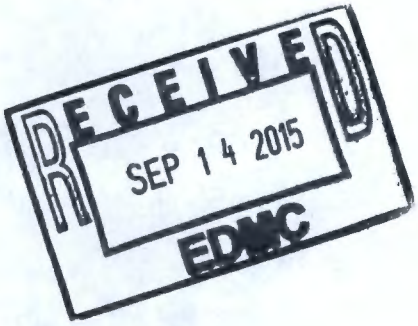


ORP Project Managers Meeting
June 17, 2015
2440 Stevens Center
Richland, Washington
Meeting Minutes Transmittal

Distribution:

W. Abdul*	ORP	H6-60
R. E. Beach*	ORP	H6-60
S. M. Braswell*	MSA	H6-60
J. M Bruggeman*	ORP	H6-60
K. W. Burnett*	ORP	H6-60
C. J. Carter*	ORP	H6-60
B. L. Charboneau*	ORP	H6-60
J. A. Diediker*	ORP	H6-60
J. A. Dowell	ORP	H6-60
K. A. Ebert*	ORP	H6-60
R. L. Evans*	ORP	H6-60
J. F. Grindstaff*	ORP	H6-60
C. C. Harrington	ORP	H6-60
P. R. Hernandez*	OPR	H6-60
D. R. Hildebrand	RL	A6-38
F. B. Hidden	ORP	H6-60
B. J. Harp	ORP	H6-60
K. L. Higgins	ORP	H6-60
L. A. Huffman*	ORP	H6-60
J. M. Johnson*	ORP	H6-60
C. J. Kemp	ORP	H6-60
K. Kidder	USACE/ORP	H6-60
D. P. Knight	ORP	H6-60
J. J. Lynch*	ORP	H6-60
D. M. MacDonald*	ORP	H6-60
B. M. Mauss	ORP	H6-60
E. M. Mattlin	ORP	H6-60
D. L. Noyes	ORP	H6-60
S. H. Pfaff*	ORP	H6-60
G. B. Olsen*	ORP	H6-60
J. J. Rambo	ORP	H6-60
D. M. Smith*	ORP	H6-60
S. C. Stubblebine	ORP	H6-60
G. D. Trenchard	ORP	H6-60
B. R. Trimberger*	ORP	H6-60
R. J. Valle*	ORP	H6-60
K. G. Wade	ORP	H6-60
I. Wheeler	ORP	H6-60
W. R. Wrzesinski*	ORP	H6-60
J. D. Young	ORP	H6-60
J. Alzheimer	Ecology	H0-57
R. K. Biyani*	Ecology	H0-57

C. Carlson	Ecology	H0-57
N. Chandron*	Ecology	H0-57
T. Z. Gao*	Ecology	H0-57
M. Jones	Ecology	H0-57
J. J. Lyon*	Ecology	H0-57
J. D. McDonald*	Ecology	H0-57
J. Price	Ecology	H0-57
A. Tortoso	Ecology	H0-57
T. Beam	WRPS	H3-26
H. M. Bowers	WRPS	H6-14
J. W. Donnelly	WRPS	H3-26
S. J. Eberlein*	WRPS	H0-55
J. A. Joyner	WRPS	H16-14
J. J. Luke*	WRPS	H6-14
R. J. Skwarek	WRPS	H3-28
D. H. Butler	MSA	A3-01
C. P. Noonan*	MSA	A3-01
R. E. Piippo*	MSA	A3-01
J. G. Woolard*	MSA	A3-01
B. Curn*	BNI	
S. Cimon*	ODOE	

ADMINISTRATIVE RECORD – Heather Childers: H6-08
*Attendees

ORP TPA Project Managers' Monthly (PMM) Meeting
June 17, 2015

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

Janet Diediker — Date: 8/11/15
Janet Diediker, DOE-ORP

Paul Hernandez — Date: 8/11/15
Paul Hernandez, DOE-ORP

Jeremy Johnson — Date: 8/10/15
Jeremy Johnson, DOE-ORP

CTK — Date: 8-11-15
Chris Kemp, DOE-ORP

Steve Pfaff — Date: 8/11/2015
Steve Pfaff, DOE-ORP

Not available — ~~Date:~~
~~DaBrisha Smith, DOE~~-ORP

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

Joni Grindstaff, DOE-ORP — Date: 8/17/15

Wahed Abdul, DOE-ORP — Date: 8/12/15

Gary Olsen, DOE-ORP — Date: 8/12/15

Jason Young, DOE-ORP — Date: 8/12/15

Jeff Bruggeman, DOE-ORP — Date: 8/12/15

J. Lyon, Project Manager,
Washington State Department of Ecology — Date: 9/9/15

J. D. McDonald, Project Manager,
Washington State Department of Ecology — Date: 8/24/15

1.0 Administrative Items/Milestone Status

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

ORP provided the monthly TPA and Consent Decree report, which will be submitted to the Administrative Record (AR).

TPA Milestone Status

ORP stated that there were no changes to the milestone status this month. ORP noted that milestone M-045-91G is on schedule to be completed, and a letter is being routed internally for approval and submittal to Ecology regarding the milestone completion.

2.0 Agreements, Issues, Actions

The tank farms actions were discussed and updated as follows:
Action No. 1 (TF-14-06-02) – ORP reported that it continues to meet with Ecology on a monthly basis regarding the WMA-C PA modeling effort. ORP stated that it is working with Ecology on the hydraulic properties of the vadose zone soil, and a meeting was held earlier today. This action remains open.
Action No. 2 (TF-14-02-02) – ORP stated that a P4/P5 schedule is being prepared and should be completed within four weeks. This action remains open.
Action No. 3 (TF-13-12-01) – This action is ongoing and remains open.
Action No. 4 (TF-13-02-03) – ORP stated that it will continue to meet with Ecology at the project manager level to discuss work on the WMA-C PA and other options for M-045-82. ORP added that it is preparing a draft change control form to modify M-045-82 that will require internal ORP review prior to providing a draft to Ecology. ORP estimated that the draft should be available to share with Ecology within two weeks. ORP indicated that the logic and sequence for the Tier 1, Tier 2, and Tier 3 closure plan submittal could be discussed with Ecology and ORP intends to schedule a meeting with Ecology. Ecology asked if ORP intended to discuss the sequence of closure items. ORP responded that it will be an appropriate discussion topic. Ecology asked when ORP intends to have a meeting to discuss the sequence of closure items. ORP responded that a date has not yet been identified, but a meeting will be scheduled with Ecology. This action remains open.
Action No. 5 (TF-15-03-02) – ORP stated that a meeting was scheduled with Ecology to discuss information regarding the 242-A Evaporator campaign, but the meeting was postponed by Ecology. ORP stated that it is prepared to discuss the information with Ecology, and provided a three-page handout today containing the information. Ecology requested that ORP send the information via email, and stated that Ecology would either respond to the information or request a meeting with ORP. This action remains open.
Action No. 6 (TF-15-03-05) – ORP stated that work is still under way on the technical white papers supporting the LAW Pretreatment System (LAWPS) design, and there was not an

estimated closure date for this action item at this time. Ecology stated its understanding that regular LAW project/process meetings either have been or will be started. *Ecology requested that it be invited to those meetings, adding that the request includes not just the LAWPS facility itself, but everything that is associated with what goes into and out of the LAWPS facility.* ORP asked if Ecology's request was to be replicated under the WTP actions or to just keep it as one action under tank farms. Ecology responded that it should be kept under one action so that it would be easier to track. This action remains open.

3.0 Review of the ORP Summary

Tank Farms

System Plan – ORP reported that a letter was submitted to Ecology in response to Ecology's January 14, 2015 letter regarding System Plan Rev. 7. ORP stated that Ecology's January 14 letter requested additional information, which was provided in ORP's response letter. ORP's letter stated that after Ecology reviews the information, a meeting could be scheduled through upper management to discuss the additional information provided. Ecology indicated that the information was reviewed internally at the project manager level, but it was not aware of the status of upper management review and offered to inquire about the status of upper management review. ORP stated that after upper management discusses the information, a meeting could be scheduled with Ecology project managers and WRPS. ORP noted that WRPS conducted the modeling.

Acquisition of New Facilities; M-90-00; M-47-00 - ORP stated that there was no change in status from last month, and all of the milestones are on schedule.

Supplemental Treatment and Part B Permit Applications; M-62-00, -20, -30, -45 – ORP stated that M-062-45ZZ and M-062-45ZZ-A are in dispute, and the remaining milestones listed are on schedule. ORP noted that there was no change in milestones from last month, and no changes are expected next month. Ecology asked what is being designed under M-062-31-T01. ORP responded that the design is associated with the alternative that is chosen under Supplemental Treatment. Ecology noted that if the alternative has not been chosen by now, it would be a challenge to complete the design within a year. ORP concurred with Ecology's statement.

242-A Evaporator Status – ORP reported that the evaporator is back in operation and has resumed the EC-01 campaign. ORP handed out a graph depicting the evaporator operations from about an hour ago, and provided a brief explanation of the graph. ORP noted that the blue line in the graph is the flow from the feed tank that is coming in at about 65 gallons per minute; the orange line is the evaporated water that goes out to the Effluent Treatment Facility (ETF) and the Liquid Effluent Retention Facility (LERF) basin; and the gray line is the slurry that is going out to AP-107. ORP stated that waste is being taken from AW-102, which has a higher water content, and the slurry is being pulled out at the 1.41 specific gravity, which is the target of the evaporator operations. ORP noted that the lines at the top of the graph show the thermal efficiency of the reboiler, and the reboiler only raises the temperature by about two or three

degrees. ORP notes that when the waste is dumped into the vessel under a vacuum, boiling is induced at about 123-127 °F. ORP noted that the larger fluctuations on the graph are an indicator that the operators need to fine-tune the operation; and the smaller fluctuations on the graph reflect smoother operations after operator adjustment.
Ecology asked if the EC-01 run started on schedule. ORP responded that EC-01 was originally scheduled to start in the February/March 2015 time frame, but startup was delayed. Four campaigns were scheduled for FY15, but the fourth campaign won't occur in FY15. ORP stated that the evaporator is running behind schedule since the EC-01 run is not yet complete. ORP noted that the determining factor in the campaigns is how much waste is reduced, and depending on what is reduced in each campaign, three campaigns could accomplish what is planned for four campaigns if enough waste is staged. ORP stated that WRPS prepares an integrated schedule for the evaporator that is incorporated into the production operations integrated schedule. The schedule includes the sampling and analysis events that need to occur before a campaign starts. Consequently, when the evaporator slows down, other activities are impacted, which in turn could impact the evaporator operation. ORP stated that a schedule for the evaporator was created June 15, 2015, which reflects EC-03 occurring in late September 2015.

Ecology inquired about other project system impacts caused by the delays with the evaporator. ORP responded that transfers would be the primary impact, and noted that work on a safety significant steam valve has been delayed, which is associated with installing safety significant systems. ORP added that since the sampling and analysis is based on certain tanks, and possibly the combination of certain tanks, that would not occur until the pipelines are cleared out from the previous campaign. Ecology asked about the status of the EC-02 campaign. ORP responded that the sampling and analysis for EC-02 has been completed, and work is under way on the sampling and analysis for EC-03.

Ecology stated that five risk factors were cited during an AY-102 meeting held yesterday, and the fifth risk factor was the evaporator campaigns, which posed the most concern. ORP acknowledged that the evaporator facility has been referred to as a single-point failure, and that there are systems within the facility that could be considered single-point failures. ORP recognized that the reliability and the operation of the evaporator are critical to the mission, and the goal is to get the evaporator to operate and to operate efficiently. Ecology asked if ORP had a projection for the amount of space that will be gained from the EC-01 campaign. ORP responded that the information is included in the handout that was provided (see tank farm action No. 5), and that there are different waste volume reduction projections for each campaign. ORP stated that EC-01 is projected for 447,000 gallon waste volume reduction as noted in the handout, and the goal in FY15 is a cumulative waste volume reduction of one million gallons. Ecology asked why ORP chose the amount of one million gallons for the waste volume reduction in FY15. ORP responded that it was the result of the process engineering calculations using the Hanford Tank Waste Operations Simulator (HTWOS) model. ORP noted that the HTWOS model is described in the handout.

Double-Shell Tank System Update – ORP reported on the progress with AY-102. ORP stated

that it has been meeting with Ecology routinely on a monthly basis to review the project status, and handed out the last two months' presentation that were provided to Ecology, which will be submitted to the AR. Ecology complimented the team that has been providing the status on AY-102, and stated that it has been very helpful for Ecology. ORP stated that the pit rehab work and removal of the legacy equipment in AY-102 is nearly completed, and the focus will turn to the AP-02A pit in the waste receiver tank. ORP stated that the current status is showing a readiness to start pumping AY-102 in January 2016, which is ahead of schedule for meeting the settlement agreement deadline of March 4, 2016.

M-045-91 - SST Integrity Assurance - ORP noted that all of the milestones have been completed through June 2015, and they will be removed from the TPA monthly summary report. ORP stated that the summary report under M-045-91G has been completed, which is due July 31, 2015, and the transmittal letter is being routed for approval. ORP noted that as discussed with Ecology several months ago, no additional milestones are being proposed under M-045-91H, and ORP's position is that this milestone has been completed. ORP initiated a discussion regarding M-045-91E-1, which is not listed in the TPA summary monthly report, to provide the compilation of the dome reflection surveys every two years. ORP asked whether the parties should continue to have those as milestones and/or if they are useful. *Ecology suggested an action item to schedule a discussion on M-045-91E-1 to determine if the milestone needs to be closed and what the alternative reporting method would be.* Ecology stated that if the milestones are discontinued, there needs to be a method for ensuring there are consequences if ORP does not complete an activity. Ecology cited the example of including it as a primary document.

Ecology asked if the IQRPE associated with M-045-91I has been contracted. ORP responded that there is not a contract for the SST IQRPE. Ecology noted that the milestone is due in September 2018. ORP responded that getting an IQRPE for the SSTs should not be as difficult as it was for the DSTs. Ecology indicated that it would be helpful for its internal planning to know ORP's plan and schedule for the SST IQRPE contract.

