now tentatively scheduled to be done the first week of May 2013. Ecology asked if the AY-101 grab sample for chemistry control is related to the mixing event that is planned for AY-101 and whether it will be a presample or a post mixing sample. ORP responded that a recirculation is being done in AY-101, and the assumption is it would be a post recirculation sample. ORP will provide Ecology the information if the sampling in AY-101 is done post recirculation.

Tank Operations Contract (TOC) Overview - ORP reported that the TOC project is doing very well, considering all the unknown variables this fiscal year. The project continues to conduct operations in a safe manner, with no recordable injuries for the month of February 2013. Ecology asked if the resource and material issues with tank retrieval would have an impact on meeting Consent Decree requirements. ORP responded that the issues will be addressed during the SSTs update (see below). Regarding the Waste Feed Delivery (WFD) project, Ecology requested

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information on the pulse jet mixing change request associated with DNFSB 2010-2. ORP took an action to provide Ecology a briefing on the pulse jet mixing change request. The Oregon Department of Energy (ODOE) asked if the equipment failures associated with WFD performance were due to the simulant mixing issues or just equipment failures. ORP responded that the equipment failures were a combination of both issues.

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

M-045-20 - ORP noted that the work plan was approved by Ecology.

M-045-21 - ORP stated that the 241-TX Farm sampling and analysis plan (SAP) was submitted to Ecology, and one comment on the SAP has been received from Ecology. ORP noted that the TX SAP is carried on the key documents list.

M-045-61/62 - ORP noted that these two milestones were discussed under action No. TF-13-02-03.

M-045-91 - ORP stated that work on the report of the barriers for the three efforts under M-045-20 is on hold. The three efforts are the 241-SX contaminant removal demonstration, the U Farm surface geophysical exploration (SGE), and the direct pushes in 241-TX Farm.

Significant Past Accomplishments - ORP stated that logging of the five dry wells by C-108 was completed, noting that it was a difficult task working among all the equipment.

TPA-SST Retrieval and Closure Program:

M-045-82 - ORP noted that this milestone was addressed under action No. TF-13-03-03. After the impracticability demonstration is obtained and provided to WRPS, ORP will be able to continue with the action.

Significant Past Accomplishments - ORP stated that the retrieval completion report for C-104 was submitted to Ecology. The retrieval completion report for C-108 is in ORP concurrence for submittal to Ecology. A draft transmittal letter for the C-109 retrieval completion report is being prepared to send to Ecology. ORP noted that a retrieval data report (RDR) will be submitted a

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year after the certificate is sent to Ecology. The C-104 RDR has been added to the key documents list.

Tank Waste Retrieval Work Plan (TWRWP) Status - ORP reported that Ecology approved two different cutting methods for the C-105 TWRWP.

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

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

CD-SST Retrieval and Closure:

Significant Planned Activities in the Next Six Months - ORP reported that retrieval in tanks C-107 and C-101 and removal of the heel in C-110 are expected to be completed this year. Caustic preconditioning will be started in C-111 or C-112 this year and then in either C-111 or C-112 starting in early FY14. Both C-111 and C-112 are planned to be completed in FY14. ORP noted that the DPO for the C-105 dome cut has been resolved, and the C-105 dome cut will proceed this summer with the Mobile Arm Retrieval System (MARS) vacuum.

Deep Sludge Height Issue - ORP reported that for C-102, an evaluation is being done of the deep sludge issue with receiver tanks AN-101 and AN-106. Two options that are being evaluated are to open up a third double-shell tank (DST AY-101) or to have a mixer pump on hand for the slow generation sludges in AN-101 if it becomes evident that is occurring. ORP stated that the lab at PNNL is conducting a review of the conservatism in the deep bed gas calculation, and there is potential that the justification for continuing operation (JCO) could be raised to between 220 to 240 inches in AN-101 and AN-106. Ecology noted that the sludge height assumptions for retrieval are one of the System Plan modeling assumptions that Ecology intends to focus on.

Sequestration Impacts - ORP stated that sequestration impacts are being discussed biweekly with Ecology. ORP noted that some of the trained crew have been bumped and the incoming new crew need to be trained. ODOE asked about the time to train new crew. ORP responded that it takes four to six months.

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## **Waste Treatment Plant**

ORP stated that the initial meetings were held with Ecology regarding the LAB construction substantially complete and the Steam Plant construction complete milestones. ORP provided Ecology with the assessment plan detailing all of the methods that were looked at, and then walk-downs in the field were conducted. Ecology is reviewing the information that ORP provided during the meetings. ORP noted that Ecology sent an email with additional questions, and asked for clarification on the type of information Ecology is requesting. Ecology stated that in order to develop a basis for approving the two milestones, knowledge of exactly what ORP has done is needed. Ecology noted that a list of 11 categories of items that need to be complete and 14 categories of items that do not need to be complete has been created and approved by immediate management. The categories were taken directly from ORP's statement in speaking to substantially complete. Ecology is initiating internal meetings to determine what the protocol should be for approving the milestones. When that protocol is approved by senior management, Ecology will schedule a meeting with ORP to provide the plan with the level of detail and scope of the various items that will need to be reviewed. Ecology indicated that it would be ready to meet with ORP in about two weeks. ORP suggested waiting until the meeting is held with Ecology before gathering additional information, and noted that Ecology's plan would likely outline what information is needed. Ecology agreed with ORP's suggestion.

Ecology noted that upper management has not made the decision whether a vertical slice sample or if a percentage sample (up to 100%) will be required, based on the categories in the substantially complete definition. ORP stated that it will coordinate with Bechtel in preparation to meet with Ecology and provide whatever support is needed.

Ecology asked about the status of the Reliability Validation Process (RVP). ORP responded that deficiencies continue to be defined as the various vessels are inspected. ORP indicated that there are continuing issues, but there is no indication that the vessels can't be repaired. Ecology inquired about an update on wave 1 of the RVP. ORP stated that the team is meeting and getting briefing today, and the Phase 1 report out of wave 1 is in the process of being completed. Ecology requested a briefing when the Phase 1 report has been vetted. ORP took an action to provide Ecology a briefing on the RVP Phase 1 result to date, and the path and actions in Phase 2.

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ORP stated that RLD vessel 8 (RLD-8) has been accepted for use in the full-scale testing after the vessel was determined to not be acceptable for plant operation. ORP noted the advantage to using RLD-8 in testing is the flexibility to do more aggressive testing with simulants that could potentially damage the vessel. Ecology asked when the repairs or changes to RLD-8 will be made. ORP responded that the changes likely would be made prior to placing it in the test facility. Ecology stated that since RLD-8 won't be used in production, the level of repair would not need to be as robust, but there is still a level of repair that will be needed. ORP agreed that there is a certain level needed to ensure RLD-8 is representative of the prototypic design. ORP stated that Bechtel is still analyzing the condition of the welds in RLD-8 to make it acceptable for testing and what modifications will need to be done to the pumps and internal components.

Ecology asked if there will be delays to setting RLD-8 in the test facility later this year due to redesigning the pumps and completing qualification tests, and then getting all the instrumentation and piping attached. ORP responded that the repairs and modifications and the installation are addressed in the existing plans, adding that the lab work to determine what the simulants will be is the current challenge to the schedule. Ecology asked about the plans for permitting the test facility. ORP responded that part of the permitting will be impacted by what simulants are used, and issues with air permitting are being worked with the Benton Air District. ORP noted that the test facility is jointly owned by Energy Solutions and Washington State University (WSU), and those two entities are the leads on getting the permits. Ecology expressed concern about meeting the schedule, and asked about the current activities in the Large Scale Integrated Test (LSIT) facility. ORP responded that the current activities are building of the test stand and the prep for the physical testing, and work continues with the S-1 team to define the testing and the testing protocol. ORP took an action to provide Ecology a detailed technical briefing on the current LSIT activities.

Ecology initiated a discussion regarding the President's budget request, which has a line item on the WTP side for LAW direct feed. Ecology stated that if LAW direct feed becomes the formal way to do business, there would be a tremendous need for integration. Ecology added that LAW direct feed would pose a major challenge to tank farms to align with WTP and get everything in place to support LAW direct feed. ORP indicated that if there is a line item for LAW direct feed, it should probably be on the tank farms side. ORP noted that until the new Secretary of Energy comes on board and a decision is made, the parties are in a holding pattern.

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Significant Planned Actions in the Next Six Months - Ecology asked about the status of the HEPA filter prototype design. ORP responded that the contract will be awarded within the next six months to the vendor to design the prototype HEPA filters. The vendor will also fabricate the HEPA filters, and testing of the filters will be done through the vendor at Mississippi State University (MSU). ORP indicated that the schedule for designing and fabricating the HEPA filters was not readily available. Ecology requested that ORP provide a timeline for the fabrication and testing of the HEPA filter when it is available. ORP noted that the design and fabrication of the filters is not time driven to be completed quickly, although the activities are being watched closely.

Ecology asked if the same filters will be used throughout the WTP facility. ORP responded that the concept is that all the filters in all the facilities would be the same design and material. However, during testing of the HEPA filters, the pros and cons will be assessed regarding the benefits of using a more robust filter in a higher hazard facility versus the cost of manufacturing. Ecology asked if all the filter housing have been installed in the filter cave. ORP responded that all of the filter housings for the remote change have been installed. The procurement for the safe change filter housings has not been issued since they are part of the RVP wave 2 process.

Issues - Ecology initiated a discussion regarding the thermal catalytic oxidizers (TCO). ORP stated that the TCO vendor is currently being liquidated under Article 9 of the Uniform Commercial Code for bankruptcy. SAT was the integrator vendor for the ammonia skid, and the TCO was being built by Gulf Coast in Texas. When Bechtel was informed of the liquidation, immediate actions were taken to obtain legal counsel and remove all the equipment from the vendor shops. The equipment included the ammonia skid, pretreat racks, pretreat heat exchanger and hydraulic power racks. All of the equipment has been removed and is being shipped to the Hanford Site, and most of the equipment has arrived. The equipment from Gulf Coast is in transit, including all of the intellectual property, and everything will be inventoried. Recovery options associated with the TCO are being evaluated, and a preferred option for the path forward is anticipated by mid-May 2013.

Ecology asked if there will be enough intellectual property, including design, that work on the TCO will not have to start over again. ORP responded that everything is being evaluated. An action was taken for ORP to brief Ecology by the end of May 2013 on the preferred path forward

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for the TCO and what the anticipated impacts will be. Ecology referred to the CD milestone D-00A-07, LAW facility construction substantially complete by 12/31/14, and noted that there is a potential for the TCO issue to pose a challenge to meeting this milestone. ORP responded that the LAW milestone will have to be included in the evaluation for the path forward on the TCO.

**Pretreatment (PT) Facility**

ORP noted that a lot of the ongoing work for PT was covered during the overall WTP update, including the test facility. A review of the redundancy in the black cells and in-service inspection are being done as part of the S-1 teams' activities. Ecology requested a copy of the 8-foot vessel test plan to support pulse jet mixing control. ORP took an action to provide Ecology a copy of the test plan.

**High Level Waste**

ORP stated that the reports are being finalized for the three systems that were reviewed (RLD vessel, HOP and HFP systems) under the RVP process. The final reports will be analyzed to identify what needs to be done. Ecology asked if RLD-8 will be replaced. ORP responded that RLD-8 will be redesigned and reprocured to replace the existing RLD-8. Ecology inquired about rework to RLD-7. ORP stated that there will be rework to the internals of RLD-7 to reflect the design changes to the pumps. Ecology asked about the lead time to replace RLD-8. ORP stated that the schedule is still being worked, and it could easily be two more years. Ecology asked if construction will be impacted at the upper elevations. ORP responded that Bechtel has a plan to work around the wet cell and even inside the wet cell and still be able to install the vessels.

Ecology inquired about the status of the welds on RLD-7. ORP responded that the welding issue is still being evaluated, and meetings are held regularly with Bechtel to discuss the issues. Ecology asked if there were issues still being discovered. ORP stated that the specific issue is associated with the thermal heat load on the vessel head. Ecology asked when the RLD-7 weld issue is expected to be resolved. ORP responded that Bechtel's experts evaluated the weld issue and established a path forward. Bechtel's conclusion is that the welds are not an issue, and ORP is challenging Bechtel to provide additional information to prove that their conclusion is valid.

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ORP stated that sometime during FY13, an independent DOE team will be conducting a design review, primarily of HLW. The review will be separate from the RVP process, and it will be led by DOE and include team members that are independent of the project. The work will be done through the design completion teams. ORP stated that the independent review is anticipated to be completed by the end of September 2013. Ecology asked if the results of the RVP and the independent design review will provide a complete understanding of the issues with HLW. ORP indicated that the focus of the RVP, the independent design review and the technical teams is on HLW, with the recognition that a review of HLW can potentially be completed in the near time frame. ORP noted that the intent of the independent review will be to evaluate the design, operability and functionality of the systems.

Action No. WTP-12-10-04 - ORP stated that the updated G2 was provided to Ecology. Ecology stated that the information was not received. ORP will follow up to ensure the information is provided to Ecology. This action remains open.

Action No. WTP-13-02-01 - ORP will schedule a meeting to brief Ecology on the preventative maintenance protocols in May 2013. This action remains open.