In Tank Characterization and Summary - ORP reported that the AY-101 grab sampling was completed last week, and preparations are under way for the AP-103 grab sampling. ORP stated that there was an issue related to transportation of the AY-101 grab samples that were taken in support of the EC-03 campaign. When the lab opened the AY-101 sample transportation container, it noted that several of the samples bottles were broken. The broken bottles are a new type of bottle that is different than the previously used bottles. The new bottles have a syringe capable top and are clear versus the older amber bottles, which aren't breaking. The use of the newer bottles is being discontinued while an evaluation is being conducted to determine the cause of the breakage. ORP noted that some of the samples did not break through the bag, and these samples were saved by pouring them into another beaker. Ecology summarized that the broken bottles for sampling and analysis did not impact the ability to continue to get the needed information. ORP responded that so far there was only one sample that was lost. Ecology asked if the C-105 sampling had been done. ORP responded that it did not believe the sampling had been done. Ecology asked if tank T-111 has active ventilation. ORP responded that T-111

does have active ventilation, and the portable exhauster on T-111 is anticipated to go operational within days to weeks. ORP added that during the latest head space sampling in T-111, a chemical was identified that had not been accounted for in the air permit, and information was being gathered to transmit to the Ecology.

ORP noted that AZ-102 grab sampling was completed for EC-03, and AP-103 grab sampling should be completed this week, which is also in support of EC-03. ORP stated that as soon as the grab sampling in support of EC-03 is completed, the focus will turn back to the SY-102 core sampling with the new core sampler.

Tank Operations Contract (TOC) Overview – Ecology referred to Waste Feed Delivery, and asked if WRPS is tracking the IDF glass testing as it relates to the PA work. WRPS responded that it was tracking that activity. ORP referred to the Treat Waste overview, and pointed out that the schedule performance index (SPI) and cost performance index (CPI) of 0.64 and 0.51 were due to the April performance not being included, and that there was nothing significant that happened from a schedule perspective on LAW Pretreatment System in April to warrant the variance. ORP stated that the SPI and CPI have been rectified for the May reporting.

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

ORP noted that the M-045-22 milestone series has been completed for some time and could be removed from the monthly summary report. ORP stated that preparations are being made to schedule the annual interim measures meeting under M-045-56J, and an email has been sent to Ecology requesting input on the agenda, attendees, and available meeting dates. ORP stated that the Phase 2 RCRA Facility Investigation Report (RFI) was submitted to Ecology, and that Ecology indicated comments will be provided by July 2015. ORP reported that the change control form submitted to Ecology for M-045-92, M-045-92N and M-045-92O was not approved, and a new change control form will be submitted. ORP stated that meetings were held with Ecology on April 27, 2015, and May 14, 2015, and that ORP had proposed a force majeure on the issue. ORP indicated that the status of the three M-045-92 milestones should be in dispute and not TBD.

TPA-SST Retrieval and Closure Program:

ORP stated that a change control form is being drafted for M-045-82, and that internal meetings were being held to develop and review the proposed change control form. Ecology asked if ORP had discussed its intent with Ecology staff regarding submittal of the change control form. ORP reiterated that the language in the change control form needs to be reviewed internally within ORP, and then the draft change control form will be shared with Ecology staff.

WRPS stated that the C-101 and C-112 retrieval data report (RDR) submittal schedule is at risk. The C-112 RDR schedule can be recovered and the report should be completed and submitted on time. WRPS added that the C-107 RDR is nearly complete and should be submitted on schedule. WRPS noted that good schedule recovery has been achieved in the lab analysis.

ORP reported that a scoping meeting is scheduled August 25 through August 27, 2015, for the WMA A/AX performance assessment.

Tank Waste Retrieval Work Plan (TWRWP) Status – There was no update on the TWRWP status.

Tank in Appendix H Status (tank 241-C-106) - There was no change in status.
Tank Retrievals with Individual Milestones (tanks 241-A-103 and 241-S-112) – There was no change in status.

CD-SST Retrieval and Closure – ORP reported that on June 5, 2015, the Department of Justice issued a letter to the state of Washington Attorney Generals that milestones D-00B-03 and D-00B-04 are at serious risk to be missed. ORP noted that the CD monthly summary report did not include the notification since it was outside the reporting period for the report, and the decision was made to provide a verbal notification during today's meeting. ORP stated that the notification will be included in next month's summary report.

ORP stated that the first and second retrieval technologies at C-102 are completed to their limits of technology, and a request to forego the third technology will be submitted to Ecology. ORP noted that MARS vacuum retrieval system using high pressure water has been restarted in C-105. ORP stated that 18.1 percent has been retrieved; 99.9 thousand gallons remain. ORP reported that the new slurry pump has been installed in C-111, and next week two ERSSs will be installed. ORP noted that there are still 35,000 gallons of waste in C-111, and retrieval is expected to restart in August 2015. ORP added that the intent is to finish retrieval in C-105 before turning to retrieval in C-111. Ecology asked if C-111 retrieval is relying on the 242-A Evaporator operation to create space in the receiver tank. ORP responded that it would have to follow up on whether the receiver tank for C-111 has enough space or whether the evaporator needs to run to create enough space in the receiver tank. ORP noted that in general, supernate is being used as the spraying mechanism in an effort to minimize the addition of water and not overload the storage space.

CD TWRWP Status – The CD TWRWP table is identical to TPA TWRWP table.

Waste Treatment Plant

The WTP actions were discussed and updated as follows:
Action No. 1 (WTP-14-10-01) – ORP stated that the details associated the LAW melter assembly building are still being addressed, and recognized that the details and a schedule need to be provided to Ecology. ORP indicated that it is leaning towards a temporary building, but a decision has not been made. ORP stated that the melter building has been identified in its long-term schedule, but it has not been added to the contract. This action remains open.

Action No. 2 (WTP-14-10-02) – ORP stated that this action is impacted by the Consent Decree judicial process, and an update could not be provided. Ecology initiated a discussion regarding a newspaper article about the support facilities and a transition from diesel to natural gas. ORP responded that there have been discussions from a project planning perspective regarding the benefit of using natural gas instead of diesel fuel, but a project decision has not been made to change to natural gas. Ecology noted that the deputy secretary of energy was quoted as saying DOE will transition to natural gas. ORP stated that the statements in the article are related to the DOE-RL work to provide a natural gas pipeline, and there have been impacts from a funding perspective to complete an Environmental Impact Statement (EIS) that would be required to move forward with the natural gas project. Ecology stated its understanding that the WTP facilities are not built to accommodate natural gas, and there would be a fair amount of retrofit needed if natural gas were to be used. ORP concurred, and stated that understanding what the impacts to the project would be and changing the baseline are not efforts that have been evaluated. ORP acknowledged the comments by the deputy secretary, and stated that at this time the project is evaluating the natural gas project at a very high level. ORP pointed out that the only facility that would be impacted in LAW by the use of natural gas would be the steam plant since it uses diesel fuel. ORP stated that the emergency turbine generator (ETG) wouldn't use natural gas because it couldn't be ensured that a fuel source would be available. ORP added that it would not be a big impact if the burners needed to be changed out for the five or six boilers, but that hasn't been considered. ORP noted that some of the newspaper articles infer that all of the power would come from natural gas, and that is not the case.

Action No. 3 (WTP-14-10-03) – ORP stated that this action is impacted by the Consent Decree judicial process, and an update could not be provided. This action remains open.

Action No. 4 (WTP-14-10-04) – ORP stated that this action is impacted by the Consent Decree judicial process, and an update could not be provided. Ecology agreed to remove the second actionee from the action since the HLW portion has been completed. This action remains open.

Action No. 5 (WTP-14-10-05) – (ORP noted that there was a mistake on the action item list and two actions were accidentally identified as Action No. 5 today.) ORP stated that this action is impacted by the Consent Decree judicial process, and an update could not be provided. Ecology agreed to remove the second actionee from the action since the HLW portion has been completed. This action remains open.

Action No. 6 (WTP-14-06-02) – ORP stated that this action is impacted by the Consent Decree judicial process, and an update could not be provided. Ecology initiated a discussion regarding the status of the technical issues, and stated that the initial technical issue resolution plans were too vague to help Ecology understand what is going on. Ecology repeated its request to be included in the activities associated with the technical issues to facilitate an understanding about what is occurring at the facility. This action remains open.

Action No. 7 (WTP-14-06-03) – ORP stated that it is not ready to provide a briefing on the LAW design and operability (D&O) review. ORP indicated that after the D&O is issued, there will be a meeting set up between ORP and Ecology management for a briefing. Ecology raised a concern regarding the D&O review. Ecology noted that the GAO report indicated there was enough concern with 13 of 26 systems that were evaluated during in the LAW D&O review, that the level of review has been increased to all 26 systems and to LAB and BOF. Ecology expressed a high level of interest in understanding the concerns resulting from the D&O review.

Ecology added that the GAO mentioned about 100 different items that could potentially cause significant problems, and stated that Ecology needs to be apprised of the situation. This action remains open.
Action No. 7 (WTP-14-04-01) – This action remains open.
Action No. 8 (WTP-15-01-01) – ORP reported that the contractor is preparing a standard high solids vessel design (SHSVD) study on the impacts to planning areas 2, 3 and 4, and the study will not be finalized until the September 2015 time frame. ORP stated that the design study will address the vessels that will be replaced in planning areas 2, 3 and 4, and will include modeling to ensure that there is sufficient space to maintain throughput and a review of the P&ID's. This action remains open.
Action No. 9 (WTP-15-01-03) – ORP noted that there was a lengthy discussion last month regarding this action. ORP believes that this action can be closed, and Ecology disagrees. The ORP representative was not present today, and there will be more discussion next month. This action remains open.

WTP Status - ORP provided a brief overall status for WTP, and noted the percentages complete for the LAW, BOF, and LAB (LBL) facilities. Ecology stated that the percentages complete for LBL do not accommodate any retrofit or downsizing for direct feed LAW (DFLAW). ORP concurred, and proceeded to provide a status of the contract modifications that it has been requiring of the contractor in order to rebaseline. ORP stated that the negotiations and the modification to the contract were completed for contract line item number (CLIN) 2.1, which includes the design changes for DFLAW intakes and outtakes, and the design changes at the BOF facilities to accommodate waste coming through LAW. ORP noted that the effort to re-baseline can be initiated now that the contract modification is in place. ORP is expecting to receive the first draft of the rebaseline from the contractor some time in calendar year 2016, at which point the numbers can be quantified. ORP noted that it is working under an interim forecast, and the percentage complete numbers for LBL do not reflect the interim forecast. ORP added that more contract modifications are needed to get everything in place for DFLAW.

Low Activity Waste Facility (LAW)

ORP reported that repairs to the melter feed process vessel and the concentrate receipt process vessel have been completed. Ecology asked if the repairs were weld repairs. ORP responded that they were weld repairs. ORP noted that installation of the container finish handling system cranes and hoists at the plus three elevation has been completed. ORP then reviewed the significant planned actions for the next six months. Ecology asked if any work is being held in abeyance because of the potential reconfiguration to support DFLAW. ORP responded that it was not aware of any holdup, noting that the most recent plan is to enter into the LAW building in the northwest corner and connect directly into the room at the -21 foot elevation. Ecology inquired about the melter installation. ORP responded that it had been reported that the castable and brick refractory had been completed within the shell of the two melters, and the next step will be to install the refractory on the melter lid.

Ecology inquired about the schedule for the melter lid. ORP stated that the most recent

schedule was not available, but it is planned to be installed in the near term.

High Level Waste

ORP noted that HLW is working under the two-year FY15/16 interim work plan, which continues the limited authorization for full production engineering and limited procurement and construction. ORP stated that the key work on the engineering side is to support construction, which is mainly civil construction with some HVAC ducting, fire protection, some electrical conduit, and crane installation build-up. ORP stated that a key activity in the priority list is to complete the RLD vessel design and the safety basis change package so the vessel can be installed in the wet process cell. The vessel will be installed over the top, and after installation the slab can be placed at the 58-foot level. ORP noted that Bechtel submitted the safety basis change package on May 29, 2015, and it is undergoing review, with approval anticipated in the August 2015 time frame. Ecology asked what level the vessel will go in. ORP stated that it goes in the -21 foot level. Ecology asked if the ring beams for the vessel are in place. ORP responded that there were no changes to the vessel size in HLW, and the ring beams have already been received. Ecology stated that the special topics indicated that the ring beam was going to change for this particular vessel. ORP stated that it had not heard of a change and that the ring beams have been installed, but it would follow up on Ecology's inquiry about the RLD ring beams.

ORP noted that the HEPA filter design did not pass the phase 1, iteration 1 efficiency test at MSU, and Bechtel is moving forward with a new plan for different filter media with less reinforcement so it can pass the testing. Ecology referred to ORP's statement about changing the filter media so they can pass, and asked what would be the trade off or what would likely be compromised. ORP responded that the filter media is being improved to make it stiffer and it won't be compromised. ORP noted that the original plan was to have one filter design to support the WTP, and all of the requirements were incorporated in to one filter design, which significantly restricted the air flow path. ORP stated that as a result, the requirements for the offgas and C5 for HLW and LAW will be identified separately, and about eight different media with different levels of reinforcement will be tested. ORP stated that after the testing, a couple of the filter media will be selected that are suitable for different applications. Ecology asked if ORP has enough information about the heat, humidity, and the flow path in various areas in the facility that two or three filter media will be sufficient. ORP responded that there is enough information to make a decision.

Ecology asked if the HEPA filter testing is on the critical path. ORP responded that it is not in the critical path for HLW, but it is for LAW because the final selected filter is needed for commissioning. Ecology stated its understanding that the phase 1 testing was to be completed sometime in September 2015. ORP responded that phase 1, iteration 2 was supposed to be completed in September. ORP explained that iteration 1 was to be rough testing, and if the filters passed, then iteration 2 would proceed for additional testing. Once the filters passed iteration 2, then the NQA-1 testing would have been done, which is phase 2. ORP stated that phase 1 iteration 2 testing will not be done, and instead, the eight filters that have been selected

will be tested directly to NQA-1 in the August 2015 time frame. ORP noted that MSU has geared up to be validated for NQA-1 testing. Ecology asked if ORP's assertion is that the NQA-1 testing is more robust than either phase 1 or 2 iterations would be. ORP responded that phase 2 would have been the same as NQA-1 testing. Ecology requested a briefing or update on the HEPA filter testing to provide assurance that the testing covers all the necessary test requirements. ORP responded that there is no decrease in the testing parameters, and noted that the Ecology team was briefed a few weeks ago on the new testing plan. ORP added that their subject matter experts have reviewed the testing process very critically and are very involved in the test plan and selection of testing criteria.

ORP stated that it has approved the commercial grade dedication (CGD) plan for the emergency turbine generator. ORP stated that part of the autosampling (ASX) system needs to be installed so that the walls can be built. ORP noted that prior to installation, Bechtel is conducting an additional review of the ASX system documentation based on the findings from ORP's assessment of the overall CGD program. ORP stated that the RLD safety basis design change package will be submitted for review, and the plan is to approve it within the next six months. Ecology asked if the timing of the RLD safety basis information will coincide with the final design reviews. ORP responded that the RLD system will be designed after the safety basis is approved, then procurement be initiated.

Ecology inquired about the status of the HOP system. ORP responded that the HOP is one of the systems that had a number of D&O issues, which Ecology is aware of. ORP has requested Bechtel to conduct a full review of the entire HOP system, and the review will be initiated after the system design description (SDD) document is issued. After Bechtel has completed its review, it is to provide a recommendation about the changes that need to be made to the HOP system. ORP noted that if permitting requirements need to be changed, then discussions will be held with Ecology on what kind of changes Bechtel is recommending. ORP indicated that Bechtel's study would be completed by the end of this year or early next year. Ecology asked ORP to speculate on the changes to the HOP system. ORP responded that one finding from the D&O review was that the control system is overly complex, so there could be changes that simplify the process; however, until Bechtel finishes its review, ORP can't speculate on system changes.

Pretreatment (PT) Facility

ORP noted that since September 2012, production engineering, construction, and procurement have been placed on hold, with all of the efforts focused on resolving the technical issues in PT. ORP stated that all of the technical issues are interrelated, citing the example that a change in vessel configuration could impact hydrogen generation or criticality.

Regarding technical issue 1 (T1) for hydrogen in vessels, ORP stated that the standard high solids vessel design (SHSVD) is a smaller vessel than some of the baseline configuration vessels, and a preliminary look at the hydrogen generation shows favorable results. ORP noted that nothing has been finalized yet on the SHSVD, and efforts are continuing. ORP stated that the

preliminary calculation shows there is a potential to downgrade the mixing from safety class to safety significant, which would be a major benefit. ORP stated that in terms of T2, criticality, there are also benefits to the smaller vessel for the high solids. ORP noted that one of the activities was to determine which tanks in the tank farms pose a potential criticality issue for the PT facility, and only ten of the 149 single-shell tanks were identified. ORP stated that there may be ways to deal with criticality, such as feeding at a slower rate. ORP stated that T3, hydrogen in piping and ancillary vessels (HPAV), is also favorably impacted by the smaller standard high solids vessel. ORP indicated that by the end of this calendar year, there will be a much better idea on the path forward and a better level of assurance on resolving the first three issues, T1, T2, and T3, for the SHSVD.

ORP reported that a lot of the activities are taking place on the T4 mixing issue with design verification and testing for the SHSVD, and noted that tests have been completed with the clear acrylic vessel at the MCE facility. ORP stated that the test data is under review and a report will be issued, but a date could not be provided. ORP noted that the test results seem to be favorable, and the focus is now on what needs to be in place to conduct the 16-foot vessel testing, which is the standard high solids vessel. ORP reported that a purchase order has been released to a vendor to fabricate the 16-foot vessel, but there are about 12 or 13 hold points to ensure the design requirements are met, and the hold points need to be released before the vessel can be fabricated. ORP stated that the hold points are associated with questions such as what are the fluid properties and process properties for each of the vessels, and what is the process chemistry inside the vessel. Ecology asked if this work is for the test vessel, and ORP confirmed that it was. Ecology asked if the national labs are still involved. ORP responded that the labs are still involved, including PNNL, NETL, and Savannah River.

Ecology asked if ORP was looking at all the nuclear safety issues and deliverables while the T4 issue resolution is under way. ORP responded that it is still looking at those issues and deliverables. ORP noted that T1, T2, and T3 represent the primary safety hazards. ORP stated that if the T1, T2, and T3 issues get to the point of minimizing the risk by the end of this calendar year, it will have a much better sense for testing associated with the T4 issue. ORP stated that the 16-foot vessel testing is slated to start in summer 2016, and to be completed by the end of FY17.

Ecology asked if there is a group that is looking at the installation of the high solids vessels, how it would be done in the existing facility, and the amount of penetrations required. ORP responded that it is being evaluated under T6, PT facility optimization. ORP referred to an action that Ecology requested a briefing on the impacts on optimization in planning areas 1, 2, and 3 in the SHSVD, which is to be provided this September. ORP stated the impacts on optimization will be part of the design study to be prepared by Bechtel. ORP stated that Bechtel has already evaluated the structure where the vessels will be located in these planning areas, and they are looking at the piping and modeling the process since the vessels will be smaller. Ecology stated that if all the testing and studies have a positive outcome, ORP could have a road map for the vessels and what goes in and out of the facility and all of the ancillary support components. ORP concurred with Ecology's statement, adding that the design study is the first

piece in developing the road map that Ecology referred to. ORP stated that the design study assumes various scenarios for hydrogen in vessels, criticality, et cetera, but until those other issues are resolved, the road map won't be complete. ORP added that part of the road map includes conducting the full-scale vessel testing to ensure it meets the requirements for mixing.

Ecology asked how ORP knows, with a high confidence level, that all of the contributors of concern are being identified and addressed. ORP responded by citing an example with the vessel design, which has numerous inputs that identify whether it is safety significant or safety class. ORP added that the issues need to be resolved because the difference between safety significant and safety class will involve a significant amount of additional controls. ORP noted that Bechtel has added a couple of team members, including a chief technology officer, whose career has been involved with testing. ORP observed that the additions to the Bechtel team has increased its skill level, and that will help them to identify the necessary requirements and be successful.

ORP stated that T5 issue resolution for erosion/corrosion is ongoing, and the corrosion simulant basis document has been issued. ORP noted that some of the T5 issues affect all of the facilities, and there is work in HLW that may help with the erosion/corrosion issue. Ecology requested a copy of the corrosion simulant basis document. *ORP took an action to provide Ecology a copy of the corrosion simulant basis document and to add this action to the action tracking table.* ORP noted that there had been a brief discussion on T6, and characterized facility optimization as a conceptual design for incorporating all the changes from the technical issues. ORP stated that there is not much work being conducted on the vessel analysis issue (T7) because the test vessel design and the mixing requirements are needed to be able to understand the structural elements that are required for the vessel. Ecology asked what vessels ORP was referring to. ORP responded that it would be for all of the vessels because during the seismic shutdown ten years ago, it was recognized that going to different seismic criteria would impact some of the other vessels. Ecology asked if that would include the installed vessels, and ORP concurred.

ORP stated that the main issue under T8 for ventilation is the filters, and noted that an update was provided under HLW. ORP reported that in PT there is an issue that is slightly different from the other facilities, that is related to the pulse jet ventilation header that captures the aerosols. ORP stated that calculations from that will be incorporated with the T6 into the conceptual design report. ORP noted that there is not a separate team in PT that is working on ventilation, and the HLW team is covering that area. Ecology expressed an interest in understanding the filter process in order to get a better level of assurance that with two or three configurations, all the bounding conditions have been addressed. Ecology reiterated its concern about heat, humidity and the process flow, and the static and dynamic process flow through the various parts of the facilities. Ecology questioned how two or three HEPA filter designs could address all of the various parameters throughout the facility. ORP responded that the filters are used in a couple different processes, including the ventilation system and the offgas system, and each system will have different process conditions. ORP stated that there shouldn't be too many conditions beyond those two systems. ORP added that Ecology's question could probably not

be fully addressed and answered until the conceptual design, the modeling, and the SHSVD are done for PT. Ecology expressed the concern that the filter design could be over-generalized to the point where they will work in every facility, but the filter performance could be an issue. ORP responded that there are about 800 filters in WTP, and from an operations perspective, having one configuration would be simpler and it would avoid picking up the wrong filter when a filter needed to be replaced. ORP indicated that the filter performance would not be an issue, as Ecology expressed, but the drawback is more associated with the increased cost with a more robust filter.

ORP noted that the low solids pulse jet mixing (PJM) controls testing has been completed, which tests the control system and how the PJMs work. ORP stated that phase 2 of that testing involves the high solids, and preparations are under way for the testing. Ecology asked if ORP is satisfied that the phase 2 simulant basis is very close and aligns with what is known to be in the tank. ORP responded that it is bounding from the PJM controls perspective. ORP stated that a very high solids recipe will be used for the PJM controls test. ORP noted that the additional mixing parameters will be addressed in a test that will start in about a year. ORP stated that there are various recipes that can be used, and the effort is to understand what recipes will provide a level of assurance that everything has been addressed. Ecology asked if funding is available for the designs study. ORP responded that everything being reported to Ecology is funded.

Balance of Facilities (BOF)

ORP stated that since the contract modification has been completed for DFLAW, there will be more activities associated with DFLAW to report on in the coming months. Ecology asked about the Effluent Management Facility (EMF). ORP responded that there is still a design requirement for EMF before construction on the facility can be started.

Analytical Laboratory (LAB)

ORP stated that progress is still being made on the LAB. ORP noted that construction will soon be suspended, which is a project decision to complete the LAB to the extent that it can receive LAW samples instead of completing LAB to the point where it could receive samples from PT and HLW. ORP added that due to the schedule for receipt of PT and HLW samples, procurement of sampling equipment will occur later, closer to the date when those samples would be received so that the equipment has the most up-to-date technology. ORP stated that LAB is basically ready to receive DFLAW samples, and that efforts are turning towards startup and commissioning. Ecology referred to the letter associated with the GAO report on the D&O review, and stated that the percentages should be viewed with caution as the letter indicated the D&O review should be expanded to all of the systems in LAW, BOF and LAB.

4.0 Key Documents List - ORP provided an updated key documents list.

Upcoming Meetings

The ORP project managers meeting is scheduled July 16, 2015, from 9:00 a.m. to 11:30 a.m. at the ORP office in Richland,WA.

FINAL

Office of River Protection

Tri-Party Agreement Monthly Summary Report June 2015

Office of River Protection
Tri-Party Agreement Milestone Review
June 2015 (Monthly Summary Report/Project Earned Value Management System reflects April 2015 information)

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

CD = Consent Decree 08-5085-FVS

Milestone	Title	Due Date	Completion Date	Status
Fiscal Year 2015				
M-062-40D	Submit System Plan	10/31/2014	10/31/2014	Completed
M-062-40ZZ	Submit One Time Tank Waste Supp Treatment Technologies Report	10/31/2014	Deleted on 08/12/2014	Deleted
M-045-91G-T03	Provide AOR Final Doc. for SSTs on 1,000,000 Gallon Tanks	10/31/2014	07/07/2014	Completed
M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	12/26/2014	11/14/14	Completed
M-045-61	Phase 2 RCRA Facility Investigation	12/31/2014	12/23/2014	Completed
M-045-86H	Submit Retrieval Data Report to Ecology for C-110	01/29/2015	08/06/2014	Completed
M-045-91G-T04	Provide AOR Final Doc. for SSTs on 55,000 Gallon Tanks	01/30/2015	12/3/2014	Completed
M-045-91B-T01	Provide Ecology report on the Concrete Core from Tank A-106 or alt	01/31/2015	12/3/2014	Completed
M-062-01AD	Submit Semi-Annual Compliance Report	1/31/2015	1/29/2015	Completed
M-045-91F-T02	Provide Report of Liner Failures for SSTs	03/31/2015	3/16/2015	Completed
M-062-45-T01	Comp. Neg's 6-Mo After Last Issuance of System Plan	04/30/2015		In Dispute
M-062-45-ZZ	Negotiate a One Time Supplemental Treatment Selection	04/30/2015		In Dispute
M-062-45-ZZ-A	Convert M-062-31-T01 Thru M-062-34-T01 to Interim Milestones	04/30/2015		In Dispute
M-045-91F	Provide Summary Conclusions Report on Leak Integrity	06/30/2015	4/29/15	Completed
M-045-62	Phase 2 Corrective Measures Implementation Work Plan For WMA-C	TBD		On Schedule
M-045-92O	Barrier 3 Design/Monitoring Approval From Ecology	06/30/2015		In Dispute
M-045-91G	Provide Summary Conclusions Report of AOR for SSTs	07/28/2015		On Schedule
M-045-56K	Ecology and DOE Agree, at a Minimum, to Meet Yearly (By July)	07/31/2015		On Schedule
M-045-91H	Submit Change Pkg (if necessary) to est. Additional Milestones	07/31/2015		On Schedule
M-062-01AE	Submit Semi-Annual Compliance Report	7/31/2015		On Schedule
M-045-82	Submit Comp. Permit Modification Request for Tiers 1,2,3	09/30/2015		To Be Missed
M-045-91E1	Provide SST Farms Dome Deflection Surveys Every Two Years	9/30/2015		On Schedule
Fiscal Year 2016				
M-045-92N	Construct Barriers 1 and 2 in 241-SX Farm	10/31/2015		In Dispute
M-062-01AF	Submit Semi-Annual Project Compliance Report	1/31/2016		On Schedule
M-047-07	CD-1 for Secondary Liquid Waste Treatment and CR for CD-2 to ECY	3/31/2016		On Schedule
M-090-13	CD-1 for Interim Hanford Storage Project and CR for CD-2 to ECY	3/31/2016		On Schedule
M-062-31-T01	Comp. Final Design & Submit RCRA Part B Permit Mod Request for Enhanced WTP & Supplemental Treatment	4/30/2016		On Schedule
M-045-92Q	Submit Barrier 4 Design/Monitoring Plan	6/30/2016		In Dispute
M-062-01AG	Submit Semi-Annual Project Compliance Report	7/31/2016		On Schedule
M-045-56L	Ecology And DOE A Ecology And DOE Agree, At A Minimum, To Meet Yearly (By July)	7/31/2016		On Schedule

Milestone	Title	Due Date	Completion Date	Status

AOR = Analyses of Record.
CD-1/-2 = critical decision-1/-2
CR = change request.
DOE = U.S. Department of Energy.
Ecology = Washington State Department of Ecology.
RCRA = Resource Conservation and Recovery Act.
SST = single-shell tank.
TPA = Tri-Party Agreement.
WMA-C = Waste Management Area C.

System Plan

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

M-062-40D, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: October 31, 2014, Status: Completed on 10/31/2014.