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

Significant Past Accomplishments - ORP noted that the placement of the castable refractory in melter 1 was completed, and the castable refractory was also placed in melter 2. The first two layers of the thermal bricks were staged in melter 1 yesterday. ORP stated that a thin layer of special refractory grout will be placed over the bricks, possibly by the end of this week. ORP will call Ecology when the grout is being placed so the process can be observed.

Significant Planned Actions in the Next Six Months - ORP stated that all of the activities are on schedule.

Issues - ORP noted that the issue with the TCO vendor bankruptcy was discussed under the overall WTP project. Ecology requested that the TCO be listed as an issue. ORP responded that the TCO is still being evaluated, and if it is determined to be an issue it will be listed on the monthly summary report. Ecology suggested documenting the TCO in next month's summary report, even if it is not determined to be an issue or the full impact has not been assessed.

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**Balance of Facilities (BOF)**

Significant Planned Actions in the Next Six Months - ORP stated that the current focus in BOF is to complete construction of the chiller compressor plant, which is progressing well and is at a punch list status. Ecology asked if the chiller compressor plant will be construction complete and not at a substantially complete status. ORP explained that substantially complete only applies to LAW and LAB, and the designation does not apply anywhere else and is specific to the Consent Decree language. Ecology asked if the chiller compressor plant would be ready for turnover when the construction is completed. ORP responded that BOF is essentially the support systems for the rest of WTP, and the support systems need to be ready to support initial startup, operation and commissioning of LAW. ORP stated that there is a series for the BOF systems to come online. There are two phases of component-level testing once construction complete is met. The first phase of component-level testing involves initial equipment checks, and the second phase is energization of online systems. ORP noted that there can be a long period of time between construction complete and startup and operation, so the final energization and wetting of systems is done closer to commissioning. At that time, the operations group will take BOF through to support the commissioning phase and initial commissioning of LAW. ORP stated that the focus is to have all the facilities required to support the startup chain of events to be at a construction complete status. Ecology asked who will be the startup company. ORP explained that the construction organization, startup organization and startup commissioning organization are all within Bechtel. When Bechtel's project scope is completed, which is construction through cold and hot commissioning, there will be an operational contract set in place.

Action No. WTP-13-02-02 - ORP is ready to provide a briefing on RLD vessels 163/164, and is working with Ecology to set up a time. This action remains open.

Action No. WTP-13-01-01 - ORP is ready to provide a briefing to Ecology on the cathodic protection system, and is working with Ecology to set up a time. This action remains open.

Action No. WTP-13-01-02 - ORP and Ecology met on March 27, 2013, to discuss Steam Plant complete documentation. This action was closed.

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### **Analytical Laboratory (LAB)**

ORP stated that the focus in LAB is on the final elements to get to construction complete status. ORP noted that even at construction completion, a few key elements will remain that cannot be installed such as the shield windows and the manipulator arms for the hot cell. When the instrumentation is ready to install to support HLW and PT, the shield windows and manipulator arms will be installed. Currently there is a strong effort to complete the hot cells. Functional testing of several systems that support the LAB hoods is ongoing.

Significant Past Accomplishments - ORP noted that the flooring in room A-117 was completed to support a change in design for the computer equipment to be located within the LAB instead of in a different building. That design change increased the HVAC cooling load.

Significant Planned Actions in the next Six Months - ORP stated that the repairs to the RLD vessels is the single largest focus in LAB. The contract was let, and the vendor is evaluating the welds. A scope adjustment was made to the contract to add some LAW vessels as part of the vendor's evaluations. Completion of the weld repairs is targeted for the November/December 2013 time frame.

Action No. WTP-13-01-03 - ORP and Ecology met on March 27, 2013 to discuss LAB substantially complete documentation. This action was closed.

#### **4.0 Key Documents List**

An updated ORP key documents list was provided.

#### **5.0 Upcoming Meetings**

- The ORP TPA May quarterly dry run meeting is tentatively scheduled for May 14, 2013, from 9:00 to 11:30 a.m. in ORP room 1200.
- The ORP TPA May Quarterly/IAMIT meeting is scheduled for May 16, 2013, from 8:30 to 11:30 a.m.

ORP Project Managers Meeting  
April 23, 2013  
2440 Stevens Ctr.  
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**Attachment A: Agenda, AR List, Agreement, Issues and Actions**

**(5 pages including this cover sheet)**

**ORP TPA April Project Managers' Monthly Meeting**  
**Tuesday, April 23, 2013**  
**2440 Stevens Center Richland, Washington**  
**Room 1200, 9:00AM-11:30AM**

**AGENDA**

**1.0 Administrative Items**

**Recent Items Entered/To Be Entered into the TPA Administrative Record** (see <http://www5.hanford.gov/arpir/?content=advancedSearch> - search EDMC File Number)

<b>Item Description</b>	<b>TPA/CD Topic Milestone Tie</b>	<b>TPA Admin Record – EDMC File Number</b>
Meeting Notes: 200 West Tank Farms Interim Measure Investigation Work Plan and 241-TX Sampling and Analysis Plan, held 01/16/13, signed 02/11/13	M-045-20, M-045-21	0089023
CD Retrieval Certification Submittal for SST C-104, ORP letter 13-TF-0018 dated 03/21/13	M-045-86/D-00B-01	1219910
February ORP TPA Quarterly Meeting Minutes, held 02/21/13, signed 03/26/13	All	1219944
March 2013 ORP TPA Monthly Report	All	1219973
March 2013 ORP CD Monthly Report	All	1219974
Ecology Approval for 200 West Interim Measures Work Plan RPP-PLAN-54808 Rev. 1, ECY letter 13-NWP-030, 03/27/13	M-045-20, M-045-22	1220042
TPA Change Package M-45-12-05, Revise M-045-22 and associated targets to provide due dates, signed on 04/01/13	M-045-22	1220043
TWRWP RPP-22520, Rev. 7 for C-101 and C-105, Notice Number 2013-04, signed 04/17/13	CD TWRWP	1220219

**2.0 Agreements, Issues, Actions (review before and after ORP Project Summary Presentations)**

**3.0 Review of the ORP Project Summary**

**4.0 Key Documents List**

**Upcoming Meetings**

- The ORP TPA May Quarterly Dry-Run meeting is tentatively scheduled for May 14, 2013 from 9:00-11:30AM in ORP Room 1200.
- The ORP TPA May Quarterly/IAMIT meeting is tentatively scheduled for May 16, 2013 from 8:30-11:30AM at Ecology.

## ORP/Ecology TPA and CD Agreements, Issues, and Actions for April 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.

### Actions:

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
<b>Tank Farms Actions</b>					
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 and any sampling spec results.	Open.	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.	Open.	Dan McDonald / 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.	Open.	Chris Kemp	

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

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
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>Open.</b>	Jeremy Johnson	
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>Open.</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	
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. <b>Update 03/26/13:</b> Follow-up meetings to discuss these milestones will be held by ORP and ECY.	<b>Open.</b> First meeting was held at ECY on 03/14/13.	Chris Kemp	
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>Open.</b>	Chris Kemp	
TF-13-02-01	02/19/13	ECY would like to be added to the Groundwater Quarterly Monitoring Report distribution list and be notified of the months when groundwater sampling is scheduled to occur for the seven Tank Farms WMAs.	<b>Open.</b> 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 for the comments provided on the draft SST Integrity TPA change package and meet with ECY. <b>Update 03/26/12:</b> ECY and ORP will meet to discuss additional impacts before finalizing the TPA change package.	<b>Open.</b> ORP has incorporated comments and the SST Integrity Chg Pckg is under ECY review.	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>Open.</b>	Chris Kemp	

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

#	Date Initiated	Action Description	Action Status	Actionee(s)	Date Closed
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>Open.</b> ORP will set up a meeting with ECY (requestors) and WRPS to discuss the status when requestors are available in April 2013.	DaBrisha Smith	
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 will set up a meeting to discuss.	Chris Kemp	
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.	<b>Open.</b> ECY will review these results for discussion at a follow-up overall ORP/ECY Comms Improvements meeting.	Jeff Lyon	
<b>WTP Actions</b>					
WTP-13-02-02	02/21/13	ORP will meet with ECY to discuss the schedule and status of RLD Vessels 163 and 164 welding rework.	<b>Open.</b>	Jason Young	
WTP-13-02-01	02/21/13	ORP will meet with ECY to discuss the PT and HLW facility maintenance program.	<b>Open.</b>	Wahed Abdul	
WTP-12-10-04	10/23/12	ORP will determine the status of the updated G2 Run and provide to ECY.	<b>Open.</b>	Wahed Abdul	
WTP-13-01-03	01/22/13	ORP will get back to ECY by early February to setup a briefing on LAB Substantially Complete documentation.	<b>Open.</b>	Jason Young	
WTP-13-01-02	01/22/13	ORP will get back to ECY by early February to setup a briefing Steam Plant Complete documentation.	<b>Open.</b>	Jason Young	
WTP-13-01-01	01/22/13	ORP will get back to ECY by early February on a briefing to discuss the LAB cathodic protection issue.	<b>Open.</b>	Jason Young	

ORP Project Managers Meeting  
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**Attachment B: List of Attendees**

**(3 pages including this coversheet)**

**Sign In Sheet**  
**ORP TPA PMM Meeting**  
**April 23, 2013**

NAME	ORG	PHONE
Lon Huffman	EUD	376 0104
Jeff Lyon	Ecology	539-1996
	ORP	376-5166
Wally Gao	Ecology	372-7901
Robbie Biyani	"	372-7884
DAVID BECKER	Ecy	372-7990
Nitya Chandran	Ecy	372-7931
Arlene Tortoso	Ecy	372-7956
Isabelle Wheeler	ORP	376-1560
Annette Carlson	Ecology	372-7897
Jason Young	DOE	376-0325
Bryan Tramberger	DOE	376-2674
Jeff Brezger	DOE	438-0444

**Sign In Sheet**  
**ORP TPA PMM Meeting**  
**April 23, 2013**

NAME	ORG	PHONE
ROB PIPPO	MSA EIS	373-3285
Kathy Knox	Knox Court Reporting	946-5535
Jeremy Johnson	ORP	376 1866
RA Hebraud	DOE	373-7626
CT. 128	ORP	509-373-0649
STUEY Cimat	ODOB	(541) 963-0853
Dan McLaughlin	ECY	509.372.7988
Dabrisha Smith	ORP	509.376.4300
DAN KILPAT	ORP	509. 392. 3064
Chris Harrington	ORP	509-376-1239
Reed Kaldor	MSA	509-372-1992
Mike Pecocquin	WRPS	539-5357
Jim Alzheimer	ECY	509-372-7982
Nancy Uzunlar	Ecology	3727928
Joni Grindstaff	DOE-ORP	376-6200
Susan Eberlein	WRPS	372-1689
Steve Killory	WRPS	727-7804
Isabelle Wheeler	ORP	376-1560
Mike Barro	Ecology	372-7927
JOE CAGGIANO	"	372-7915
Billie Mauss	DOE-ORP	373-5113
Allen Mattlin	DOE-ORP	376-1900
Steve Pfaff	ORP	376-2188

ORP Project Managers Meeting  
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**Attachment C: Presentation Materials**

**ORP TPA Project Summary  
(18 pages)**

**And**

**ORP Consent Decree Project Summary  
(18 pages)**

**And**

**Working ORP Key Documents List  
(2 pages)**

**(39 pages including this coversheet)**



**FINAL**

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



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

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

Milestone	Title	Due Date	Completion Date	Status
M-045-61	Phase 2 RCRA Facility Investigation/Corrective Measures Study	12/31/2014		To Be Missed
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:

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

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

ORP and Ecology are scheduled to meet 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", Please see issues below.

ORP and Ecology will jointly begin defining the System Plan 7 scenarios in the July-August 2013 time frame. The defined scenarios milestone is October 31, 2013.

**Issues:**

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

### Acquisition of New Facilities

**M-090-13, 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).

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

242-A Campaign strategy:

The 242-A Campaign Strategy for FY2010 through FY2015 depicted below has been updated based on ORP-11242, River Protection Project Plan, Revision 6, and ongoing schedule integration efforts.

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY10	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and completing in early October 2010.
FY10	10-02	AW-106	AW-106	Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY11	NA	NA	NA	No campaign conducted in FY11 due to ongoing 242-A and Tank Farm facility life extension and ARRA funded upgrades.
FY12	NA	NA	NA	No campaign conducted in FY12 due to ongoing 242-A and Tank Farm facility upgrades and revision to the 242-A Documented Safety Analysis (DSA).
FY13	13-01	AP-107	AP-107	Estimated start early August 2013. May require two (2) passes to achieve waste volume reduction.
FY13	13-02	AW-106	AW-106	Estimated start late August 2013.
FY14	14-01	AN-106 AZ-102 AW-106	AP-107	Estimated start March 2014. Two (2) passes required.
FY15	15-01	AY-101 AZ-102	AP-107	Estimated start March 2015. Three (3) passes required.
FY15	15-02	AY-101	AP-107	Estimated start August 2015. Four (4) passes required.

## SST Integrity Assurance

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

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

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

**M-045-91F-T02, Provide to Ecology as a HFFACO secondary document a report evaluating the common factors of liner failures for SSTs that have leaked and will provide recommendations as appropriate, such as enhanced Leak Detection, Monitoring, and Mitigation, Due: 7/31/2013, Status: To Be Missed. See issues below.**

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

**M-045-91G-T03, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 1,000,000 gallon tanks (A, AX and SX Farms), Due: 9/30/2013, Status: To Be Missed. See issues below.**

**M-045-91E, Provide to Ecology a compilation of the Single-Shell Tank farms dome deflection surveys every two years, beginning 9/30/2013, Due: 9/30/2013, Status: On schedule.**

**M-045-91G-T04, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 55,000 gallon tanks (B, C, T and U Farms), Due: 10/31/2013, Status: To Be Missed. See issues below.**

**M-045-91F, Provide to Ecology a report (Summary Conclusions Report on Leak Integrity) summarizing and evaluating the information submitted under M-045-91F-T01 through -T04, Due: 12/31/2013, Status: To Be Missed. See issues below.**

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

**M-045-91B-T01, Provide Ecology a report containing the results and interpretation of testing, and analysis, performed on the concrete core obtained from Tank A- 106 or alternate tank, Due: 9/30/2014, Status: On schedule.**

**M-045-91H, Submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones based on information obtained from the actions in the preceding M-045-91 series milestones to date, Due: 7/31/2015, Status: On schedule.**

**M-045-91I, Provide to Ecology an IQRPE certification of SSTs structural integrity for the remainder of the mission, or for such time as the IQRPE believes he/she can reasonably certify, Due: 9/30/2018, Status: On schedule.**

**Significant Past Accomplishments:**

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

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

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

**Issues:**

- FY2012 and FY2013 funding constraints have impacted M-045-91 scheduled work. ORP has met with Ecology to discuss impacts on individual milestones and targets dates for FY2013 and beyond per the TPA Section 12.0 Change Process. Ecology’s initial comments on a draft TPA Change Request have been incorporated, and ORP has provided this updated draft to Ecology for review. 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 March 1 – March 30, 2013:

**Accomplishments:**

- Completed RPP-PLAN-53814, Rev. 0, ORSS Sampling and Analysis Plan for Waste Solids in Tank 241-C-109 to Support Tank Closure.
- Completed RPP-PLAN-23827, Rev. 3, Sampling and Analysis Plan for Single-Shell Tanks Component Closure.
- Completed RPP-PLAN-52884, Rev. 1, Sampling and Analysis Plan for Post-Retrieval Waste Solids in Tank 241-C-107
- Completed RPP-23403, Rev. 5, Single-Shell Tank Component Closure Data Quality Objectives.
- Completed RPP-RPT-44630, Rev. 5, Derivation of Best-Basis Inventory for Tank 241-AY-102 as of January 1, 2013.
- Completed RPP-RPT-44625, Rev. 2, Derivation of Best-Basis Inventory for Tank 241-AW-105 as of January 1, 2013.

- Completed sampling of Tank 241-AN-101 supernatant on March 11, 2013. Fourteen samples were collected.

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

- Tank Sampling
  - Tank 241-C-109 ORSS sampling for closure is currently scheduled for April 2013.
  - Tank 241-C-107 Mobile Arm Retrieval System (MARS) Drag Sampling for closure is currently scheduled for May 2013.
  - 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.
- BBI Updates: The following tanks have been identified for updates in FY13 Quarter 2. The BBI updates will be released in April 2013.
  - 241-AN-101
  - 241-AN-106
  - 241-AP-104
  - 241-AY-101
  - 241-AZ-101
  - 241-C-101
  - 241-C-108
  - 241-SY-102
- Data Quality Objectives (DQO)
  - A DQO on a Solubility Model is due to be released in April 2013.
  - A DQO for Tank C-112 Hard Heel Dissolution is due to be released in April 2013.

**Issues:**

None.

## TANK OPERATIONS CONTRACT (TOC) OVERVIEW

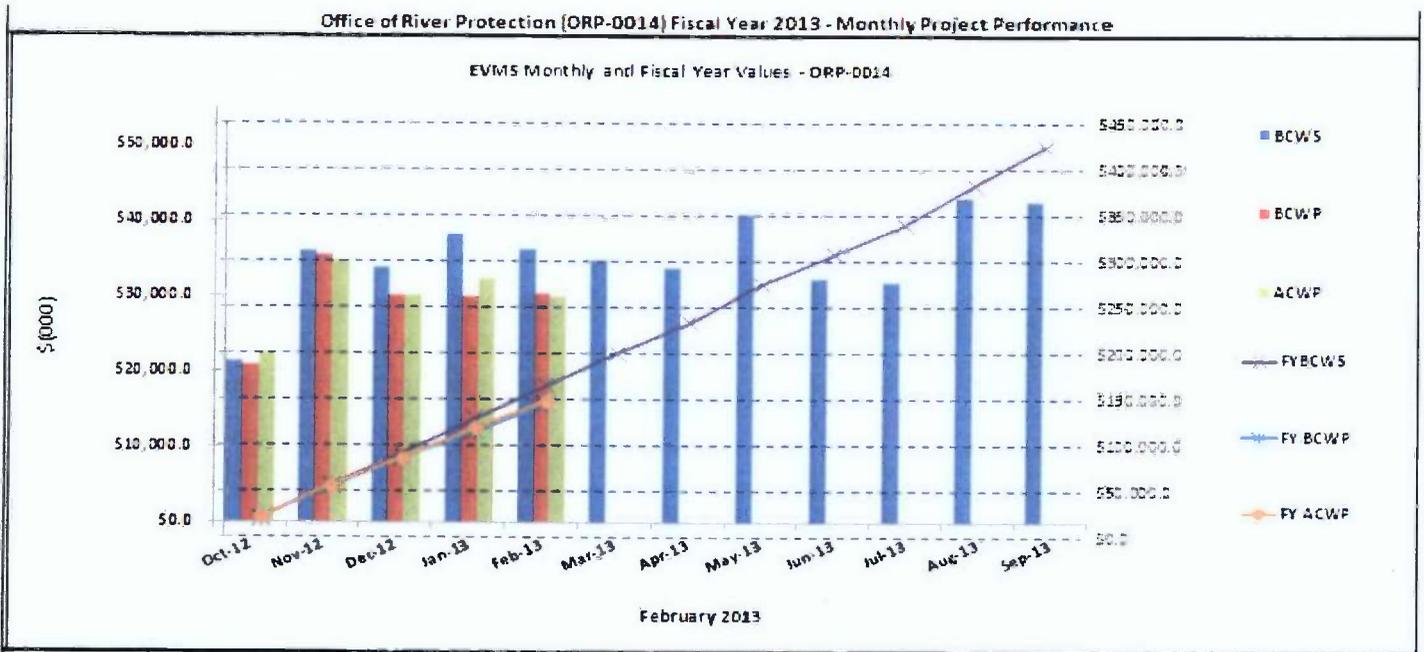
### Project Performance

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

As of February 28, 2013, Washington River Protection Solutions LLC (WRPS) worked 6,648,722 hours (689 days) without a Lost Time Workday Injury and 322,410 hours (31 days) without a Recordable case. There were no Days Away, Restricted, or Transferred (DART) cases or Recordable cases in February.

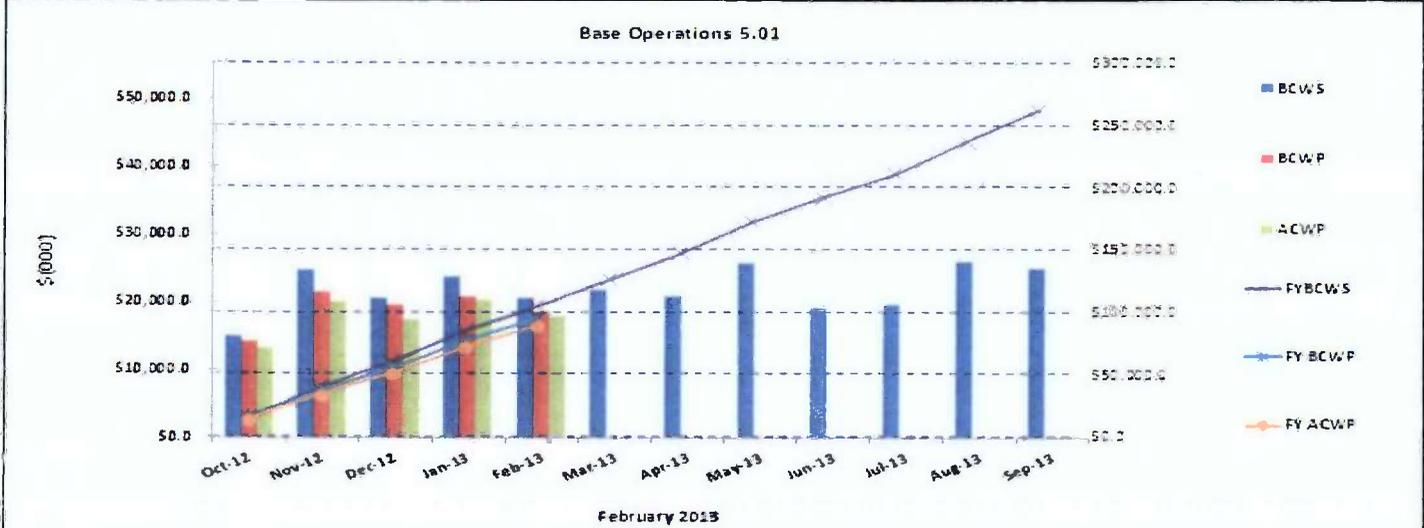
WRPS Project Performance - (\$k)										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	36,167.5	30,290.9	29,773.7	(5,876.6)	517.2	0.84	1.02			
FYTD	165,403.9	146,332.9	149,074.6	(19,071.0)	(2,741.7)	0.88	0.98	430,997.0	377,756.6	53,240.4
CTD	1,769,504.0	1,745,209.1	1,674,220.3	(24,294.9)	70,988.8	0.99	1.04	7,014,060.6	6,911,862.9	102,197.7

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	\$34,599.7			0.00		\$200,003.5			0.00	
Apr-13	\$33,773.8			0.00		\$233,777.3			0.00	
May-13	\$40,892.1			0.00		\$274,669.4			0.00	
Jun-13	\$32,288.5			0.00		\$306,957.9			0.00	
Jul-13	\$31,800.4			0.00		\$338,758.3			0.00	
Aug-13	\$42,997.4			0.00		\$381,755.7			0.00	
Sep-13	\$42,434.3			0.00		\$424,190.0			0.00	
<b>CTD</b>	<b>\$1,769,504.0</b>	<b>\$1,745,209.1</b>	<b>\$1,674,220.3</b>	<b>0.99</b>	<b>1.04</b>					

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



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-12	\$14,882.7	\$14,170.4	\$13,207.0	0.95	1.07	\$14,882.7	\$14,170.4	\$13,207.0	0.95	1.07
Nov-12	\$24,586.3	\$21,630.8	\$20,130.8	0.88	1.07	\$39,469.0	\$35,801.2	\$33,337.8	0.91	1.07
Dec-12	\$20,440.9	\$19,491.2	\$17,422.8	0.95	1.12	\$59,909.9	\$55,292.4	\$50,760.6	0.92	1.09
Jan-13	\$23,738.1	\$20,753.9	\$20,334.3	0.87	1.02	\$83,648.0	\$76,046.3	\$71,094.9	0.91	1.07
Feb-13	\$20,673.5	\$18,559.8	\$17,986.6	0.90	1.03	\$104,321.5	\$94,606.1	\$89,081.5	0.91	1.06
Mar-13	\$21,758.8			0.00		\$126,080.3			0.00	
Apr-13	\$20,728.3			0.00		\$146,808.6			0.00	
May-13	\$25,607.5			0.00		\$172,416.1			0.00	
Jun-13	\$19,077.3			0.00		\$191,493.4			0.00	
Jul-13	\$19,634.2			0.00		\$211,127.6			0.00	
Aug-13	\$25,939.3			0.00		\$237,066.9			0.00	
Sep-13	\$24,820.9			0.00		\$261,887.8			0.00	
<b>CTD</b>	<b>\$1,139,665.4</b>	<b>\$1,127,470.2</b>	<b>\$1,089,772.2</b>	<b>0.99</b>	<b>1.03</b>					

**Base Operations**

**Schedule Variance (\$1,653K):**

The unfavorable schedule variance is primarily due to:

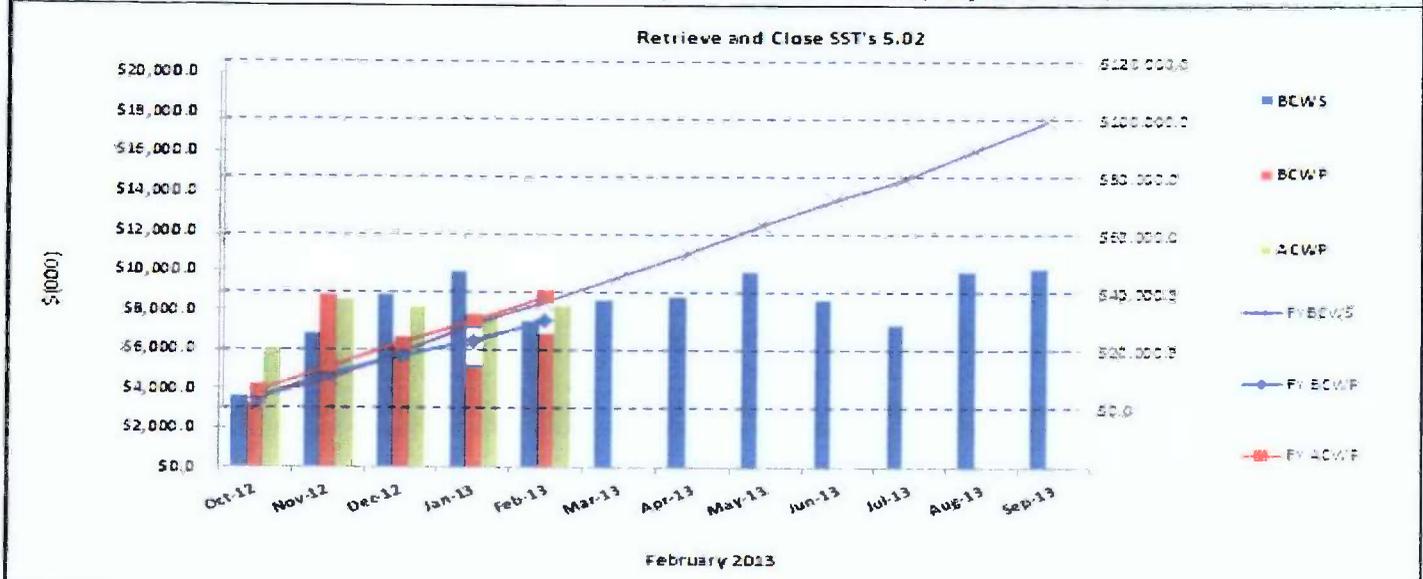
- One System Engineering had some delays in the development and completion of the Smart Plant Foundation software and site acceptance testing. These delays also impacted training and the planning of additional upgrades to the Smart Plant software.
- DST to DST Transfer had four transfer planned in FY 2013 which were completed in FY 2012, this resulted in performance “give-back”. The AN-101 to AP-104 transfer was also delayed due to the slower retrieval of SST C-101 and being behind schedule on C-107 retrieval.
- SST Integrity had delays to the SST structural analysis of record due to additional work required on the tank-to-tank interaction report. The release of the C-107 dome core forensics report is also behind schedule.

**Cost Variance \$1,258K:**

The favorable cost variance is primarily due to:

- 222-S analytical equipment inadvertently overstated performance on the receipt of the scanning electron microscope (SEM) equipment. The equipment was planned to arrive in February but due to delays by the vendor, the SEM is anticipated to be received in March.
- DST Integrity project increased efficiencies by completing the Extent of Condition-SY-103 100% Annulus Video workscope in parallel with the SY-103 UT activities.

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



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	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	\$8,549.1			0.00		\$45,135.2			0.00	
Apr-13	\$8,677.0			0.00		\$53,812.2			0.00	
May-13	\$9,896.3			0.00		\$63,708.5			0.00	
Jun-13	\$8,470.0			0.00		\$72,178.5			0.00	
Jul-13	\$7,298.8			0.00		\$79,477.3			0.00	
Aug-13	\$9,902.0			0.00		\$89,379.3			0.00	
Sep-13	\$10,128.5			0.00		\$99,507.8			0.00	
<b>CTD</b>	<b>\$376,285.0</b>	<b>\$371,114.2</b>	<b>\$372,708.6</b>	<b>0.99</b>	<b>1.00</b>					

**Single-Shell Tanks**

**Schedule Variance (\$2,441K):**

The unfavorable schedule variance is primarily due to:

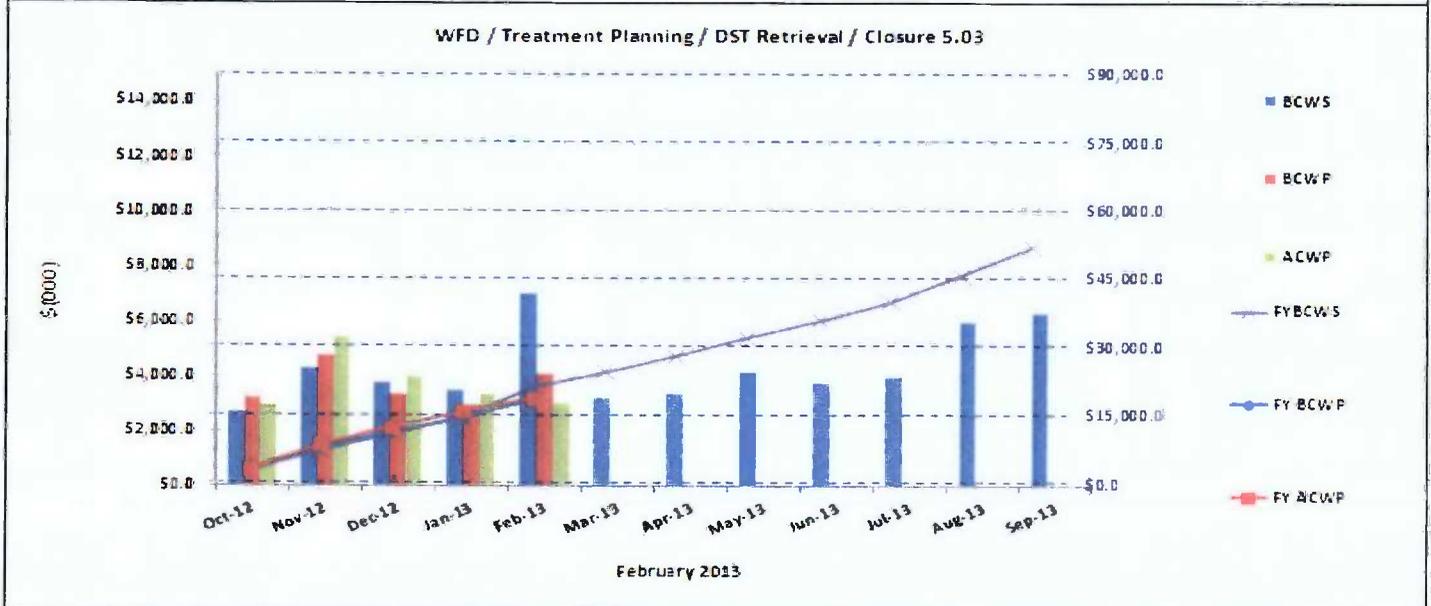
- C-102 Retrieval delays in starting waste retrieval, as operations had been realigned to start once C-101 bulk retrieval was complete instead of working in parallel as planned.
- C-101 Retrieval had a 3-week delay of retrieval operations to allow for maintenance and testing of the AN Farm exhauster.
- Retrieval technology development experienced fabrication delays of the MARS-V safety instrument system, cross-flow filter system, and temperature monitoring system because of educator plugging issues.
- C-105 Retrieval delays to the large riser cutting method and MARS-V installation.
- C-109 Retrieval delays with installation of the Off-Riser sampling System for post-retrieval sampling analysis. Resources are unavailable until the C-104 post retrieval and AN-101 sampling activities are complete.

**Cost Variance (\$1,402K):**

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 design and engineering resources needed to resolve comments on C-102 operation procedures and additional training of personnel for readiness verification.
- Increased labor and subcontract support for C-105 installation activities
- Addition subcontract and labor costs associated with resolution of MARS-V issues.

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



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-12	\$2,710.6	\$3,212.7	\$2,921.1	1.19	1.10	\$2,710.6	\$3,212.7	\$2,921.1	1.19	1.10
Nov-12	\$4,289.4	\$4,729.6	\$5,435.7	1.10	0.87	\$7,000.0	\$7,942.3	\$8,356.8	1.13	0.95
Dec-12	\$3,764.2	\$3,316.5	\$3,912.1	0.88	0.85	\$10,764.2	\$11,258.8	\$12,268.9	1.05	0.92
Jan-13	\$3,476.4	\$2,941.2	\$3,378.3	0.85	0.87	\$14,240.6	\$14,200.0	\$15,647.2	1.00	0.91
Feb-13	\$7,001.2	\$4,060.6	\$3,017.0	0.58	1.35	\$21,241.8	\$18,260.6	\$18,664.2	0.86	0.98
Mar-13	\$3,183.1			0.00		\$24,424.9			0.00	
Apr-13	\$3,354.2			0.00		\$27,779.1			0.00	
May-13	\$4,153.5			0.00		\$31,932.6			0.00	
Jun-13	\$3,727.7			0.00		\$35,660.3			0.00	
Jul-13	\$3,945.8			0.00		\$39,606.1			0.00	
Aug-13	\$5,937.2			0.00		\$45,543.3			0.00	
Sep-13	\$6,262.4			0.00		\$51,805.7			0.00	
<b>CTD</b>	<b>\$235,118.8</b>	<b>\$228,310.1</b>	<b>\$196,491.7</b>	<b>0.97</b>	<b>1.16</b>					

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

**Schedule Variance (\$2,474K):**

The unfavorable schedule variance is primarily due to:

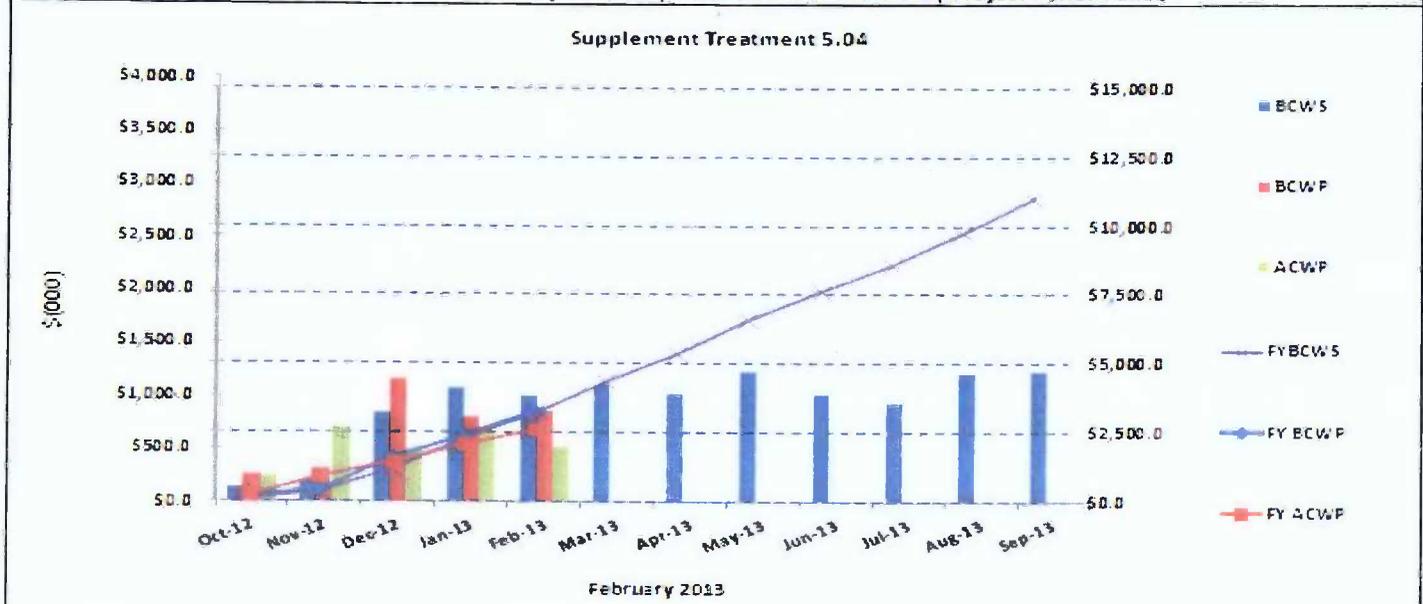
- WFD System Performance due to delays associated with solids accumulation testing on the small-scale demonstration platform resulting from equipment failures, simulant mixing issues, issues with the development of analytical procedures, and attempts to perform in-house sample analysis to save costs
- RPP System Plan delays in selecting scenarios.

**Cost Variance (\$871K):**

The unfavorable cost variance is primarily due to:

- WFD system performance had a reduction in cost due to implementation of DNFSB 2010-2, pulse jet mixing change request.