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

Significant Past Accomplishments:

1. On October 24, 2013, Washington State Department of Ecology (Ecology) and U.S. Department of Energy (DOE), Office of River Protection (ORP) signed the Tri-Party Agreement (TPA) Change Control Form M-62-13-02, moving out the due date for this embedded milestone from October 31, 2013 to December 15, 2013, for selection of three, or more, scenarios to be modeled in the System Plan.
2. Ecology has defined five scenarios to be analyzed in System Plan 7. Washington River Protection Solutions LLC (WRPS) has included a description of each scenario in the Selected Scenarios for the River Protection Project System Plan, Rev. 7 document released to ORP on December 4, 2013. See joint ORP and Ecology letter 13-TPD-0070, dated December 12, 2013, for completion and description of M-062-40C scenarios.
3. Detailed assumption review was completed, and has been approved by Ecology.
4. On February 11, 2014, DOE-ORP transmitted a letter (14-TPD-0003) to Washington River Protection Solutions LLC in response to letter (WRPS-1400313) to approve the use of Ecology's Appendix B, "Key Assumptions and Success Criteria," for the ORP 11242, River Protection Project System Plan, Rev. 7.
5. On February 13, 2014 Washington State Department of Ecology presented the five selected scenarios to the Hanford Advisory Board Tank Waste Committee.
6. Ecology, DOE-ORP and WRPS reviewed and provided comments for sections 1 and 2 of the System Plan 7 during the week of February 17, 2014.
7. Ecology, DOE-ORP and WRPS reviewed and provided comments for section 3 of the System Plan 7 during the week of March 21, 2014.
8. Ecology, DOE-ORP and WRPS reviewed and provided comments for Appendix C of the System Plan 7 during the week of April 1, 2014.
9. During the week of April 28, 2014, WRPS and DOE-ORP facilitated meetings for Ecology to define detail spending assumptions for Case 5.
10. On July 29, 2014, WRPS Case authors presented the results of the five cases to Ecology and DOE-ORP.
11. System Plan 7 was reviewed, all comments resolved and incorporated into the document.

12. On October 31, 2014, ORP transmitted System Plan 7 to Ecology.

13. ORP received Ecology's January 14, 2015 transmitted letter 15-NWP-004, regarding the Department of Ecology review of *River Protection System Plan,* ORP-11242, Revision 7.

14. DOE-ORP meet with Ecology at the Tank Farms informal TPA and CD monthly status meeting on February 25, 2015.

Significant Planned Actions in the Next 6 Months:

None

Issues:

None.

Acquisition of New Facilities

M-090-13, Submit Critical Decision-1 for Interim Hanford Storage Project and TPA Change Request for CD-2 to Ecology, Due: March 31, 2016, Status: On Schedule. Created by TPA Change Control Form M-90-12-02, signed by ORP and Ecology on November 19, 2012, to "Submit to Ecology, a Conceptual Design Report Package (Critical Decision-1) for the Interim Hanford Storage Project (storage of the first two years of Hanford Site Immobilized High-Level Waste from WTP operations) and a TPA Change Request (in accordance with TPA Action Plan Section 12.0) to submit to Ecology, a Preliminary Design Report package (Critical Decision-2)."

M-090-00, Acquire/Modify Facilities for Storage of Immobilized High-Level Waste (IHLW), Due: December 31, 2019, Status: On schedule.

M-047-07, Submit CD-1 for Secondary Liquid Waste Treatment and Change Request (CR) for CD-2 to Ecology, Due: March 31, 2016, Status: On Schedule. Created by TPA Change Control Form M-47-12-02, signed by ORP and Ecology on November 19, 2012, to "Submit to Ecology, a Conceptual Design Report package (Critical Decision-1) for the Secondary Liquid Waste Treatment Project and a TPA Change Request (in accordance with TPA Action Plan Section 12.0) to submit to Ecology, a Preliminary Design Report package (Critical Decision-2)."

M-047-00, Complete Work Necessary to Provide Facilities for Management of Secondary Waste from the Waste Treatment and Immobilization Plant (WTP), Due: December 31, 2022, Status: On schedule.

Significant Past Accomplishments:
ORP and Ecology signed TPA Change Packages M-47-14-01 and M-90-14-01 on July 14, 2014 moving the due date for M-047-07 and M-090-13 to March 31, 2016.

Significant Planned Actions in the Next 6 Months:
None.

Issues:

None.

Supplemental Treatment and Part B Permit Applications

M-062-45ZZ (designation for M-062-45 item #3), Negotiate a one-time supplemental treatment selection, Due: April 30, 2015, Status: In dispute.

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

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

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

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

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

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

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

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

Significant Past Accomplishments:

*Per ORP letter 14-TF-0052, signed by ORP on May 6, 2014 and provided to Ecology on May 7, 2014, ORP documented the ORP/Ecology discussions for the One-Time Hanford Tank Waste Supplemental Treatment Technologies Report and that ORP does not intend to submit this report. ORP received Ecology's response letter, 14-NWP-110, on May 29, 2014. ORP Letter 14-TF-0088, dated and delivered to Ecology on July 31, 2014, submitted a signed TPA Change Package to delete the requirement of the One-Time Hanford Tank Waste Supplemental Treatment Technologies Report from TPA Milestone M-062-40. Ecology signed TPA Change Package M-62-14-01 deleting M-062-40ZZ on August 12, 2014.

Significant Planned Actions in the Next 6 Months: None.

Issues: On 01/30/15, ORP provided Ecology Change Control Form M-62-14-02, which proposed adding language under TPA Milestone M-062-45 to defer negotiations required under M-062-45. Ecology did not respond with the 14 day review period that ended February 13, 2015 which is deemed disapproval in accordance with the TPA. In letter 15-TF-0014, dated 02/20/15,

ORP initiated dispute resolution. Ecology provided a justification for their disapproval on March 12, 2015 via letter 15-NWP-036. Ecology and ORP signed an extension of the dispute resolution period at the TPA project manager level until August 15, 2015.

242-A Evaporator Status

(previously reported under Milestone M-48, which has been closed out)

242-A Evaporator Status:

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

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY 2010	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and completing in early October 2010. Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY 2010	10-02	AW-106	AW-106	
FY 2011	N/A	N/A	N/A	No campaign conducted in FY 2011 due to ongoing 242-A and tank farm facility life extension and American Recovery and Reinvestment Act funded upgrades.
FY 2012	N/A	N/A	N/A	No campaign conducted in FY 2012 due to ongoing 242-A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis.
FY 2013	N/A	N/A	N/A	No campaigns to be conducted in FY 2013 due to ongoing 242 A and tank farm facility upgrades and revision to the 242-A Documented Safety Analysis.
FY 2014	13-01	AP-107	AP-107	Campaign started September 9, 2014. Campaign completed on October 9, 2014.
FY 2015	EC-01	AP-103 AP-104	AP-107	Estimated to complete in June 2015.
FY 2015	EC-02	AZ-102	AP-103	Estimated to begin July 2015.
FY 2015	EC-03	AZ-102	AP-103	Estimated to begin September 2015.
FY 2015	EC-04	AW-106	AP-103	Estimated to begin October/November 2015.

FY = fiscal year.
N/A = not applicable.

Significant Planned Actions in the Next 6 Months:

Resumption of EC-01 are set to being following completion of repairs to the feed valve, tentatively in mid-June. The evaporator vessel will be filled with water for the initial boil up. Once boiling is achieved and required pre-start activities are complete, waste flow from tank AW-102 may be initiated. When a SpG of

1.41 is achieved, slurry flow to AP-107 may be started. Waste Volume Reduction (WVR) is expected to be on the order of 400 kgal; however, a minimum of 300 kgal will be targeted.

Issues:
Campaign delays due to unforeseen technical/mechanical malfunctions.

Double-Shell Tank System Update

Ultrasonic Testing Inspection

- Ultrasonic testing for tank AN-103 is ongoing and inspection of the annulus floor has indicated thinning. Inspection of the primary tank sidewall has initiated and the UT work is being completed by ITIVS out of South Carolina.
- Ultrasonic testing for tank AN-104 is planned to be performed by the end of the FY.

Visual Inspection

- Continuing bi-weekly inspections of AY-102 waste accumulation sites.
- Continuing bi-monthly comprehensive inspection of AY-102 annulus.
- Annulus visual inspections are completed in tanks AP-102, AP-103, AP-104, AP-105, AP-106, AP-108 AW-101, AW-102, and AW-104. This completes the FY 2015 annulus inspections for the DSTs.

Single-Shell Tank Integrity Assurance

M-045-91F-T04, Provide to Ecology, as a Hanford Federal Facility Agreement and Consent Order secondary document, a report on the 100-series SSTs, which have been or will be identified as having leaked in RPP-32681, Rev. 0, Due: December 26, 2014, Status: Complete. RPP-RPT-54909, Hanford Single-Shell Tanks Leak Causes, Locations, and Rates: Summary Report was transmitted to Ecology on 11/14/2014 under letter 14-TF-1024.

M-045-91G-T04, Provide to Ecology the structural analyses of record final documentation for SSTs for 55,000 gallon tanks (B , C , T , and U Farms), Due: January 30, 2015, Status: Complete. RPP-RPT-49993, Single-Shell Tank Integrity Project Analysis of Record Hanford Type I Single-Shell Tank Thermal and Operating Loads and Seismic Analysis was transmitted to Ecology on 12/03/2014 under letter 14-TF-0128

M-045-91B-T01, Provide Ecology a report containing the results and interpretation of testing and analysis, performed on the concrete core obtained from Tank A-106 or an alternate tank, Due: January 31, 2015, Status: Complete. RPP-RPT-58254, Concrete Core Testing Report for the Single-Shell Tank 241-A-106 Sidewall Coring Project was transmitted to Ecology on 12/03/2014 under letter WRPS-140473214-TF-0127.

M-045-91F-T02, Provide to Ecology as a Hanford Federal Facility Agreement and Consent Order secondary document a report evaluating the common factors of liner failures for SSTs that have leaked and will provide recommendations as appropriate, such as enhanced leak detection, monitoring, and mitigation, Due: March 31, 2015, Status: Complete. RPP-RPT-55804, Common Factors Relating to Liner Failures in Single-Shell Tanks, was transmitted from ORP to Ecology on 03/16/2015 under letter 15-TF-0005.

M-045-91F, Provide to Ecology a report (Summary Conclusions Report on Leak Integrity) summarizing and evaluating the information submitted under M-045-91F-T01 through M-045-91F-T04, Due: June 30, 2015 Status: Complete. Report transmitted to Ecology on April 29, 2015 under ORP letter 15-TF-0043

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

M-045-91H, Submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones based on information obtained from the actions in the preceding M-045-91 series of milestones to date, Due: July 31, 2015, Status: Complete 3/25/2015.

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

Significant Past Accomplishments:

In support of M-045-91G, SST AOR Summary Report, was issued and prepared for public release.

Completion of M-045-91H. The work completed to date under M-045-91F and M-045-91G does not necessitate the creation of any additional milestones. In accordance with a 3/25/15 meeting with Ecology, ORP considers M-045-91H complete and does not intend to submit a change package for the creation of any additional milestones for SST Integrity.

In support of M-045-91Fwas met on April 29, 2015 with ORP letter 15-TF-0043.

Significant Planned Actions in the Next 6 Months:

Issue and transmit the SST AOR Summary report to meet M-045-91G.

Issues:

In Tank Characterization and Summary

For the period from May 1 through May 31, 2015:

Accomplishments:

- Completed RPP-RPT-45764, *Derivation of Best-Basis Inventory for Tank 241-AN-102 as of April 1, 2015*, Rev 5.
- Completed RPP-RPT-44049, *Derivation of Best-Basis Inventory for Tank 241-AZ-102*, Rev 7.
- Completed RPP-RPT-58547, *Derivation of Best-Basis Inventory for Tank 241-T-111 as of March 10, 2015*, Rev 0.
- Completed RPP-PLAN-60281, *Tank 241-AP-105 Grab Sampling and Analysis Plan*, Rev 0.
- Completed RPP-PLAN-60248, *Tank 241-AZ-102 Grab Sampling and Analysis Plan in Support of 242-A Evaporator Campaign EC-03*, Rev 0.
- Performed sampling of 242-A Evaporator slurry to 241-AP-107 on May 7, 2015. Two samples were received at the lab.
- Performed 241-AP-101 grab sampling May 12, 2015 and May 14, 2015. Ten samples were received at the lab.

Planned Action within the Next 6 Months:

Tank sampling:

- Tank 241-C-105 in-process grab sampling is planned for June 2015.
- Tank 241-AY-101 grab sampling is planned for June 2015.
- Tank 241-AP-103 grab sampling is planned for June 2015.
- Tank 241-SY-103 core sampling is planned for June 2015.
- Tank 241-AP-105 grab sampling is planned for July 2015.
- Tank 241-AP-107 grab sampling is planned for September 2015.
- Tank 241-C-111 HHR grab sampling is planned for September 2015.
- Tank 241-AW-102 grab sampling is tentatively planned for November 2015.
- Tank 241-AN-101 grab sampling at 241-C-111 HRR 100% is planned for November 2015.

Best-Basis Inventory (BBI) updates:

BBI updates for the following tanks were completed in May:

- 241-AN-102
- 241-AZ-102
- 241-T-111

BBI updates for the following tanks currently are planned to be completed in June:

- 241-AN-107
- 241-AX-101
- 241-BX-111
- 241-C-112
- 241-SX-102

Data Quality Objectives (DQO):

- RPP-44057, *Data Quality Objectives to Support Strategic Planning*, Rev 2, is in-process to clarify DQO applicability and obtain data used to update the BBIs.

- Update of RPP-SPEC-33590, *Data Quality Objectives for Evaluation of Stack Chemical Emissions*, Rev 2, is in-process to incorporate updated requirements for evaluation of stack chemical emissions after AY/AZ tank farm ventilation upgrades.

Issues:

None.