Office of River Protection (ORP-DD14) Fiscal Year 2013 - Monthly Project Performance



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-12	\$136.6	\$266.4	\$245.6	1.95	1.08	\$136.6	\$266.4	\$245.6	1.95	1.08
Nov-12	\$212.9	\$169.2	\$705.1	0.79	0.24	\$349.5	\$435.6	\$950.7	1.25	0.46
Dec-12	\$835.7	\$1,150.7	\$487.7	1.38	2.36	\$1,185.2	\$1,586.3	\$1,438.4	1.34	1.10
Jan-13	\$1,067.8	\$811.9	\$646.8	0.76	1.26	\$2,253.0	\$2,398.2	\$2,085.2	1.06	1.15
Feb-13	\$1,001.5	\$863.0	\$531.0	0.86	1.63	\$3,254.5	\$3,261.2	\$2,616.2	1.00	1.25
Mar-13	\$1,108.8			0.00		\$4,363.3			0.00	
Apr-13	\$1,014.3			0.00		\$5,377.6			0.00	
May-13	\$1,234.8			0.00		\$6,612.4			0.00	
Jun-13	\$1,013.5			0.00		\$7,625.9			0.00	
Jul-13	\$921.5			0.00		\$8,547.4			0.00	
Aug-13	\$1,218.8			0.00		\$9,766.2			0.00	
Sep-13	\$1,222.5			0.00		\$10,988.7			0.00	

<b>CTD</b>	<b>\$18,434.7</b>	<b>\$18,314.5</b>	<b>\$15,247.8</b>	<b>0.99</b>	<b>1.20</b>
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*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.** ORP will submit to Ecology for review and approval an interim measures investigation work plan for to vadose zone characterization at 241-TX Farm and 241-U Farm, and soil desiccation/contaminant removal proof-of-principal test at 241-SX Farm. The work plan will also be submitted with a TPA Change Package to establish milestone due date for M-045-22 and target dates for submittal of three secondary documents, see M-045-22-T01, -T02, and -T03. Added per TPA change package M-45-12-04. ORP submitted this work plan and a draft TPA change package for dates for M-045-22 and its targets on 12/06/12 via letter 12-TF-0054. Ecology responded via 12-NWP-190 authorizing ORP to begin field work while Ecology completed their review of the Work Plan. Ecology provided comments on the Work Plan in the January 2013 TPA Project Managers' meeting. Comments have been resolved and 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 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.** Added per TPA change package M-45-12-04. The Sample Analysis Plan was finalized and was transmitted to Ecology via ORP letter 13-TF-0013 on 03/11/13.

**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 a 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:**

- Provided the revised interim measures investigation Work Plan for M-045-20 and final TPA change package for M-045-22 and its targets via ORP letter 13-TF-0014 on 03/18/2013.
- Automated data collection systems for T-Farm and TY Farm interim barrier monitoring continue gathering data.
- Direct push field work continues 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 equipment was mobilized in C Farm to begin pushing near the C-200 tanks to place deep electrodes for resistivity evaluations.
- The TY Interim Surface Barrier Monitoring Plan was revised per approved TPA Change Notice 2012-09.

#### **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.
- Initiate 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.
- See discussions above and related discussions in Consent Decree report.

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

- Perform post-retrieval logging of drywells near C-108 in support of the M-045-86 retrieval data report.
- Continue analysis of the post-retrieval samples from tank C-104.
- 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 for discussion at the next ORP/Ecology M-045-61/-62 meeting.

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:**

None.

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

Work with Ecology on updates to TWRWPs RPP-22520 and RPP-37739 for tanks C-105 and 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 APRIL 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

April 2013

## Office of River Protection

Consent Decree 08-5085-FVS  
Monthly Summary Report

April 2013 (Project EVMS reflects February 2013)

Page	Topic	Leads
1	Statistics / Status	James Lynch / Dan McDonald / Jeff Lyon
2	SST Retrieval and Closure – D-00B-01, -02, -03, -04	Chris Kemp / Jeff Lyon
3	Tank Waste Retrieval Work Plan (TWRWP) Status – Consent Decree Appendix C	Chris Kemp / Jeff Lyon
4	SST Retrieval Monthly and Fiscal Year EVMS Data	Dan Knight / Jeff Lyon
5	WTP - Immobilization Plant Project – D-00A-06, D-00A-17, D-00A-01	Delmar Noyes / Dan McDonald
7	WTP Pretreatment (PT) Facility – D-00A-18, -19, -13, -14, -15, 16	Wahed Abdul / Dan McDonald
10	High-Level Waste (HLW) Facility – D-00A-20, -21, 02, 03	Wahed Abdul / Dan McDonald
12	Low-Activity Waste (LAW) Facility – D-00A-07, -08, -09	Jeff Bruggeman / Dan McDonald
14	Balance of Facilities (BOF) – D-00A-12	Jason Young / Dan McDonald
16	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		On-going
**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	09/25/2013		On-going
<b>Fiscal Year 2014</b>				
D-006-00-A	Meet Approximately Every 3 Years to Review Requirements of CD	10/25/2013		On-going
D-00B-01	Complete Retrieval of Tank Waste from 10 SSTs in WMA-C	09/30/2014		On-going
D-00B-02	Advise Ecology of the 9 SSTs Waste Will be Retrieved by 2022	09/30/2014	08/22/2011	Completed
<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 the requirement in Section IV-B-5 of the Consent Decree (CD), DOE must submit to Ecology a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix "C", Part 1, of the CD. Completed for SST C-104 on March 21, 2013 via ORP letter, 13-TF-0018.

**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. Continued operation of the modified sluicing system in C-101 using ERSS.
2. Completed the testing of the new AN-106 pump.
3. Completed readiness activities for C-107 MARS system.
4. Completed installation of the Fold Track into C-110.
5. Continued with installation of support equipment for C-110 Fold Track and Construction Acceptance Testing.
6. Initiated procurements and installation of equipment for C-112 Hard Heel removal.
7. DOE-ORP formally transmitted the Retrieval Completion Certification Report for tank 241-C-104 to Ecology on March 21, 2013. (See ORP Letter 13-TF-0018)

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

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

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

None.

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

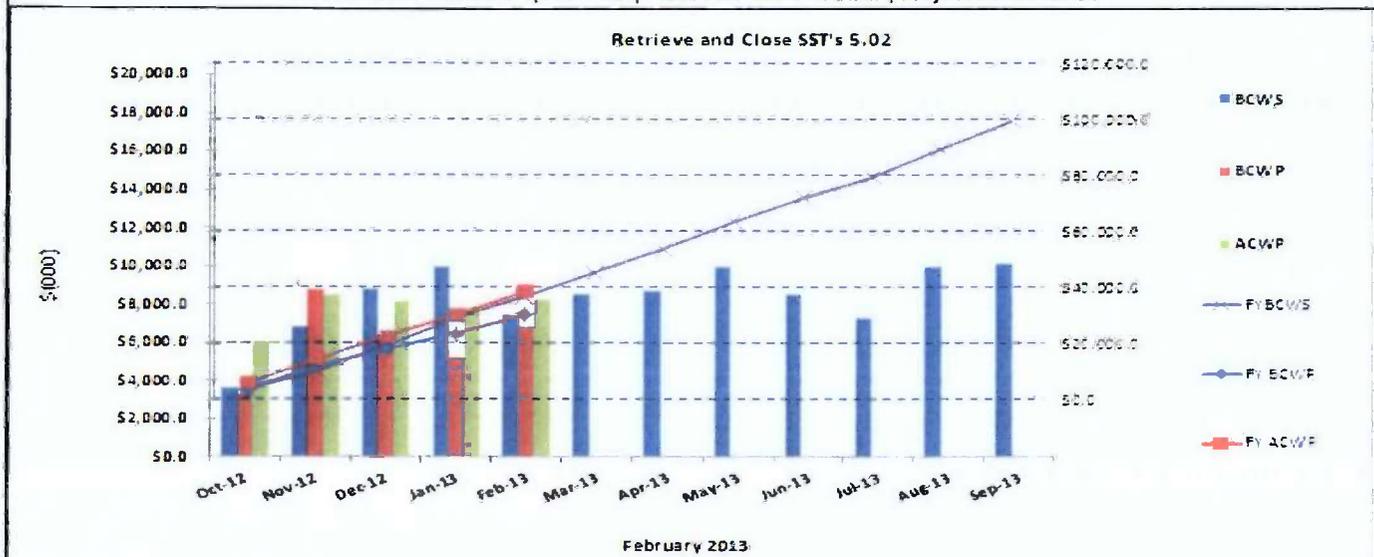
Work with Ecology on updates to TWRWPs RPP-22520 and RPP-37739 for tanks C-105 and C-111.

#### 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	BCVS	BCVP	ACVP	SPI	CPI	FYBCVS	FY BCVP	FY ACVP	FY SPI	FY CPI
Oct-12	\$3,620.6	\$3,262.2	\$6,009.2	0.90	0.54	\$3,620.6	\$3,262.2	\$6,009.2	0.90	0.54
Nov-12	\$6,822.3	\$8,789.7	\$8,503.5	1.29	1.03	\$10,442.9	\$12,051.9	\$14,512.7	1.15	0.83
Dec-12	\$8,754.6	\$6,086.6	\$8,117.5	0.70	0.75	\$19,197.5	\$18,138.5	\$22,630.2	0.94	0.80
Jan-13	\$9,897.3	\$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	\$8,549.1			0.00		\$45,135.2			0.00	
Apr-13	\$8,677.0			0.00		\$53,812.2			0.00	
May-13	\$9,896.3			0.00		\$63,708.5			0.00	
Jun-13	\$8,470.0			0.00		\$72,178.5			0.00	
Jul-13	\$7,298.8			0.00		\$79,477.3			0.00	
Aug-13	\$9,902.0			0.00		\$89,379.3			0.00	
Sep-13	\$10,128.5			0.00		\$99,507.8			0.00	
<b>CTD</b>	<b>\$376,285.0</b>	<b>\$371,114.2</b>	<b>\$372,708.6</b>	<b>0.99</b>	<b>1.00</b>					

#### Single-Shell Tanks

##### Schedule Variance (\$2,441K):

The unfavorable schedule variance is primarily due to:

- C-102 Retrieval delays in starting waste retrieval, as operations had been realigned to start once C-101 bulk retrieval was complete instead of working in parallel as planned.
- C-101 Retrieval had a 3-week delay of retrieval operations to allow for maintenance and testing of the AN Farm exhauster.
- Retrieval technology development experienced fabrication delays of the MARS-V safety instrument system, cross-flow filter system, and temperature monitoring system because of educator plugging issues.
- C-105 Retrieval delays to the large riser cutting method and MARS-V installation.
- C-109 Retrieval delays with installation of the Off-Riser sampling System for post-retrieval sampling analysis. Resources are unavailable until the C-104 post retrieval and AN-101 sampling activities are complete.

##### Cost Variance (\$1,402K):

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 design and engineering resources needed to resolve comments on C-102 operation procedures and additional training of personnel for readiness verification.
- Increased labor and subcontract support for C-105 installation activities
- Addition subcontract and labor costs associated with resolution of MARS-V issues.

## 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 2,292 full-time equivalent (FTE) contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 561 craft, 469 non-manual and 128 subcontractor FTE personnel working at the WTP construction site (all facilities). As of February 2013, the combined Low-Activity Waste (LAW) Facility, Analytical Laboratory (LAB), and Balance of Facilities (BOF) were 61 percent complete; design and engineering was 76 percent complete; procurement was 83 percent complete; construction was 68 percent complete; and startup and commissioning was 10 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 February 2013, the cumulative-to-date WTP Project schedule variance was a positive \$3.6M, and the cumulative-to-date WTP Project cost variance was a negative \$45.9M. 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 February:

### Significant Past Accomplishments:

- Completed the 8-ft vessel mixing test platform systems calibration and installation of jet pump pairs to support pulse jet mixing control testing in May (PT)
- Completed weld inspections for five installed black cell vessels as part of the weld deficiency extent of condition evaluation (PT)
- Accepted existing plant wash and drain vessel RLD-VSL-08 for use in full-scale testing (HLW)
- Completed placement of the castable refractory in Melter 1 (LAW)
- Completed fire protection sprinkler testing and certification for Switchgear Buildings 87 and 91 (BOF)

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

- Complete hydrogen generation rate (HGR) calculations in support of the hydrogen in piping and ancillary vessels (HPAV) technical issue (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.