TANK OPERATIONS CONTRACT OVERVIEW

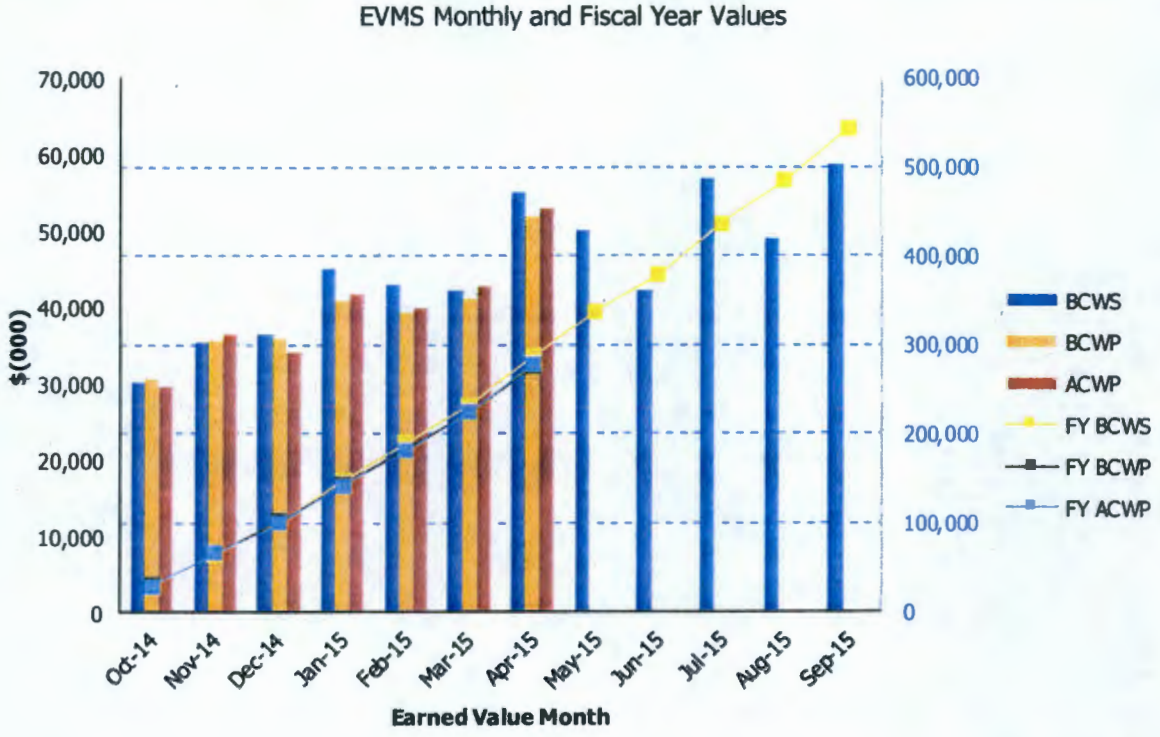
Project Performance

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

Through April 30, 2015, Washington River Protection Solutions LLC (WRPS) worked 2,554,707 hours (192 days) without a Lost Time Workday Injury and 708,396 hours (49 days) since the last Recordable case. There was one recordable cases in March, and no Days Away, Restricted, or Transferred (DART) cases.

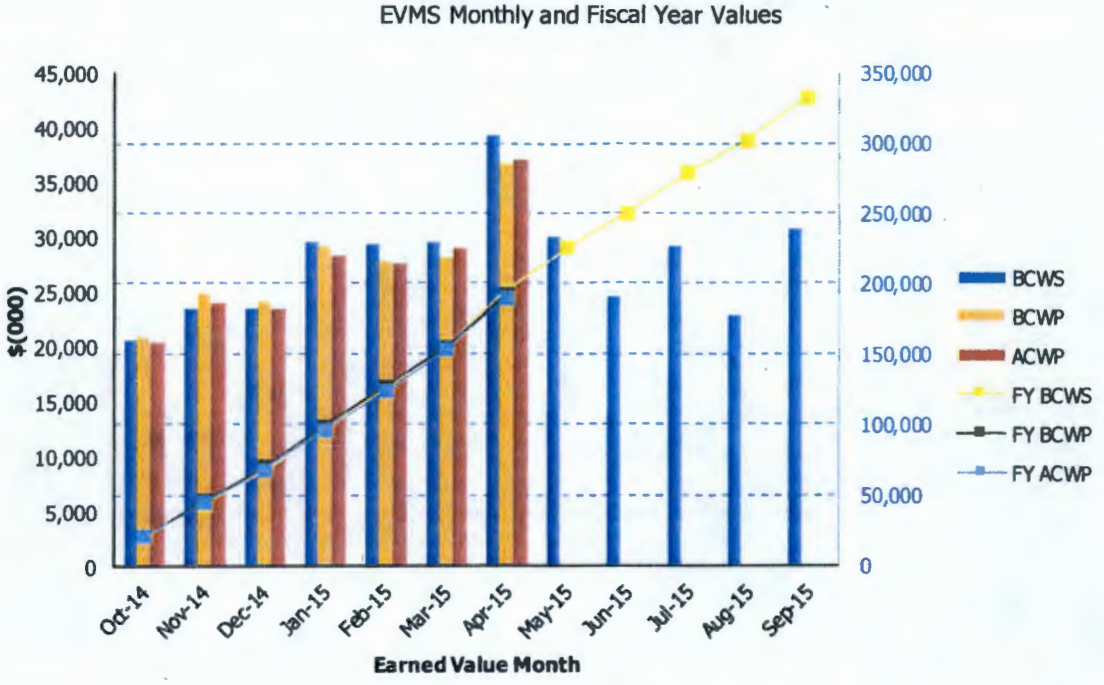
April-15										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	54,958.0	51,747.0	52,922.0	(3,211.0)	(1,175.0)	0.94	0.98			
FYTD	286,788.0	274,843.0	276,891.0	(11,945.0)	(2,048.0)	0.96	0.99	543,280.0		
CTD	2,630,634.0	2,593,323.0	2,577,837.0	(37,311.0)	15,486.0	0.99	1.01	3,387,130.0	3,340,509.4	46,620.6

Tank Farms ORP-0014



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	$30,052	$30,480	$29,607	1.01	1.03	$30,052	$30,480	$29,607	1.01	1.03
Nov 2014	$35,246	$35,697	$36,417	1.01	0.98	$65,298	$66,178	$66,024	1.01	1.00
Dec 2014	$36,377	$35,858	$33,978	0.99	1.06	$101,675	$102,036	$100,002	1.00	1.02
Jan 2015	$45,083	$40,697	$41,603	0.90	0.98	$146,757	$142,733	$141,605	0.97	1.01
Feb 2015	$42,913	$39,189	$39,643	0.91	0.99	$189,671	$181,922	$181,248	0.96	1.00
Mar 2015	$42,159	$41,174	$42,721	0.98	0.96	$231,830	$223,096	$223,968	0.96	1.00
Apr 2015	$54,958	$51,747	$52,922	0.94	0.98	$286,788	$274,843	$276,890	0.96	0.99
May 2015	$49,882					$336,670				
Jun 2015	$42,253					$378,923				
Jul 2015	$56,899					$435,822				
Aug 2015	$48,837					$484,659				
Sep 2015	$58,619					$543,278				
CTD	$2,630,693	$2,593,323	$2,577,837	0.99	1.01					

Tank Farms ORP-0014
Base Operations 5.01



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	$20,627	$20,833	$20,428	1.01	1.02	$20,627	$20,833	$20,428	1.01	1.02
Nov 2014	$23,471	$24,930	$23,988	1.06	1.04	$44,098	$45,762	$44,417	1.04	1.03
Dec 2014	$23,467	$24,105	$23,547	1.03	1.02	$67,565	$69,867	$67,964	1.03	1.03
Jan 2015	$29,511	$29,162	$28,218	0.99	1.03	$97,075	$99,029	$96,181	1.02	1.03
Feb 2015	$29,299	$27,739	$27,582	0.95	1.01	$126,375	$126,768	$123,764	1.00	0.98
Mar 2015	$29,525	$28,162	$28,967	0.95	0.97	$155,900	$154,929	$152,731	0.99	0.99
Apr 2015	$39,203	$36,623	$36,998	0.93	0.99	$195,103	$191,552	$189,729	0.98	0.99
May 2015	$30,043					$225,146				
Jun 2015	$24,437					$249,582				
Jul 2015	$29,176					$278,759				
Aug 2015	$22,875					$301,634				
Sep 2015	$30,751					$332,385				
CTD	$1,732,531	$1,717,395	$1,697,413	0.99	1.01					

Base Operations and Tank Farm Projects

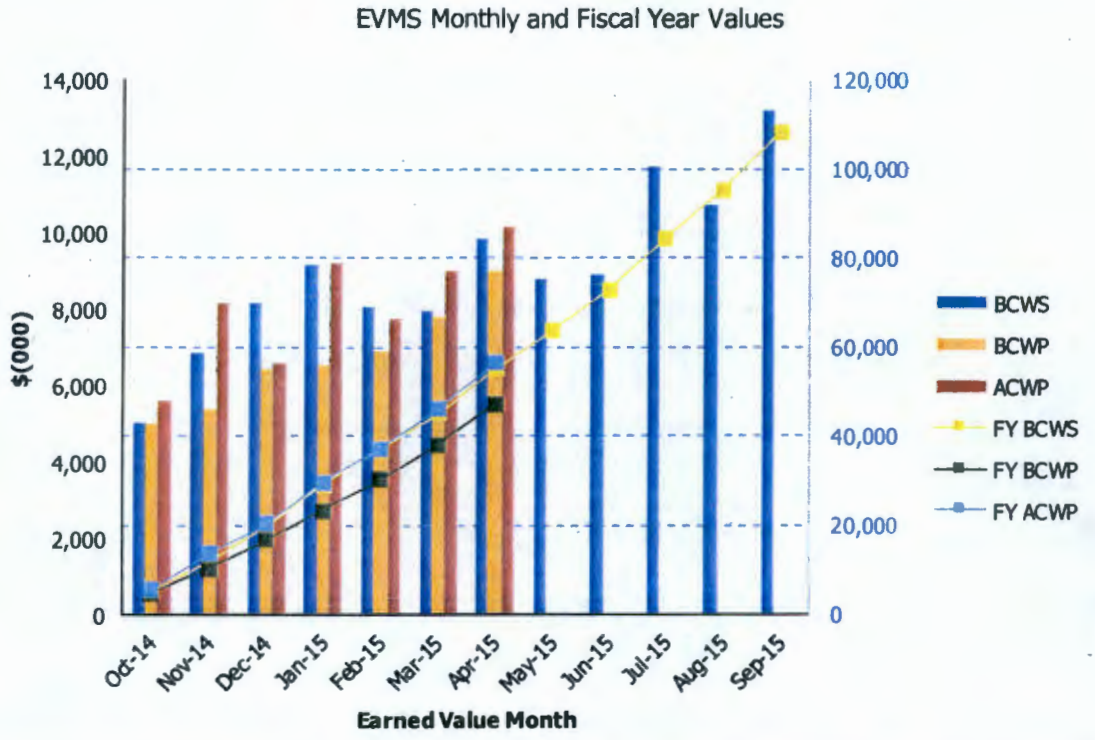
The current month unfavorable schedule variance (SV) of ($2,579K) is due to the following:

- SY Farm Exhauster Refurbishment and Installation was delayed due to priorities given to AP Exhauster to support AY-102 Retrieval.
- Delays with the 242-A Evaporator Campaign due to a failed ammonia analyzer.
- Loss of critical resource to perform Ultrasonic Testing at AN Farm.

The current month unfavorable cost variance (CV) of ($375K) is due to the following:

- Cost increases due to vapor requirements, increased equipment costs and increase in training requirements.

Tank Farms ORP-0014
Retrieve and Close SST's 5.02



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	$5,024	$5,011	$5,609	1.00	0.89	$5,024	$5,011	$5,609	1.00	0.89
Nov 2014	$6,852	$5,392	$8,174	0.79	0.66	$11,876	$10,403	$13,783	0.88	0.75
Dec 2014	$8,171	$6,453	$6,612	0.79	0.98	$20,047	$16,856	$20,395	0.84	0.83
Jan 2015	$9,167	$6,524	$9,195	0.71	0.71	$29,215	$23,380	$29,589	0.80	0.79
Feb 2015	$8,075	$6,924	$7,719	0.86	0.90	$37,290	$30,304	$37,309	0.81	0.81
Mar 2015	$7,971	$7,801	$9,009	0.98	0.87	$45,261	$38,105	$46,318	0.84	0.82
Apr 2015	$9,818	$9,019	$10,148	0.92	0.89	$55,079	$47,124	$56,466	0.86	0.83
May 2015	$8,781					$63,860				
Jun 2015	$8,899					$72,759				
Jul 2015	$11,715					$84,474				
Aug 2015	$10,714					$95,188				
Sep 2015	$13,179					$108,367				
CTD	$560,578	$542,541	$565,809	0.97	0.96					

The current month unfavorable cost variance (CV) of ($1,129k) is due to:

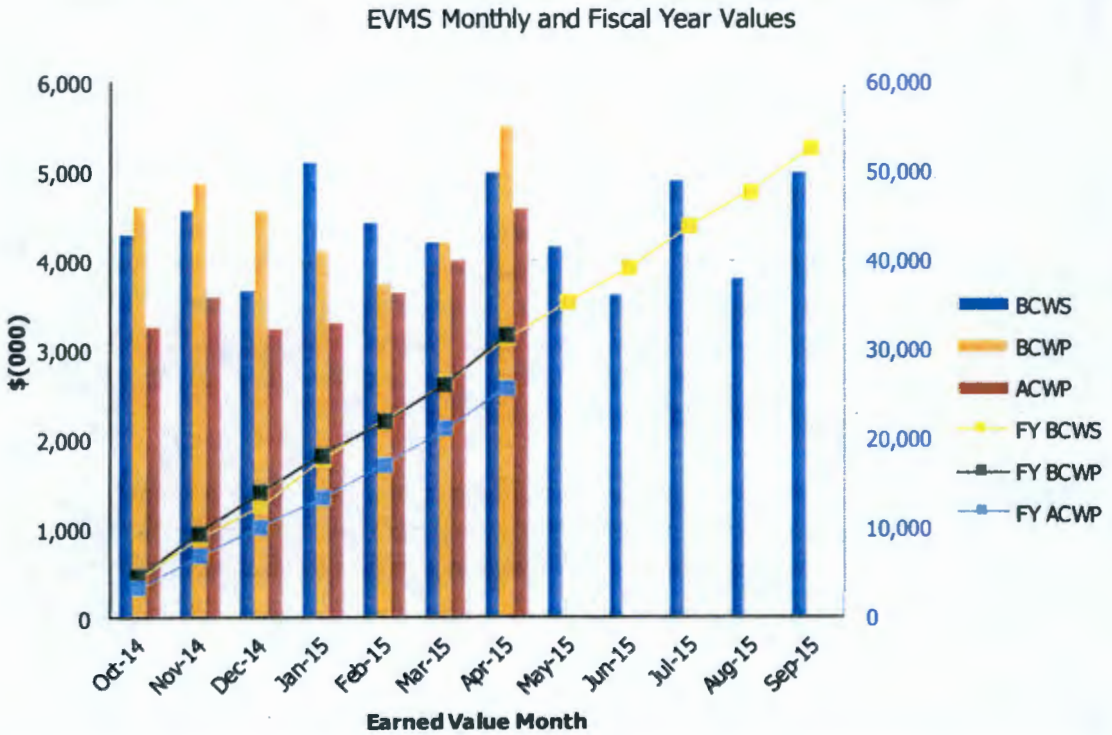
- Limited amount of waste retrieved from C-102 due to the material makeup/characterization (sand like consistency) of the remaining volume. In addition,

retrieval operations were halted in mid-April due to a leak within sluicer box #1. The project spent additional time and effort attempting to locate the leak source.

The current month unfavorable schedule variance (SV) of ($799k) is due to:

- Limited amount of waste retrieved from C-102 due to the material makeup/characterization (sand like consistency) of the remaining volume.

Tank Farms ORP-0014
Waste Feed Delivery/Treatment/Double-Shell Tank Retrieval Closure 5.03



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	$4,277	$4,605	$3,261	1.08	1.41	$4,277	$4,605	$3,261	1.08	1.41
Nov 2014	$4,549	$4,876	$3,585	1.07	1.36	$8,826	$9,480	$6,846	1.07	1.38
Dec 2014	$3,652	$4,559	$3,229	1.25	1.41	$12,478	$14,040	$10,075	1.13	1.39
Jan 2015	$5,101	$4,113	$3,308	0.81	1.24	$17,579	$18,152	$13,383	1.03	1.36
Feb 2015	$4,413	$3,734	$3,636	0.85	1.03	$21,992	$21,887	$17,019	1.00	1.29
Mar 2015	$4,185	$4,206	$3,988	1.00	1.05	$26,177	$26,092	$21,007	1.00	1.24
Apr 2015	$4,989	$5,497	$4,584	1.10	1.20	$31,166	$31,589	$25,591	1.01	1.23
May 2015	$4,145					$35,311				
Jun 2015	$3,615					$38,926				
Jul 2015	$4,882					$43,807				
Aug 2015	$3,792					$47,599				
Sep 2015	$4,991					$52,589				
CTD	$307,735	$304,153	$285,936	0.99	1.06					

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

The current month favorable schedule variance (SV) of $508K is due to:

- IDF Glass Testing – recovering work scope which was previously behind schedule: Long-Term Performance Testing of New Glass Composition Regions and Annual Report, Comprehensive Report on Glass Parameters for PA Modeling, and Measure Kds for Key Contaminants in Simulant Glass Leachate.
- One System Nuclear Safety & Engineering Program Integration – performing activities ahead of schedule: Engineering and Operational Software, A6 and A8 Transformer, and Ignition Source interfacing.

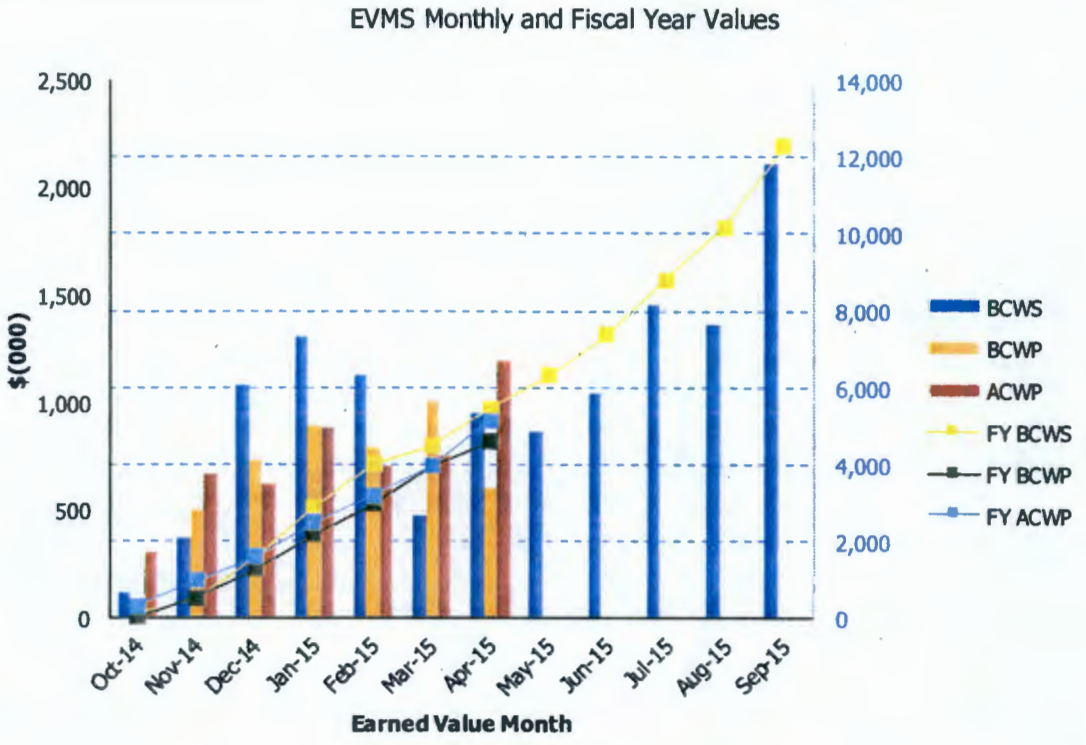
The current month favorable cost variance (CV) of $913K is due to:

- One System Nuclear Safety & Engineering Program Integration – efficiencies realized by utilizing experienced Nuclear Safety contract engineering rather than planned internal labor.

- Pre-conceptual Projects - work scope being performed by internal resources, although subcontract resources were originally planned. New data was obtained from the CH-TRU project which resulted in a more efficient analysis of the RH-TRU project risks and issues. The planned RH-TRU engineering study was not necessary as sufficient technical data was obtained from this analysis to prepare a white paper in support of the Strategic Initiatives Analysis Plan (SIAP). The utilization of subcontract support with historical SIAP experience resulted in more efficient performance of the SIAP development, scenario selection, analysis, and organization activities.

- WTP Interface Management – fewer internal labor resources have been required to accomplish the work scope by utilizing experienced personnel with historical knowledge of the work scope. Additionally, the level of staffing within the Secondary Waste account was less than planned.

Tank Farms ORP-0014
Treat Waste 5.5



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	$124	$32	$308	0.26	0.10	$124	$32	$308	0.26	0.10
Nov 2014	$374	$500	$674	1.34	0.74	$498	$532	$982	1.07	0.54
Dec 2014	$1,087	$741	$628	0.68	1.18	$1,585	$1,273	$1,610	0.80	0.79
Jan 2015	$1,304	$899	$883	0.69	1.02	$2,889	$2,172	$2,493	0.75	0.87
Feb 2015	$1,126	$792	$707	0.70	1.12	$4,015	$2,964	$3,200	0.74	0.93
Mar 2015	$478	$1,006	$754	2.11	1.33	$4,492	$3,970	$3,954	0.88	1.00
Apr 2015	$948	$607	$1,194	0.64	0.51	$5,440	$4,577	$5,148	0.84	0.89
May 2015	$869					$6,309				
Jun 2015	$1,043					$7,352				
Jul 2015	$1,458					$8,810				
Aug 2015	$1,367					$10,177				
Sep 2015	$2,111					$12,288				
CTD	$9,740	$9,122	$9,544	0.94	0.96					

Treat Waste

The current month unfavorable schedule variance (SV) of ($342K) is due to:

- LAWPS Conceptual Design - April's month end performance not being updated. April's performance will be corrected during May's reporting period.

The current month unfavorable cost variance (CV) of ($587K) is due to:

- LAWPS Conceptual Design - April's month end performance not being updated. April's performance will be corrected during May's reporting period.

Work Breakdown Structure 5.2 Retrieve and Close Single-Shell Tanks

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

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

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

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

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

M-045-56K, Complete Implementation of Agreed to Interim Measures, Due: July 31, 2015, 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 Waste Management Areas (WMA) (pending the Corrective Measures Study report, Milestone M-45-58, and implementation of other interim corrective measures), Due: To be determined, Status: On schedule.

M-045-61, Submit to Ecology in accordance with the HFFACO Secondary document review process a Phase 2 RCRA Facility Investigation (RFI) Report Draft A for WMA Area C (WMA-C), Due: December 31, 2014, Status: Complete. The Phase 2 RCRA Facility Investigation Report Draft A for WMAC, RPP-RPT-58339, was transmitted to Ecology on December 23, 2014, via letter 14-TF-0131. This milestone was modified by HFFACO change package M-45-14-03, signed October 1, 2014.

M-045-61A, Submit to Ecology for review and approval as an Agreement primary document, document review process, a Phase 2 Corrective Measures Study, and revision 0 update to the RFI Report for WMA-C), Due: December 31, 2016, Status: On Schedule. The Phase 2 RCRA Facility Investigation Report Draft A for WMAC, RPP-RPT-58339, was transmitted to Ecology on December 23, 2014, via letter 14-TF-0131. This milestone was created by HFFACO change package M-45-14-03, signed October 1, 2014.

M-045-62, Submit to Ecology for review and approval as an agreement primary document a Phase 2 Corrective Measures Study Implementation Plan for WMA-C, Due: Six (6) months after the approval of the CMS submitted under milestone M-045-61A Status: TPA Change Control form M-45-15-02 approved on April 14, 2015.

M-045-92, Complete Installation of Four (4) Additional Interim Barriers (see interim milestones below), Due: October 31, 2017, Status: TBD. TPA Change Control form M-45-15-01 submitted via letter 15-TF-0027 on March 31, 2015. Change was not approved and dispute resolution process was initiated via letter 15-TF-0042 on April 20, 2015. Dispute is at the project manager level and has been extended to August 16, 2015.

M-045-92N, Construct Barriers 1 and 2 in 241-SX Farm, Due: October 31, 2015, Status: TBD. TPA Change Control form M-45-15-01 submitted via letter 15-TF-0027 on March 31, 2015. Change was not approved and dispute resolution process was initiated via letter 15-TF-0042 on April 20, 2015. Dispute is at the project manager level and has been extended to August 16, 2015.

M-045-92O, Submit a Final Design and Monitoring Plan for Interim Barrier 3, Due: June 30, 2015, Status: TBD. TPA Change Control form M-45-15-01 submitted via letter 15-TF-0027 on March 31, 2015. Change was not approved and dispute resolution process was initiated via letter 15-TF-0042 on April 20, 2015. Dispute is at the project manager level and has been extended to August 16, 2015.

Significant Past Accomplishments:

- Automated data collection systems for T Farm and TY Farm interim barrier monitoring continue gathering data
- Documentation of the WMA-C Phase 2 Resource Conservation and Recovery Act Facility Investigation Report was completed, and RPP-RPT-58339 was transmitted to Ecology on December 23, 2014, completing M-045-61.

Significant Planned Actions in the Next 6 Months:

- Provide the annual interim barrier monitoring report for information collected in 2014.

Issues:

- Change control form M-45-15-02 was submitted by ORP via letter 15-TF-0018 to Ecology and was approved on April 14, 2014. The change control form revises the M-045-62 Milestone date for submittal of the Corrective Measures Implementation Plan to

six months after the Corrective Measures Study (CMS) is approved by Ecology. Milestone M-045-62 currently requires submittal of a Corrective Measure Implementation Plan prior to submittal of the CMS. This sequencing is incorrect allows information from the CMS to be used for the development of the Corrective Measures Implementation Plan. Dispute is at the project manager level and has been extended to August 16, 2015.

- Change control form M-45-15-01 was submitted by ORP via letter 15-TF-0027 to Ecology for approval. The change control form proposed modifying the due dates for construction of Barriers 1 and 2 and design and construction of Barriers 3 and 4. Construction of SX Barriers 1 and 2 has been delayed because ORP was required to shift resources to other higher priority, higher risk work scope, including among other things, safety concerns. In addition, Ecology and ORP have yet to agree upon the locations for Barriers 3 and 4. It is proposed that Ecology and ORP discuss Barrier 3 and 4 locations during the M-045-56 Milestone annual interim measure meetings held by the end of July 2015. The change control form was not approved, and the dispute resolution process was initiated via letter 15-TF-0042 on April 20, 2015.

SST Retrieval and Closure Program

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

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

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

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

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

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

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

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

- M-045-86H: Retrieval Data Report for C-110 was due January 29, 2015. Completed on August 6, 2014 with letter 14-TF-0086.

Significant Past Accomplishments:

- Completed post-retrieval logging of the drywells near C-107, C-112 and C-101 to support the retrieval data reports (RDRs)
- Completed the post-retrieval sample analysis and reporting for tank C-107, in support of the Retrieval Data Report. Completed post-retrieval sampling of C-112 in support of the RDR.
- Completed post-retrieval sampling of C-112 in support of the RDR.
- Complete post-retrieval sampling of C-101 in support of the RDR.
- See discussions above and related discussions in Consent Decree report.

Significant Planned Activities in the Next 6 Months:

- Complete scoping meetings for a performance assessment for WMA A/AX.
- Complete the RDR for tank C-107.
- Perform sample analysis and reporting on post-retrieval samples from tanks C-112 and C-101.
- Develop RDRs for tanks C-112 and C-101.

Issues:

ORP and Ecology continue to meet to develop an integrated path forward that addresses all the deliverables associated with Milestone M-045-82. Delays in obtaining the post-retrieval samples from tanks C-112 and C-101 may result in delayed completion of the RDRs.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Complete	MARS-V	MARS-V-High Pressure Water Spray	-
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S -High Pressure Water Spray	Water Dissolution
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	Complete	Modified Sluicing	Mechanical Waste Conditioning with an In-Tank Vehicle	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water using the ERSS	Chemical Dissolution Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

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

Significant Accomplishments:
None.

Significant Planned Activities in the Next 6 Months:
Draft AX Farm TWRWPs.

Issues:
None.

Tank in Appendix H, "Status - Single Shell Waste Retrieval Criteria"

Tank 241-C-106

Significant Past Accomplishments:

None.

Significant Planned Activities in the Next 6 Months:

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

Issues:

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

Tank Retrievals with Individual Milestones

Tank 241-A-103

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

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

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

Significant Past Accomplishments:

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

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

Tank 241-S-112

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

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

Significant Past Accomplishments:

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

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

FINAL

Office of River Protection
Consent Decree 08-5085-FVS

Monthly Summary Report

June 2015

Office of River Protection

Consent Decree 08-5085-FVS
Monthly Summary Report

June 2015 (Monthly Summary Report/Project Earned Value Management System reflects April 2015 information)

CD Milestone Statistics/Status

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

Ecology = Washington State Department of Ecology.
LAW = low-activity waste.
PT = pretreatment.
SST = single-shell tank.
WMA-C = C Farm waste management area.

Consent Decree Reports/Reviews

D-00C-01 series, Submit to State of Washington and State of Oregon Semi-Annual Report, Due: Semiannually – January 31 and July 31 of each year, Status: Ongoing. The January 2015 Semiannual Report was issued on January 29, 2015, via U.S. Department of Energy (DOE), Office of River Protection (ORP) letter 15-ECD-0006.