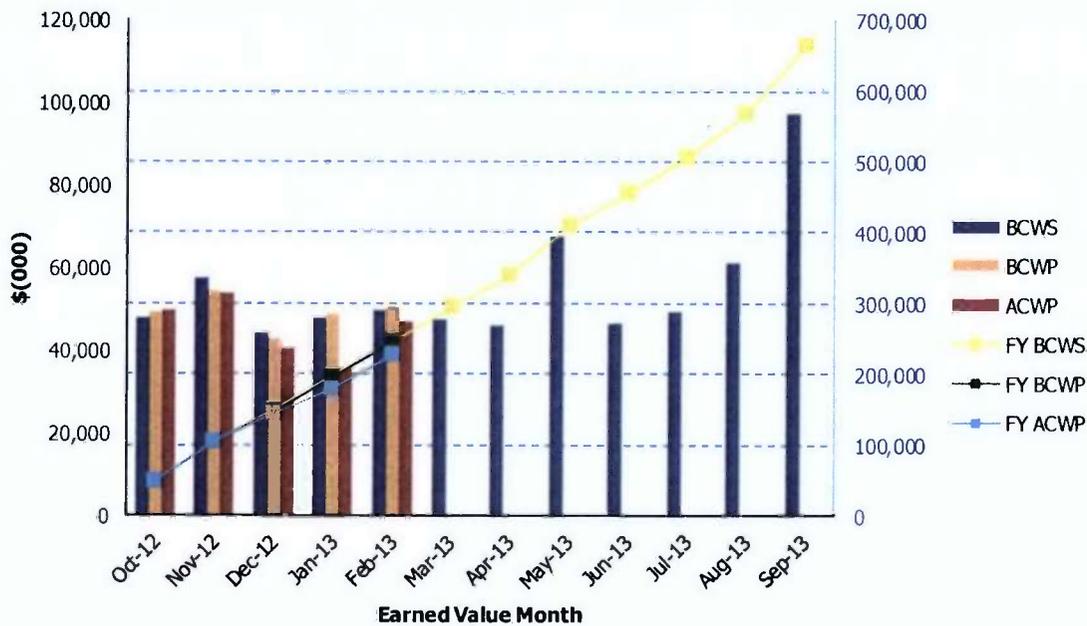
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2013 Earned Value Data

Data as of: February 2013

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2012	\$47,840	\$49,300	\$49,742	1.03	0.99	\$47,840	\$49,300	\$49,742	1.03	0.99
Nov 2012	\$57,411	\$54,398	\$53,916	0.95	1.01	\$105,251	\$103,698	\$103,658	0.99	1.00
Dec 2012	\$44,336	\$43,083	\$40,457	0.97	1.06	\$149,587	\$146,781	\$144,115	0.98	1.02
Jan 2013	\$47,780	\$49,037	\$35,389	1.03	1.39	\$197,367	\$195,818	\$179,504	0.99	1.09
Feb 2013	\$49,984	\$50,929	\$47,008	1.02	1.08	\$247,351	\$246,747	\$226,512	1.00	1.09
Mar 2013	\$47,461					\$294,812				
Apr 2013	\$46,122					\$340,934				
May 2013	\$47,705					\$408,639				
Jun 2013	\$46,723					\$455,362				
Jul 2013	\$49,396					\$504,758				
Aug 2013	\$61,319					\$566,077				
Sep 2013	\$97,343					\$663,420				
PTD	\$7,387,961	\$7,391,614	\$7,437,569	1.00	0.99					

**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. 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 to ensure the design changes are required and requirements are finalized. 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:**

- Developed a test matrix and initiated vendor selection for erosion testing
- Completed the 8-ft vessel mixing test platform systems calibration and installation of jet pump pairs to support pulse jet mixing control testing in May
- Completed weld inspections for five installed black cell vessels as part of the weld deficiency extent of condition evaluation
- Developed test plan for SC-1 jumper configuration to sustain design basis seismic loading

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

- Complete hydrogen generation rate calculations in support of the hydrogen in piping and ancillary vessels (HPAV) technical issue
- 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
- Complete hazard and operability study for the PT Vessel Vent Process System
- Perform testing of pulse jet mixing control strategy using the 8-ft vessel mixing test platform

**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.

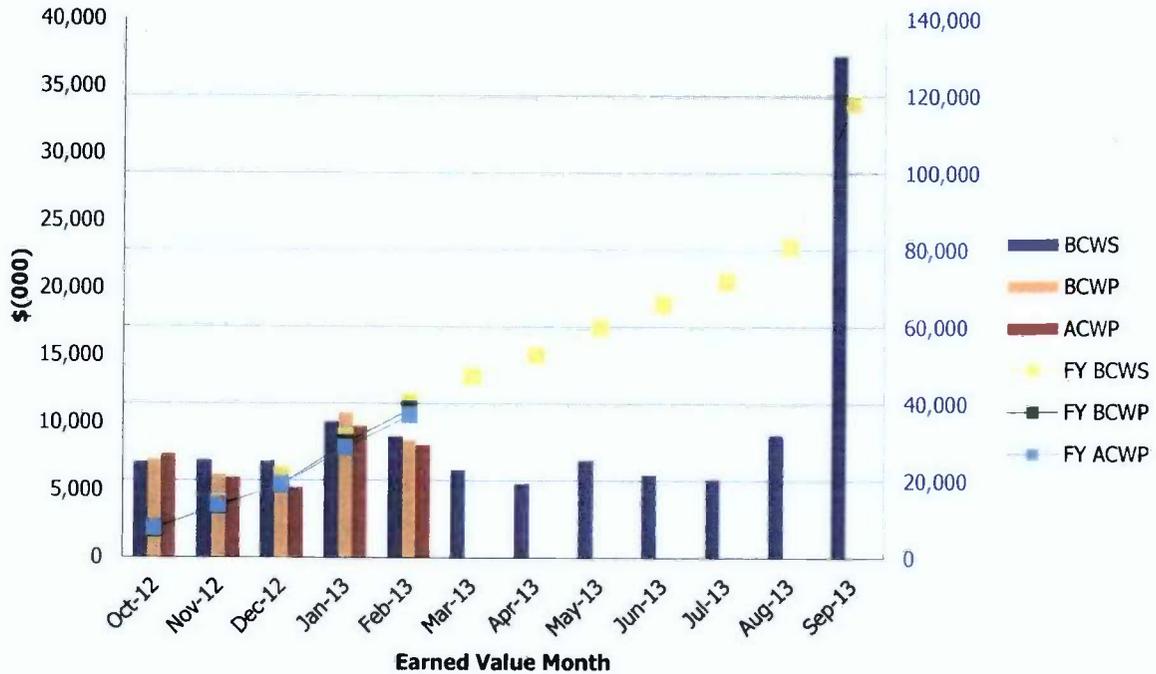
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2013 Earned Value Data

Data as of: February 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	\$6,486					\$47,017				
Apr 2013	\$5,481					\$52,498				
May 2013	\$7,201					\$59,699				
Jun 2013	\$6,128					\$65,827				
Jul 2013	\$5,832					\$71,659				
Aug 2013	\$9,097					\$80,756				
Sep 2013	\$37,287					\$118,043				
PTD	\$1,450,997	\$1,448,960	\$1,447,469	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 to ensure the design changes are required and requirements are finalized. 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 in the process of initiating a review and analysis of the issues identified in RVP (Wave 1) to develop a path forward for issue resolution. Project issue evaluation reports (PIER) are being developed to track resolution of the issues. BNI has started the second phase of RVP (Wave 2), which includes review of the HLW C5V system.

**Significant Past Accomplishments:**

- Incorporated the design changes into Chapters 3, 4, and 5 of the PDSA
- Issued a request for proposal to design and test HEPA filters
- Accepted existing plant wash and drain vessel RLD-VSL-08 for use in full-scale testing

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

- Award contract(s) for prototype design/fabrication of HEPA filters
- 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.

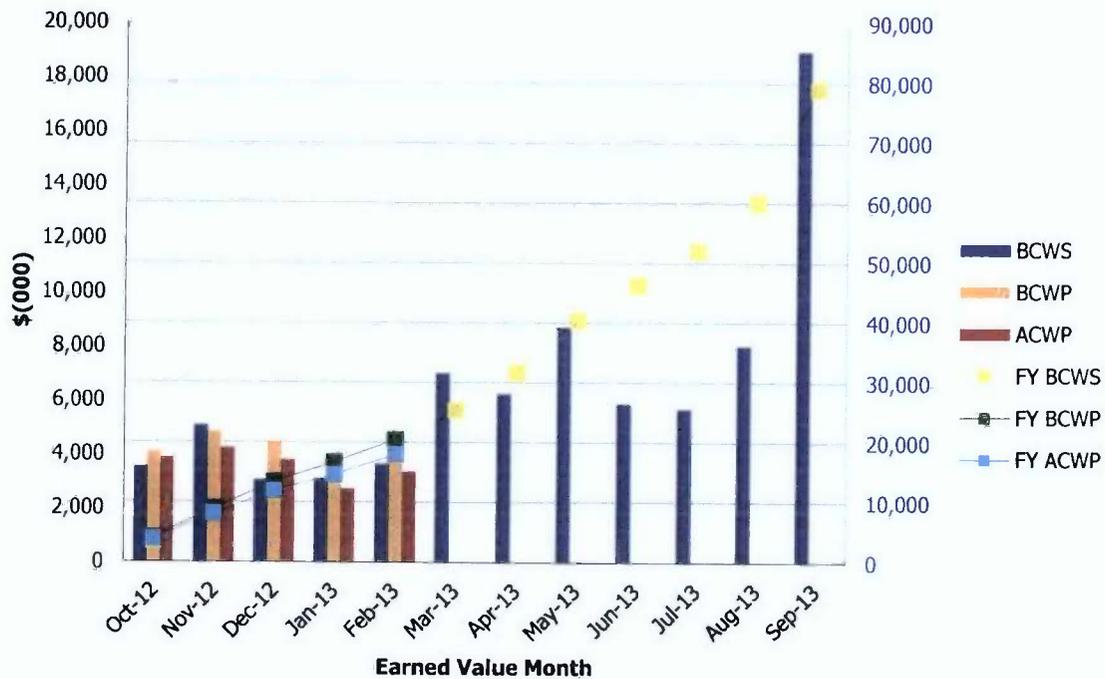
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2013 Earned Value Data

Data as of: February 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	\$7,017					\$25,426				
Apr 2013	\$6,253					\$31,679				
May 2013	\$8,717					\$40,396				
Jun 2013	\$5,876					\$46,272				
Jul 2013	\$5,685					\$51,957				
Aug 2013	\$8,029					\$59,986				
Sep 2013	\$18,964					\$78,950				
PTD	\$940,542	\$942,640	\$940,154	1.00	1.00					

**LOW-ACTIVITY WASTE 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
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 the low activity level waste stream from the Pretreatment Facility at a design capacity of 30 metric tons per day. Waste will be mixed with glass formers, vitrified into glass, and poured from the melter into stainless steel storage containers. After cooling and preparation for transport, the containers are anticipated to be disposed of on the Hanford Site at the Integrated Disposal Facility. As of February 2013, the LAW Facility is 62 percent complete overall, with engineering design 77 percent complete, procurement 85 percent complete, construction 63 percent complete, and startup and commissioning 5 percent complete.

**Significant Past Accomplishments:**

- Completed placement of the castable refractory in Melter 1
- Installed export bay exhaust fans
- Completion of coaxial pipe on 28-ft elevation
- Received Auto Sampling system power supply on-site

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

- Complete installation of melter power supplies
- Complete installation of Auto Sampling system
- Receive HEPA preheaters for LAW Secondary Offgas/Vessel Vent Process System
- Commence refractory brick installation in the melters
- Complete hazard analysis for the melter and container handling systems

**Issues:**

No major issues at this time

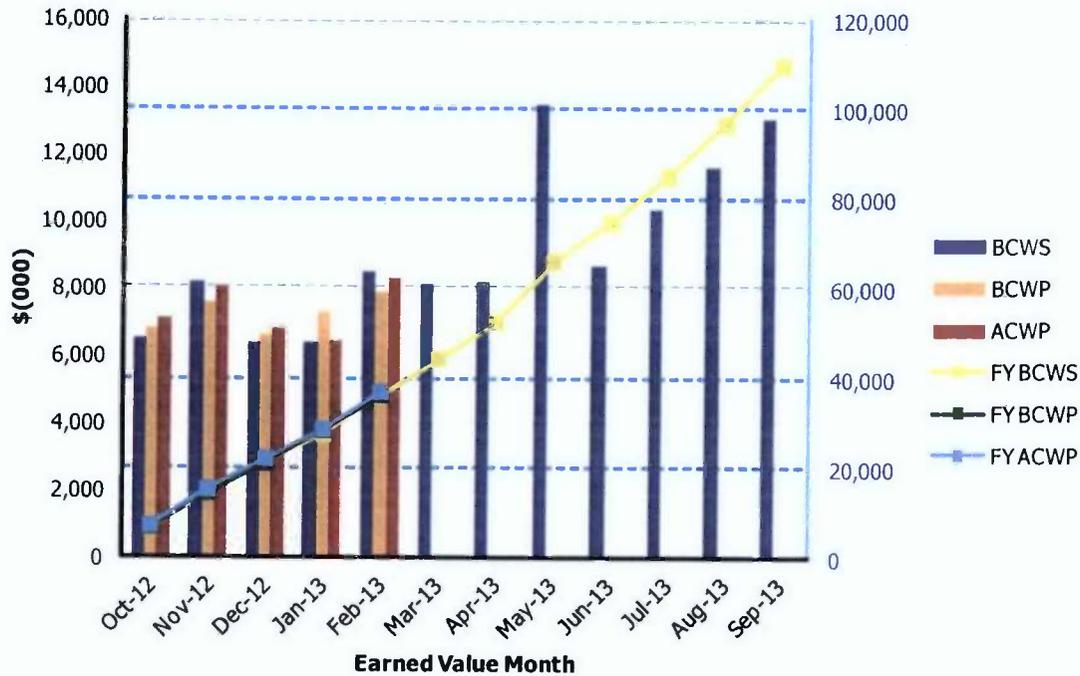
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: February 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	\$8,128					\$44,189				
Apr 2013	\$8,191					\$52,380				
May 2013	\$13,479					\$65,859				
Jun 2013	\$8,654					\$74,513				
Jul 2013	\$10,372					\$84,885				
Aug 2013	\$11,603					\$96,488				
Sep 2013	\$13,058					\$109,546				
PTD	\$729,771	\$733,202	\$785,380	1.00	0.93					

**BALANCE OF FACILITIES**

<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 process facilities – PT, HLW, LAW, and LAB. As of February 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 10 percent complete. A concern has been raised about the effectiveness of the design for the cathodic protection system. BNI is designing and installing test stations to improve the understanding of the effectiveness of the system.

**Significant Past Accomplishments:**

- Issued engineering design complete list for the Cooling Tower Facility
- Completed metering and relay testing for Switchgear Building 87
- Turned over Building 91 fire detection system to startup testing
- Completed fire protection sprinkler testing and certification for Switchgear Buildings 87 and 91

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

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

**Issues:**

No major issues at this time.

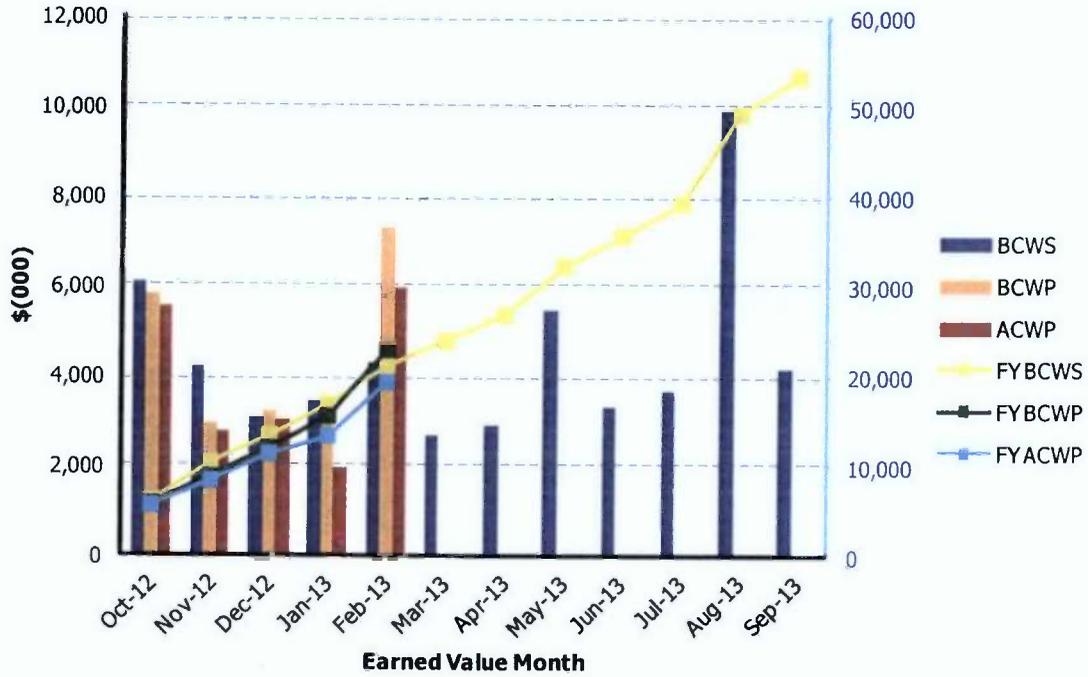
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: February 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	\$2,704					\$23,851				
Apr 2013	\$2,894					\$26,745				
May 2013	\$5,490					\$32,235				
Jun 2013	\$3,333					\$35,568				
Jul 2013	\$3,654					\$39,222				
Aug 2013	\$9,926					\$49,148				
Sep 2013	\$4,149					\$53,297				
PTD	\$296,895	\$298,447	\$293,246	1.01	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 process feed streams, effluent streams, and the final vitrified glass product. As of February 2013, the LAB is 67 percent complete overall, with engineering design 74 percent complete, procurement 85 percent complete, construction 80 percent complete, and startup and commissioning 21 percent complete.

**Significant Past Accomplishments:**

- Completed functional and purification testing of the high-pressure gas helium system
- Completed computer flooring in the controls and instrumentation room A-117

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

- Complete electrical engineering design
- Terminate cable for the HVAC air-handling units and adjustable speed drives
- Complete and close out the HVAC subcontract
- Complete repairs to RLD vessels

**Issues:**

No major issues at this time.

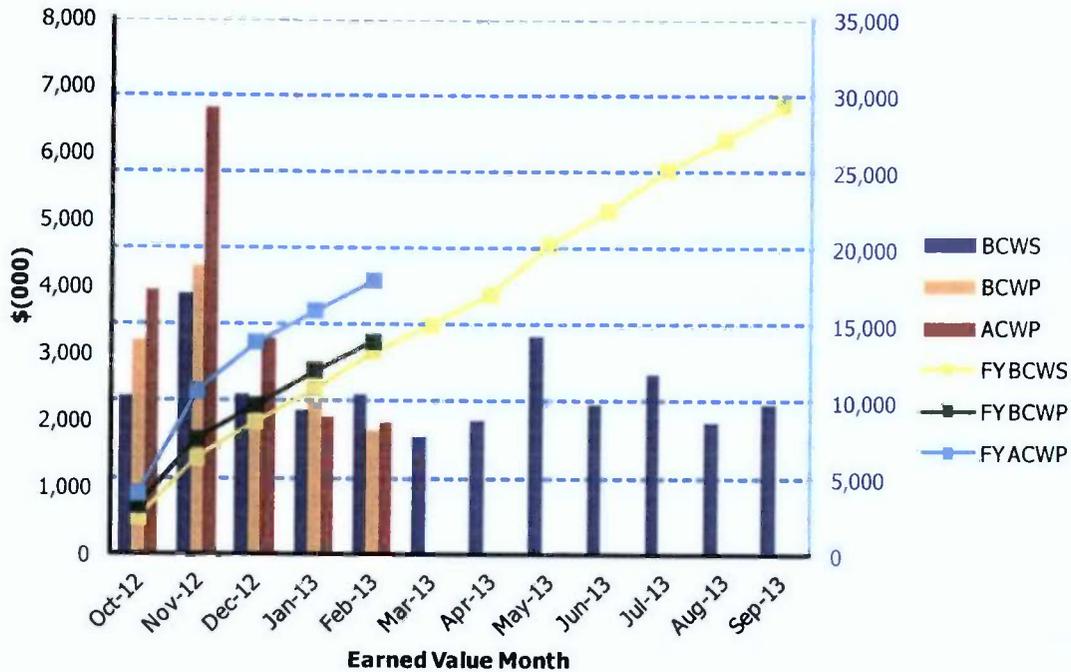
### EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2013 Earned Value Data

Data as of: February 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	\$1,753					\$14,924				
Apr 2013	\$2,012					\$16,936				
May 2013	\$3,246					\$20,182				
Jun 2013	\$2,224					\$22,406				
Jul 2013	\$2,699					\$25,105				
Aug 2013	\$1,975					\$27,080				
Sep 2013	\$2,228					\$29,308				
PTD	\$219,097	\$220,936	\$241,231	1.01	0.92					

Waste Treatment Plant Project - (LBL) Percent Complete Status  
Through February 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	1,176.8	733.2	62%	294.2	225.9	77%	259.2	220.1	85%	445.7	279.0	63%	177.7	8.2	5%
Low-Activity Waste	327.9	220.9	67%	69.9	51.9	74%	54.5	46.3	85%	134.7	107.9	80%	68.8	14.8	21%
Analytical Lab	542.2	298.4	55%	91.2	69.8	77%	71.3	51.6	72%	225.0	161.8	72%	154.7	15.3	10%
Balance of Facilities	2,046.9	1,252.6	61%	455.2	347.7	76%	385.0	318.0	83%	805.4	548.7	68%	401.3	38.2	10%
Total LBL															
<b>PTHLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)</b>															
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%
Pretreatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%
Shared Services	4,726.9	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%
Total WTP w/o UB	n/a	n/a	67%	n/a	n/a	87%	n/a	n/a	73%	n/a	n/a	62%	n/a	n/a	15%
Undistributed Budget	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	n/a	n/a	67%	n/a	n/a	87%	n/a	n/a	73%	n/a	n/a	62%	n/a	n/a	15%

Source: Preliminary WTP Contract Performance Report - Format 1, Data for Feb 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 PTHLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PTHLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB value for the project for PTHLW/SS is \$1,983M.

**WORKING ORP Key Documents List  
For April 2013**

Milestone Title	Milestone Tie	Document	TPA Milestone Due Date (if applicable) <sup>1</sup>	ORP Delivery to Regulators Date <sup>2</sup>	Anticipated Regulatory Review Completion Date <sup>3</sup>	Final Completion Date <sup>4</sup>	DOE-ORP Lead	Contractor Lead	Ecology Lead	Comments/Issues
Submit for Review and Approval a Sampling and Analysis Plan to Ecology for Soil Samples for 241-TX Tank Farm Investigation	M-045-21	Sampling and Analysis Plan for Soil Samples for 241-TX Tank Farm Investigation	03/31/13	03/11/13	04/22/13		D. Hildebrand	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>Created via Change Package M-45-12-04 on 06/21/12</li> <li>Submitted to ECY via ORP letter 13-TF-0013 on 03/11/13</li> </ul>
ORP and Ecology will review the reports generated in M-045-22-T01, -T02, and -T03 and determine whether to continue with soil desiccation/contaminant removal testing and other interim measures (TPA MS M-045-22).	M-045-22-T01	Submit Results of VZ Characterization of 241-TX to ECY	09/30/14				D. Hildebrand	S. Eberlein	J. Lyon	
	M-045-22-T02	Submit Results of VZ Characterization of 241-U to ECY	04/30/14				D. Hildebrand	S. Eberlein	J. Lyon	
	M-045-22-T03	Submit SX Soil Desiccation/Contaminate Removal Tech Results to ECY	07/31/14				D. Hildebrand	S. Eberlein	J. Lyon	
Submit to Ecology for Review and Approval as an Agreement Primary Document, a Phase 2 RCRA Facility Investigation/Corrective Measure Study Report for WMA C	Supports M-045-61	WMA C PA Initial Model Run Data Package		TBD			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>Feeds input for M-045-61 and all Closure Plans</li> </ul>
		WMA C PA Initial Document		TBD			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>Feeds input for M-045-61 and all Closure Plans</li> </ul>
		WMA C Characterization Summary 2013		TBD			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>Feeds input for M-045-61 and all Closure Plans</li> </ul>
M-045-61	Phase 2 RFI/CMS Report for WMA C	12/31/14	TBD			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>Reported as To Be Missed in the March 2013 TPA PMM. Discussions ongoing at the PM level.</li> </ul>	
Submit to Ecology for Review and Approval as an Agreement Primary Document, a Phase 2 Corrective Measures Implementation Work Plan for WMA C.	M-045-62	Phase 2 Corrective Measures Implementation Work Plan for WMA C	06/30/15	TBD			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>Reported as To Be Missed in the March 2013 TPA PMM. Discussions ongoing at the PM level.</li> </ul>
Submit Retrieval Data Report after WMA C SST Retrieval Completion Certifications	M-045-86	Retrieval Data Report for SST C-104, embedded TPA milestone M-045-86C	03/21/14							<ul style="list-style-type: none"> <li>CD Retrieval Completion Certification for SST C-104 sent to ECY on 03/21/13 via ORP Letter 13-TF-0018.</li> </ul>
Prior to beginning construction and at least one year before construction is to be complete, DOE will submit to Ecology a final design and monitoring plan for each interim barrier.	M-045-92O	Future Barrier Design 3	06/30/15	06/30/15			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>ORP/ECY TPA Change Package M-45-12-04 modified this to a due date of 06/30/15 dependent on discussions per M-045-22.</li> </ul>
	M-045-92P	Future Barrier Design 4	06/30/16	06/30/16			C. Kemp	S. Eberlein	J. Lyon	<ul style="list-style-type: none"> <li>ORP/ECY TPA Change Package M-45-12-04 modified this to a due date of 06/30/16 dependent on discussions per M-045-22.</li> </ul>
Waste Supplemental Treatment Report	M-062-40ZZ	Submit One Time Tank Waste Supplemental Treatment Tech. Report	10/31/14	10/31/14			S. Pfaff	C. Burrows	D. McDonald	<ul style="list-style-type: none"> <li>At the January 2013 TPA PMM meeting, ORP stated DOE and ECY are currently in discussions to move out the due dates for M-062-40ZZ and M-062-45ZZ</li> </ul>
Complete final design and submit RCRA Part B Permit Modification Request	M-062-31-T01	RCRA Part B Permit Modification--Final Design	04/30/16	04/30/16			S. Pfaff		D. McDonald	
M-45-91 Interim Milestones and Target Dates for SST Integrity Implementing the Expert Panel's Recommendations	M-045-91F-T01	Provide Report of the Liquid Leak Rate Assessments	01/31/13	Missed			J. Johnson	R. Gregory	J. Lyon	<ul style="list-style-type: none"> <li>Moved to 01/31/13 per M-45-12-01 TPA Chg Pckg.</li> <li>Reported as To Be Missed in October 2012 TPA PMM Mtg, this and other To Be Missed target dates/milestones are incorporated into a TPA Chg Pckg which is being discussed by ORP and ECY.</li> </ul>
	M-045-91D-T01	Provide Report on the Concrete Dome Samples from Tank C-107 Plug	05/31/13	05/31/13			J. Johnson	R. Gregory	J. Lyon	
	M-045-91F-T02	Provide Report of Liner Failures for SSTs	07/31/13	07/31/13			J. Johnson	R. Gregory	J. Lyon	<ul style="list-style-type: none"> <li>Reported as To Be Missed in October 2012 TPA PMM Mtg</li> </ul>
	M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	07/31/13	07/31/13			J. Johnson	R. Gregory	J. Lyon	<ul style="list-style-type: none"> <li>Reported as To Be Missed in October 2012 TPA PMM Mtg</li> </ul>

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

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

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

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

**Red** = DOE submittal within the next 90 days    **Green** = document is under initial ECY Regulatory Review    **Black** = document under comment/review response or other actions    **Blue** = document is completed