D-00C-02 series, Submit to State of Washington and State of Oregon Monthly Summary Reports, Due: End of each month, Status: Ongoing.

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

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

Single-Shell Tank Retrieval Program

Milestone	Title	Due Date	Status
D-00B-01	Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C	September 30, 2014	Past Due
D-00B-01A through D-00B-01J	Submit Tank Retrieval Complete Certification	One year following each retrieved tank retrieval completion report[a]	Ongoing
D-00B-02	Advise Ecology of the Nine SSTs from which Waste Will Be Retrieved by 2022	September 30, 2014	Completed
D-00B-03	Initiate Startup of Retrieval in At Least 5 of 9 SSTs in D-00B-02	December 31, 2017	Ongoing
D-00B-04	Complete Retrieval of Tank Wastes from the nine SSTs in D-00B-02	September 30, 2022	Ongoing
D-00B-04A through D-00B-04I	Submit Tank Retrieval Complete Certification	TBD	TBD

a. Pursuant to Section IV-B-5 of the Consent Decree, the U.S. Department of Energy (DOE) must submit to the Washington State Department of Ecology (Ecology) a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix C, Part 1, of the Consent Decree.
Completed for Single-Shell Tank (SST) C-104 on March 21, 2013, via DOE Office of River Protection (ORP) letter 13-TF-0018. Completed for SST C-108 on May 1, 2013, via ORP letter 13-TF-0025. Completed for SST C-109 on June 4, 2013, via ORP letter 13-TF-0037. Completed for SST C-110 on January 29, 2014, via ORP letter 14-TF-0007. Completed for SST C-107 on September 30, 2014, via ORP letter 14-TF-0114. Completed for SST C-112 on September 30, 2014, via ORP letter 14-TF-0115.

TBD = to be determined.
WMA-C = C Farm waste management area.

Significant Past Accomplishments:

- First and second retrieval technologies at C-102 are completed to the limits of technology.
- Restarted C-105 MARS-Vacuum retrieval system using high-pressure water.
- Continued fabrication of last replacement sluicer for C-111.
- Completed removal of failed slurry pump at C-111, preparations for installation of the new pump have begun.

Significant Planned Activities in the Next Six Months:

- Finish a C-105 systems engineering evaluation of the current retrieval method; will potentially need a revised tank waste retrieval work plan.
- Continue retrieval of C-105 using Mobile Arm Retrieval System – Vacuum (MARS-V)
- Begin startup of hard heel retrieval in C-111 using high-pressure water, with caustic/water dissolution available.

Issues:

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

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	First Retrieval Technology	Second Technology	Third Technology
C-101	RPP-22520, Rev. 8	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-102	RPP-22393, Rev. 7	Complete	Modified Sluicing with ERSS	High-Pressure Water deployed with the ERSS	-
C-104	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0018	-
C-105	RPP-22520, Rev. 8	Complete	MARS-V	MARS-V-High Pressure Water Spray	-
C-107	RPP-22393, Rev. 7	Complete	MARS-S	MARS-S-High Pressure Water Spray	Water Dissolution
C-108	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0025	-
C-109	RPP-21895, Rev. 5	Complete	Modified Sluicing	Chemical Retrieval Process complete per 13-TF-0037	-
C-110	RPP-33116, Rev. 3	Complete	Modified Sluicing	Mechanical Waste Conditioning with an In-Tank Vehicle	High Pressure Water
C-111	RPP-37739, Rev. 2	Complete	Modified Sluicing	High pressure water using the ERSS	Chemical Dissolution Process with ERSS
C-112	RPP-22393, Rev. 7	Complete	Modified Sluicing	Chemical Retrieval Process	-

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

Significant Accomplishments:

None.

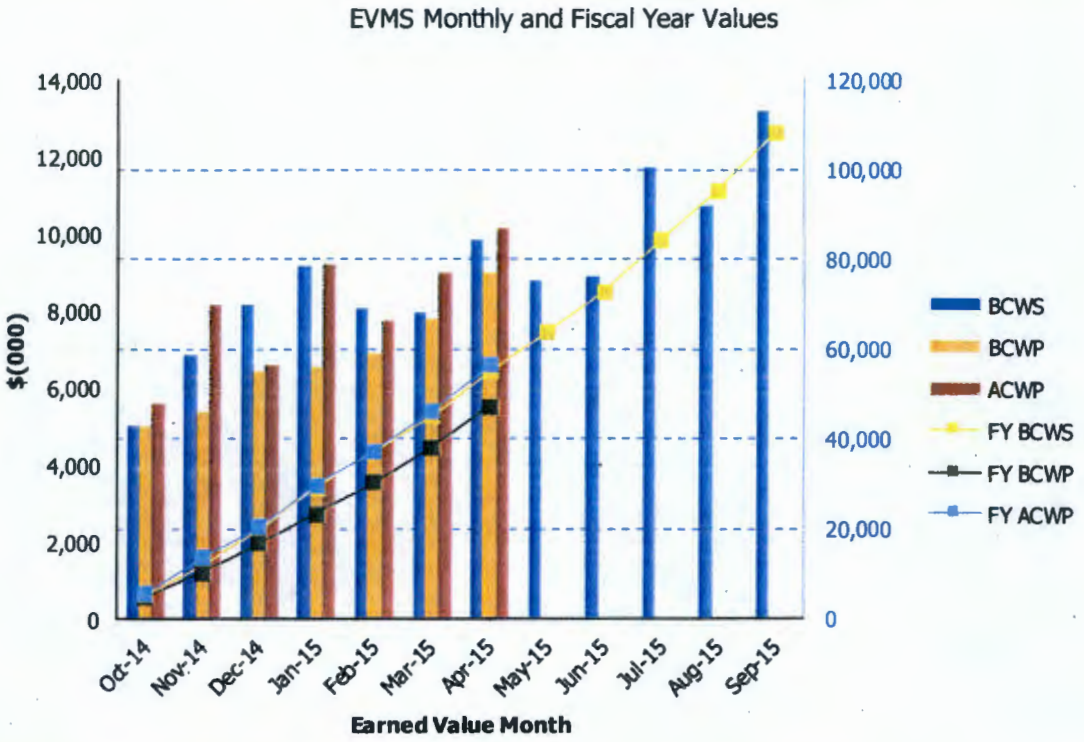
Significant Planned Activities in the Next Six Months:

Develop AX Farm tank waste retrieval work plans.

Issues:

None.

Tank Farms ORP-0014
Retrieve and Close SST's 5.02



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	$5,024	$5,011	$5,609	1.00	0.89	$5,024	$5,011	$5,609	1.00	0.89
Nov 2014	$6,852	$5,392	$8,174	0.79	0.66	$11,876	$10,403	$13,783	0.88	0.75
Dec 2014	$8,171	$6,453	$6,612	0.79	0.98	$20,047	$16,856	$20,395	0.84	0.83
Jan 2015	$9,167	$6,524	$9,195	0.71	0.71	$29,215	$23,380	$29,589	0.80	0.79
Feb 2015	$8,075	$6,924	$7,719	0.86	0.90	$37,290	$30,304	$37,309	0.81	0.81
Mar 2015	$7,971	$7,801	$9,009	0.98	0.87	$45,261	$38,105	$46,318	0.84	0.82
Apr 2015	$9,818	$9,019	$10,148	0.92	0.89	$55,079	$47,124	$56,466	0.86	0.83
May 2015	$8,781					$63,860				
Jun 2015	$8,899					$72,759				
Jul 2015	$11,715					$84,474				
Aug 2015	$10,714					$95,188				
Sep 2015	$13,179					$108,367				
CTD	$560,578	$542,541	$565,809	0.97	0.96					

Retrieval and Close Single-Shell Tanks

The current month unfavorable cost variance (CV) of ($1,129k) is due to:

- Limited amount of waste retrieved from C-102 due to the material makeup/characterization (sand like consistency) of the remaining volume. In addition,

retrieval operations were halted in mid-April due to a leak within sluicer box #1. The project spent additional time and effort attempting to locate the leak source.

The current month unfavorable schedule variance (SV) of ($799k) is due to:

- Limited amount of waste retrieved from C-102 due to the material makeup/characterization (sand like consistency) of the remaining volume.

Waste Treatment and Immobilization Plant Project

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

WTP = Waste Treatment and Immobilization Plant.

The Waste Treatment and Immobilization Plant (WTP) Project currently employs approximately 2,695 full-time equivalent contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel. This includes 603 craft, 410 non-manual, and 155 subcontractor full-time equivalent personnel working at the WTP construction site (all facilities).

In October 2012, the percent-complete values for Pretreatment (PT) and High-Level Waste (HLW) facilities were frozen at the September 2012 rate. Construction, procurement, and production engineering activities were placed on hold for PT and significantly slowed down for HLW. In August 2014, DOE approved continuation of production engineering activities for HLW. Subsequently, DOE has approved the fiscal year (FY) 2015 and FY 2016 2-Year Interim Work Plan. In April 2015, a 3-year Interim Work Plan for the PT facility was implemented emphasizing prioritization of technical issue resolution activities. The WTP Project is focused on resolving PT Facility technical issues and finalizing HLW facility design.

The WTP Project continues to focus on completion of the Low-Activity Waste (LAW) Facility, analytical laboratory (LAB), and Balance of Facilities (BOF) (collectively LBL). As of April 2015, LBL facilities were 68 percent complete, design and engineering was 80 percent complete, procurement was 77 percent complete, construction was 83 percent complete, and startup and commissioning was 16 percent complete.

In April 2015, the cumulative to-date WTP Project schedule variance was a negative $2.8 million, and the cumulative to-date WTP Project cost variance was a positive $42.8 million. The cumulative to-date cost and schedule variance is based on the progress of the LBL Internal Forecast.

The following is the project status through the end of April 2015.

Significant Past Accomplishments:

- Issued corrosion simulant basis document for localized corrosion (PT)
- Issued Commercial Grade Dedication plan for the ETG procurement (HLW)
- Completed placement of wall 4101 (HLW)
- Installed 32 tons of structural steel (HLW)
- Completed Installation of the Low Voltage Electrical System (LVE) Equipment, Elevation +48 (LAW)

- Completed Installation of LAW Container Finishing Handling System (LFH) Cranes and Hoists, Elevation +03 (LAW)
- Received and placed nonradioactive liquid waste disposal (NLD) system motor control powerhouse (BOF)

Significant Planned Actions in the Next Six Months:

- Complete modification at Full-Scale Vessel Testing Facility to continue testing for the pulse-jet mixer (PJM) control system (PT)
- Submit the Radioactive Liquid Waste Disposal (RLD) Safety Basis Change Package for DOE review (HLW)
- Complete the LAW Facility design and operability review
- Receive caustic scrubber (LAW)
- Finalize Standard High Solids Vessels Design vessel testing planning, test specification/plan, and define simulate and supplemental mixing engineering study (PT)
- Begin LAB system walk downs in support of direct feed LAW modifications (LAB)

Issues:

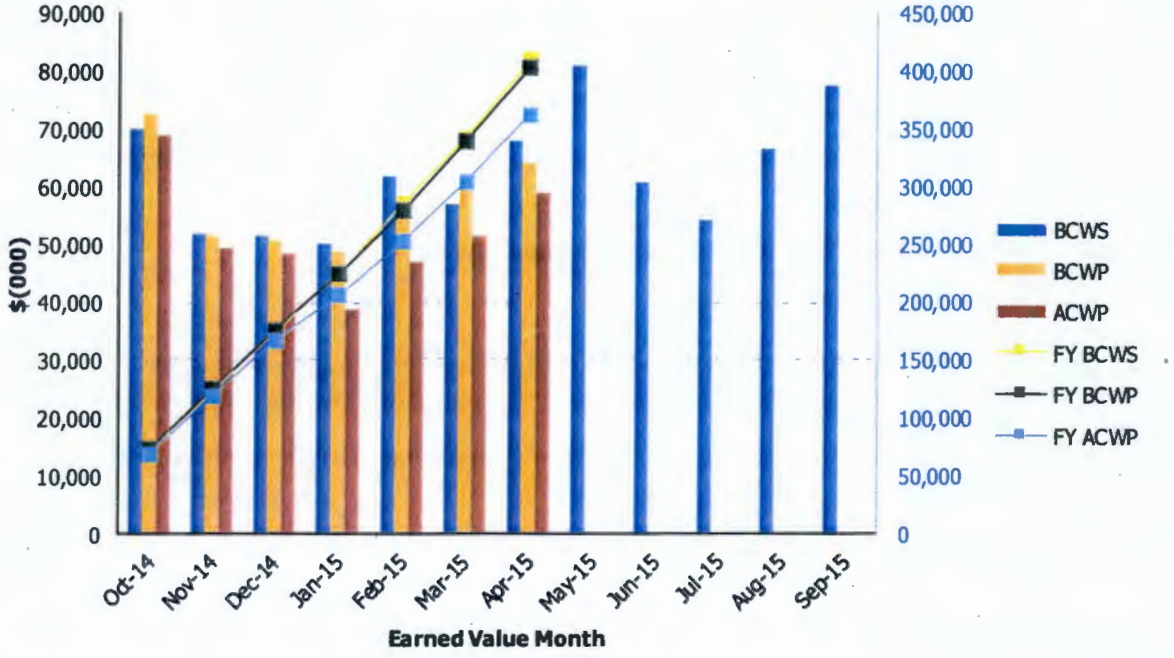
*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data Data as of: April 2015

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 2014	$69,893	$72,879	$69,039	1.04	1.06	$69,893	$72,879	$69,039	1.04	1.06
Nov 2014	$51,713	$51,323	$49,300	0.99	1.04	$121,606	$124,202	$118,339	1.02	1.05
Dec 2014	$51,573	$50,885	$48,245	0.99	1.05	$173,179	$175,087	$166,583	1.01	1.05
Jan 2015	$50,143	$48,696	$38,818	0.97	1.25	$223,323	$223,783	$205,401	1.00	1.09
Feb 2015	$61,729	$55,235	$46,859	0.89	1.18	$285,052	$279,018	$252,260	0.98	1.11
Mar 2015	$56,799	$59,925	$51,563	1.06	1.16	$341,850	$338,942	$303,823	0.99	1.12
Apr 2015	$67,809	$64,010	$58,892	0.94	1.09	$409,659	$402,952	$362,716	0.98	1.11
May 2015	$80,975									
Jun 2015	$60,580									
Jul 2015	$54,095									
Aug 2015	$66,690									
Sep 2015	$77,370									
PTD	$8,781,139	$8,778,291	$8,735,501	1.00	1.00					

Pretreatment Facility

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

PT = pretreatment.