**WORKING ORP Key Documents List  
For April 2013**

Milestone Title	Milestone Tie	Document	TPA Milestone Due Date (if applicable) <sup>1</sup>	ORP Delivery to Regulators Date <sup>2</sup>	Anticipated Regulatory Review Completion Date <sup>3</sup>	Final Completion Date <sup>4</sup>	DOE-ORP Lead	Contractor Lead	Ecology Lead	Comments/Issues
M-45-91 Interim Milestones and Target Dates for SST Integrity Implementing the Expert Panel's Recommendations (continued)	M-045-91G-T03	Provide AOR Final Doc. for SSTS on 1,000,000 Gallon Tanks	09/31/13	09/31/13			J. Johnson	R. Gregory	J. Lyon	• Moved to 09/31/13 per M-45-12-01 TPA Chg Pckg.
	M-045-91E	Provide SST Farms Dome Deflection Surveys Every Two Years	09/30/13	09/30/13			J. Johnson	R. Gregory	J. Lyon	
	M-045-91G-T04	Provide AOR Final Doc. for SSTS on 55,000 Gallon Tanks	10/31/13	10/31/13			J. Johnson	R. Gregory	J. Lyon	• Reported as To Be Missed in October 2012 TPA PMM Mtg
	M-045-91F	Provide Summary Conclusions Report on Leak Integrity	12/31/13	12/31/13			J. Johnson	R. Gregory	J. Lyon	• Reported as To Be Missed in October 2012 TPA PMM Mtg
	M-045-91G	Provide Summary Conclusions Report of AOR for SSTS	04/30/14	04/30/14			J. Johnson	R. Gregory	J. Lyon	• Reported as To Be Missed in October 2012 TPA PMM Mtg
	M-045-91B-T01	Provide Ecology report on the Concrete Core from TankA-106 or alt	09/30/14	09/30/14			J. Johnson	R. Gregory	J. Lyon	
	M-045-91H	Submit Change Pckg (if necessary) to est. Additional Milestones	07/31/15	07/31/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91I	Provide IQRPE Certification of SSTS Structural Integrity	09/30/18	09/30/18			J. Johnson	R. Gregory	J. Lyon	

Topic Areas	Document	ORP Delivery to Regulators Date <sup>1</sup>	Anticipated Regulatory Review Completion Date <sup>2</sup>	Final Completion Date <sup>3</sup>	DOE-ORP Lead	Contractor Lead	Regulator Lead	Comments/Issues
PERMIT DOCUMENTS	Tier 1 Framework Closure Plan Update	09/30/15			C. Kemp	S. Eberlein	J. Lyon	• Tier 1, 2, 3 Submittal is associated with M-045-82, due 09/30/2015. This MS was reported as To Be Missed in the March 2013 TPA PMM. Discussions ongoing at the PM level.
	Tier 2 WMA C Closure Plan	06/30/13			C. Kemp	S. Eberlein	J. Lyon	
	All Remaining Closure Plans for WMA C	09/30/15			C. Kemp	S. Eberlein	J. Lyon	
	WMA C Closure Conceptual Design	TBD			C. Kemp	S. Eberlein	J. Lyon	
	Tier 3 Closure Plans for Tanks Already Received	TBD			C. Kemp	S. Eberlein	J. Lyon	• Due 180-day post EIS
	Tier 3 Closure Plans for Additional Tanks	09/30/15			C. Kemp	S. Eberlein	J. Lyon	• Several Dates in out years
	WMA C Closure Design	TBD			C. Kemp	S. Eberlein	J. Lyon	• Final dates not yet determined; provides basis for the Tier 2 Closure Plan
	Supplemental Treatment Technology Notice of Construction	TBD			L. Huffman	F. Miera	J. Lyon	
	Submit Part B Permit Application for Selected Supplemental Treatment Technology	TBD			L. Huffman	F. Miera	J. Lyon	
	Wiped Film Evaporator Notice of Construction	TBD			L. Huffman	F. Miera	J. Lyon	
	Submit Wiped Film Evaporator Class 3 Permit Modification or Part B Permit Application	TBD			L. Huffman	F. Miera	J. Lyon	
MISCELLANEOUS DOCUMENTS	IDF Performance Assessment (ORP/WRPS has support role to RL/CHPRC)	TBD			T. Fletcher	F. Miera	J. Lyon	
	Submit Categorical TOC HIA	TBD				F. Miera	J. Lyon	
	Quarterly Hose-In-Hose Transfer Lines (HIHTL) Reports	Ongoing Quarterly			J. Johnson		J. Lyon	

<sup>1</sup> Note: "ORP Delivery to Regulators Dates" are those dates that support future milestones, are submittal dates for permitting activities, or miscellaneous submittals that support ORP actions and represent the dates when ORP submits documents to the regulators.

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

<sup>3</sup> Note: "Final Completion Date" is entered after the document is reviewed, comments are incorporated, and any disputes are resolved. Any comment resolution issues or disputes will be noted under "Comments/Issues."

**Red** = DOE submittal within the next 90 days    **Green** = document is under initial ECY Regulatory Review    **Black** = document under comment/review response or other actions    **Blue** = document is completed

ORP Project Managers Meeting  
April 23, 2013  
2440 Stevens Ctr.  
Richland, Washington  
**Meeting Minutes Transmittal**

**Attachment D: RPP-PLAN-54376 RCR**  
**(2 pages including this coversheet)**

<b>Document Number(s)/Title(s)</b> RPP-PLAN-54376 Sampling and Analysis Plan for Soil Samples in Support of Interim Measure Planning at the 241-TX Tank Farm	<b>Program/Project/Building Number</b>	<b>Reviewer</b> MW Barnes	<b>Organization/Group</b> WA Dept. Ecology	<b>Location/Phone</b> 3100 Port of Benton Blvd. Richland, WA 372-7984
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Comment Submittal Approval:

M. W. Barnes  
Organization Manager (Optional)

Agreement with indicated comment disposition(s)

R. P. [Signature]  
Reviewer/Point of Contact

Status:

4-23-2013

Date

4-23-13  
Date

Reviewer/Point of Contact

Reviewer/Point of Contact

Date

Author/Originator

Author/Originator

Item	Page #, Line #, or Section and Paragraph	Comment (s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	Hold Point	Disposition (Provide justification if NOT accepted.)	Status
1.		<p>Comment: Ecology requires the analytical results for sampling at TX Farm be provided at the time of TX Farm Interim Action recommendations currently scheduled for June 30, 2014 (from page 5-2 of RPP-Plan-53808 rev. 0).</p> <p>Justification: Ecology is confused as to when the analytical data will be supplied to us based on the language of page 6-2 section 6.2. Section 6-2 of the SAP says the data package will be issued by the laboratory within 180 days after receipt of the last samples.</p> <p>Modification needed: Ecology will be provided a copy of the analytical results at the time of TX Farm interim Action recommendations.</p>			

ORP Project Managers Meeting  
April 23, 2013  
2440 Stevens Ctr.  
Richland, Washington  
**Meeting Minutes Transmittal**

**Attachment E:**

**DOE-ORP Responses for Ecology Emails Received on March 19 and 21, 2013**

**(4 pages including this coversheet)**

## DOE-ORP Responses for Ecology Emails Received on March 19 and 21, 2013

Ecology's initial comments and questions are in *bold, italicized black*. DOE-ORP Responses are in bold blue.

### Ecology Email Received on March 19, 2013:

*I. Ecology requests that this report include a statement from Ecology that says :*

*(1) Ecology requests USDOE reporting of Evaporator planned DST waste volume reduction, for the runs or passes;*

Understanding 'Waste Volume Reduction' (WVR) is of the utmost importance. Simply stated, it is the difference between the amount of feed material – based on the tank level change ( - ) minus the amount of slurry returned to tank farms; i.e., feed - slurry.

The estimated 'Waste Volume Reduction' (WVR) for the next three planned 242-A feed tanks are as follows: AP-107 is estimated to achieve a WVR of 510 kgal\*\*\*; AW-106 is estimated to achieve a WVR of 280 kgal; and AZ-102 is estimated to achieve a WVR of 450 kgal.

\*\*\* using two passes, without considering the planned but un-quantified water additions in support of the Cold Run and other maintenance activities.

*(2) Ecology requests an statement for FY14 that reflects the need for space to provide additional DST capacity for the waste removal from AY-102;*

DOE-ORP requests additional clarification for this request from Ecology.

*(3) Ecology requests that USDOE define "passes", and "Evaporator Campaigns", and add a column that identifies planned waste reduction volume (with a definition).*

A "pass" is defined as processing the waste from the feed tank through the evaporator to the slurry tank. Some tanks or wastes can require multiple passes to achieve the desired final specific gravity (SpG). This can be due to a variety of reasons but generally is the result of two factors: (1.) The waste is dilute and the target SpG cannot be achieved in a single pass or, (2.) the source tank has more waste than can be accommodated in AW-102 - the feed tank.

A campaign is generally defined as the totality of processing waste from one Double Shell Tank. This includes facility prestart activities as well as post processing flushing and shutdown activities.

'Waste Volume Reduction' (WVR) is addressed in request #1.

*Both say august early and late, I am not sure what this means*

Campaign #13-01: Proposed Start Date 08 AUG 2013; Forecasted Finish Date 06 SEP 2013.

Campaign #13-02: Proposed Start Date 29 AUG 2013; Forecasted Finish Date 27 SEP 2013.

These are the current dates prior to sequestration and will provide updates once the sequestration impacts have been determined.

## DOE-ORP Responses for Ecology Emails Received on March 19 and 21, 2013

<i>FY13</i>	<i>13-01</i>	<i>AP-107</i>	<i>AP-107</i>	<i>Estimated start early August 2013. May require two (2) passes to achieve waste volume reduction.</i>
<i>FY13</i>	<i>13-02</i>	<i>AW-106</i>	<i>AW-106</i>	<i>Estimated start late August 2013.</i>
<i>FY14</i>	<i>14-01</i>	<i>AN-106 AZ-102 AW-106</i>	<i>AP-107</i>	<i>Estimated start March 2014. Two (2) passes required.</i>

**II. We would like to add issues for DST Integrity, it used to be milestone series M-48.**

- *Ecology has requested in a recent AY-102 IPT, and has not received, a letter from USDOE clarifying the basis and justification for a delayed waste removal from the Secondary containment and for waste removal from the primary tank of AN-102*

A draft has been shared with Ecology and comments are being incorporated. The letter is currently being reviewed for final concurrence and will be transmitted soon.

- *Ecology requests that USDOE update the DST integrity assessment (completed for Milestone M-48-14, with completion March 31, 2006), to reflect consideration of the tank failure of AY-102, with IQRPE signature.*

ORP plans to begin the next IQRPE assessment of the DST system in 2014. The assessment will consider the failure of the primary tank liner in AY-102 as well as the extent of condition reviews performed in response to the failure.

- *We request that USDOE provide a schedule to remove waste from AY-102*

ORP will submit a plan for removing the waste from AY-102 by June 14, 2013.

**III. For SST Integrity Assurance, please add:**

- *an issue that USDOE has announced that there are 6 SST with declining levels. Ecology would like to receive a response plan for this announcement from USDOE within 30 days*

This is similar to the request made to Mr. Huizenga from Maia D. Bellon. ORP will coordinate a response.

- *a schedule for the revision of RPP-9937, including dates for: the submittal to Ecology for approval of an RPP-9937 revision, completion of the comment response, and issuance of the final document*

ORP plans to have a final document to submit to Ecology for review per the TPA Primary Document review process by October 31<sup>st</sup>, 2013. ORP will continue to work on the draft revision with Ecology in order to meet this targeted date.

## DOE-ORP Responses for Ecology Emails Received on March 19 and 21, 2013

- *a schedule for intrusion evaluations for FY13 and FY14*

As discussed previously with Ecology, ORP plans to visually inspect 12 tanks for signs of intrusion in FY13. Based on the results of these inspections, the remainder of the tanks identified for evaluation could be inspected in FY14.

- *documentation of the results, an evaluation and a schedule for work to respond to the identified intrusions*

Results of the inspections performed in FY13 will be documented. Further actions and any required schedules to complete those actions will be developed once the FY13 inspections and evaluations are complete.

### Ecology Email Received on March 21, 2013:

*Janet have you ask Tom why he is spending money on the "Alternate HLW & LAW Direct Feed" projects (not a TPA or CD requirement) when he is missing other TPA Milestones or concerned about CD work?*

*And since I didn't get to ask this before, can you ask Tom if there are any responses to the leaking tanks. From our perspective some action, such as active ventilation of the first leaker would be one good idea, at least as a helpful precautionary response to a leak.*

*As a different perspective, I am surprised that USDOE has not approached Ecology regarding your leaking tanks, even AY-102 seems to have lost its priority. It seems like it has been over a month since any meaningful activity has taken place.*

*Trust me I am aware of the financial state of our Federal Government, but we (Ecology and the State) really don't like leaking tanks, and I hope that USDOE will maintain a proactive posture towards these Hanford issues that are being watched nationally.*

ORP will brief Ecology on the FY2014 budget and discuss Tank Farms work scope with Ecology as part of the TPA Paragraphs 148 and 149 process. These briefings are currently on hold until the May 2013 timeframe per direction from DOE-HQ.