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

BNI has submitted resolution plans for eight technical issues: T1, Hydrogen in Vessels; T2, Criticality; T3, Hydrogen in Piping and Ancillary Vessels (HPAV); T4, Mixing; T5, Erosion Corrosion; T6, PT Facility Optimization; T7, Vessel Analysis; and T8, Ventilation. Phase 1 of the Full-Scale Vessel Testing is continuing for the PJM controls utilizing the RLD-8T vessel. Technical review teams continue to evaluate open PT Facility technical issues. An evaluation is ongoing relative to a standardized design for high-solids vessels within the PT Facility.

Significant Past Accomplishments:

- Completed Standard High Solids Vessels Design test spec. / plan Rev. 0
- Issued PT – Ultrafiltration Process System HLP / PWD criticality hazard assessment report (Heavy Pu)
- Completed simulant solids characterization analysis
- Completed PA 2, 3, 4 conceptual piping
- Issued corrosion simulant basis document for localized corrosion

Significant Planned Actions in the Next Six Months:

- Commission Phase 2 test specification/plan and platform modifications
- Finalize Standard High Solids Vessels Design vessel testing planning, test specification/plan, and define simulate and supplemental mixing engineering study

- Issue criticality safety evaluation report on informal study for the evaluation of qualitative risk assessment input parameters to be included in the PT Facility safety basis
- Issue criticality safety evaluation report (CSER) strategy and development plan
- Implement PT Facility systems engineering approach
- Issue fluid dynamics study
- Start informational testing in 8-ft test vessel for down selection of features pertaining to standardized high-solids vessel design
- Complete preliminary analysis of Standard High Solids Vessels Design
- Issue technical basis to support hold points 1 and 2
- Issue supplemental mixing study

Issues:

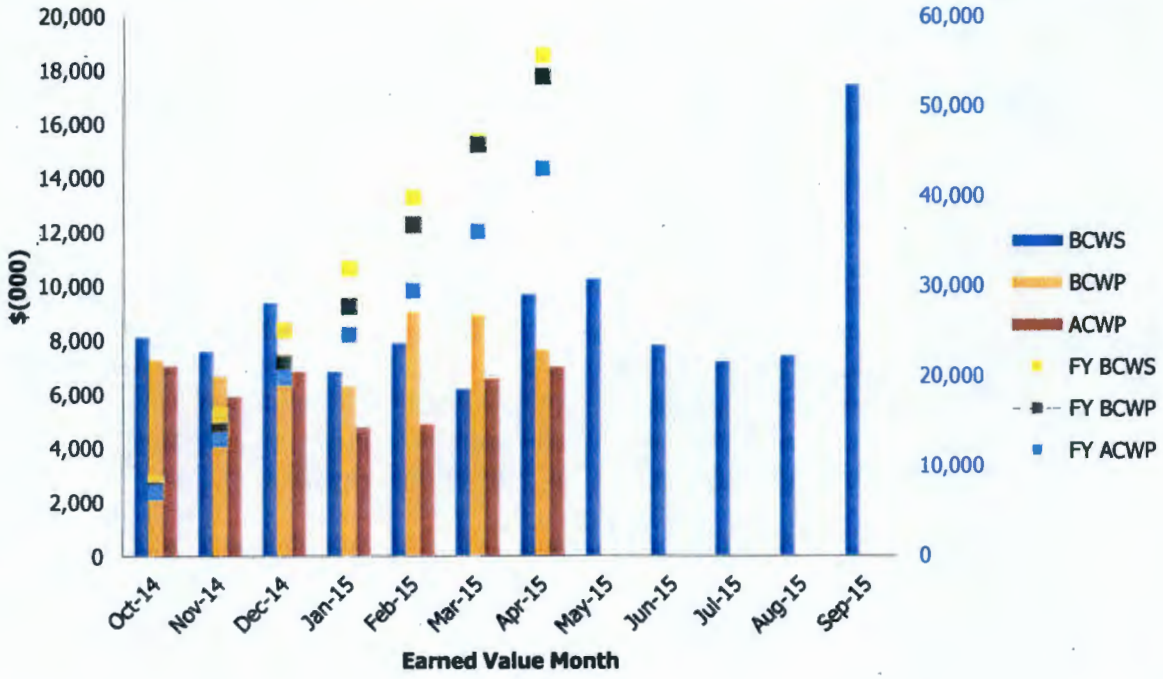
*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and ventilation.

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data Data as of: April 2015

River Protection Project
Pretreatment Facility (WBS 1.01)

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	$8,100	$7,285	$7,050	0.90	1.03	$8,100	$7,285	$7,050	0.90	1.03
Nov 2014	$7,582	$6,657	$5,917	0.88	1.13	$15,682	$13,942	$12,967	0.89	1.08
Dec 2014	$9,361	$7,472	$6,841	0.80	1.09	$25,043	$21,414	$19,808	0.86	1.08
Jan 2015	$6,819	$6,293	$4,765	0.92	1.32	$31,862	$27,707	$24,574	0.87	1.13
Feb 2015	$7,877	$9,034	$4,869	1.15	1.86	$39,740	$36,742	$29,442	0.92	1.25
Mar 2015	$6,180	$8,917	$6,567	1.44	1.36	$45,920	$45,659	$36,009	0.99	1.27
Apr 2015	$9,661	$7,631	$7,008	0.79	1.09	$55,581	$53,290	$43,017	0.96	1.24
May 2015	$10,243									
Jun 2015	$7,803									
Jul 2015	$7,189									
Aug 2015	$7,403									
Sep 2015	$17,448									
PTD	$1,662,252	$1,659,908	$1,649,644	1.00	1.01					

High-Level Waste Facility

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

HLW = high-level waste.

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

As of September 2012, the HLW Facility was 62 percent complete overall, with engineering design 89 percent complete, procurement 81 percent complete, construction 43 percent complete, and startup and commissioning 4 percent complete. Construction, procurement, and production engineering activities have been significantly slowed down, resulting in minimal change to the percent completion status since September. Construction is continuing concrete placements, installation of support steel, and crane rails in the canister decontamination cave.

To support construction, BNI Engineering continues to execute detailed evaluations to release wall and slab placements and installation of HVAC, fire protection, process piping, and electrical commodities. Engineering also continues to review vendor documentation to support receipt and future installation of auto-sampler system (ASX) units. DOE and BNI are finalizing ventilation and off-gas system filter test plans for Phase 1, iteration 2 testing.

BNI is focused on design maturity of key systems through the development of System Design Descriptions (SDD) in accordance with the Systems Engineering Management Plan. Design is progressing for RLD vessels 7 and 8. Work also continues on hazards analysis and engineering studies to develop paths forward for resolution of issues regarding the HVAC (heating, ventilation, and air-conditioning) systems, melters, and solid waste handling systems. Procurement activities for the Emergency Turbine Generator (ETG) are progressing.

Significant Past Accomplishments:

- Issued two SDD's this month for a total of 14
- Continued development of path forward of MSU Phase 1, Iteration 2 HEPA filter test plan
- RLD Safety Basis Change Package is prepared and undergoing BNI final review
- Issued Commercial Grade Dedication plan for the ETG procurement
- Initiated improved Nuclear Safety/Engineering analysis process

- Performing vendor documentation reviews in preparation for the installation of ASX framing
- Initiated operational research modeling of waste, melter, and melter cave support handling systems
- Completed one concrete placement (walls 4101)
- Installed 32 tons of structural steel
- Began installation of crane rails and supports in the canister decontamination cave

Significant Planned Actions in the Next Six Months:

- Submit the RLD Safety Basis Change Package for DOE review
- Complete vendor documentation reviews in preparation for the installation of ASX framing
- Evaluate ASX installation plan for impact to the Washington State Department of Ecology permit
- Complete installation of crane rails and supports in the canister decontamination cave
- Issue remaining outstanding SDDs
- Finalize and begin execution of MSU Phase 1, Iteration 2 HEPA filter test plan

Issues:

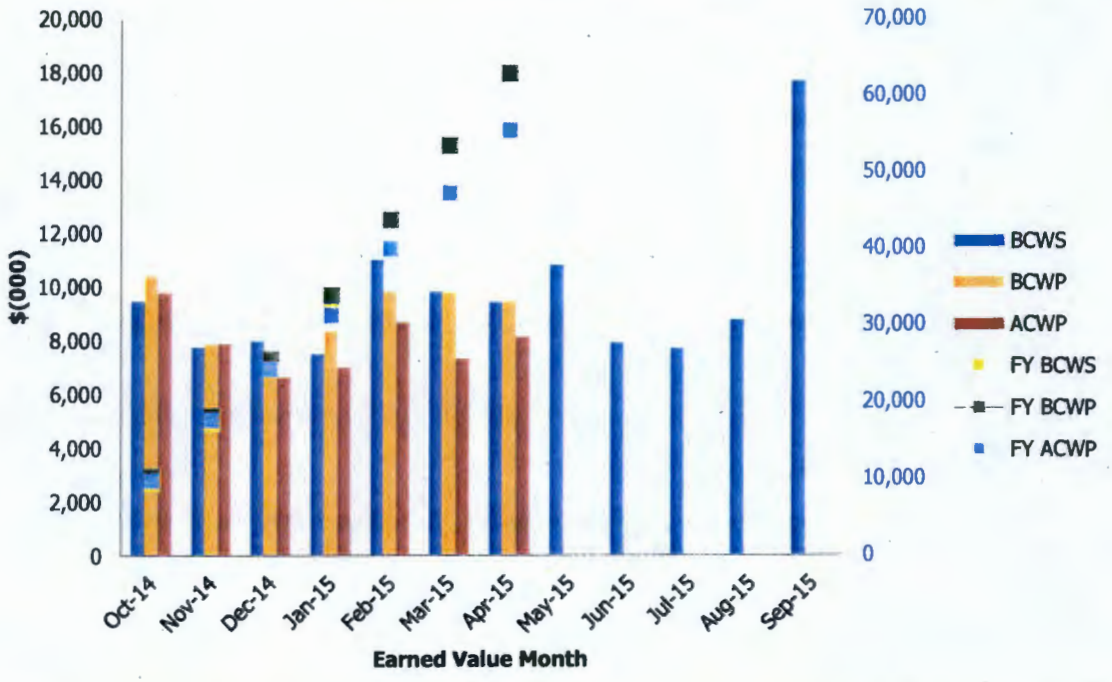
*DOE has notified the State of Washington and State of Oregon that a serious risk has arisen that DOE may be unable to meet this Consent Decree milestone. Technical issues related to the WTP include, among others, PJMs, corrosion/erosion in piping and vessels, hydrogen accumulation, criticality, and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

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data Data as of: April 2015

River Protection Project
High-Level Waste Facility (WBS 1.03)

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	$9,449	$10,367	$9,783	1.10	1.06	$9,449	$10,367	$9,783	1.10	1.06
Nov 2014	$7,743	$7,833	$7,880	1.01	0.99	$17,192	$18,200	$17,663	1.06	1.03
Dec 2014	$7,973	$7,359	$6,631	0.92	1.11	$25,165	$25,559	$24,294	1.02	1.05
Jan 2015	$7,490	$8,342	$6,994	1.11	1.19	$32,655	$33,901	$31,288	1.04	1.08
Feb 2015	$10,995	$9,796	$8,662	0.89	1.13	$43,650	$43,698	$39,949	1.00	1.09
Mar 2015	$9,792	$9,760	$7,295	1.00	1.34	$53,442	$53,458	$47,244	1.00	1.13
Apr 2015	$9,391	$9,411	$8,115	1.00	1.16	$62,834	$62,868	$55,359	1.00	1.14
May 2015	$10,774									
Jun 2015	$7,892									
Jul 2015	$7,687									
Aug 2015	$8,732									
Sep 2015	$17,653									
PTD	$1,116,947	$1,117,240	$1,109,420	1.00	1.01					

Low-Activity Waste Facility

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

LAW = low-activity waste.

The LAW Facility will process LAW that will be mixed with glass formers, vitrified into glass at a design capacity of 30 metric tons per day, and placed in stainless steel containers anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility. As of April 2015, the LAW Facility was 71 percent complete overall, with engineering design 82 percent complete, procurement 78 percent complete, construction 80 percent complete, and startup and commissioning 11 percent complete.

Significant Past Accomplishments:

- Installed over 150 linear feet of process piping and hydro-tested 650 linear feet of piping
- Installed over 1,280 linear feet of conduit and pulled approximately 14,560 linear feet of cable
- Completed Installation of the Low Voltage Electrical System (LVE) Equipment, Elevation +48
- Completed Installation of LAW Container Finishing Handling System (LFH) Cranes and Hoists, Elevation +03
- Completed repairs to Melter Feed Process (LFP) vessel LFP-00002
- Completed repairs to Concentrate Receipt Process (LCP) vessel LCP-0001

Significant Planned Actions in the Next Six Months:

- Complete subcontractor work scope in the annex
- Complete the LAW Facility design and operability review
- Complete Nuclear Safety Engineering Hazards Analysis
- Receive caustic scrubber
- Assemble and install wet electrostatic precipitator internals

Issues:

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

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data Data as of: April 2015

River Protection Project
Low-Activity Waste Facility (WBS 1.02)

EVMS Monthly and Fiscal Year Values

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2014	$16,994	$19,896	$17,781	1.17	1.12	$16,994	$19,896	$17,781	1.17	1.12
Nov 2014	$11,700	$12,666	$11,597	1.08	1.09	$28,694	$32,562	$29,378	1.13	1.11
Dec 2014	$10,760	$12,499	$11,927	1.16	1.05	$39,454	$45,061	$41,305	1.14	1.09
Jan 2015	$11,248	$10,387	$9,033	0.92	1.15	$50,702	$55,448	$50,338	1.09	1.10
Feb 2015	$16,654	$11,341	$11,676	0.68	0.97	$67,356	$66,789	$62,014	0.99	1.08
Mar 2015	$13,681	$14,539	$13,778	1.06	1.06	$81,037	$81,329	$75,792	1.00	1.07
Apr 2015	$16,031	$14,925	$15,002	0.93	0.99	$97,068	$96,254	$90,794	0.99	1.06
May 2015	$19,634									
Jun 2015	$15,814									
Jul 2015	$12,492									
Aug 2015	$19,433									
Sep 2015	$12,689									
PTD	$1,071,262	$1,073,254	$1,068,962	1.00	1.00					

Balance of Facilities

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

The BOF will provide services and utilities to support operation of the main production facilities: PT, HLW, LAW, and LAB. As of April 2015, BOF was 62 percent complete overall, with engineering design 80 percent complete, procurement 77 percent complete, construction 84 percent complete, and startup and commissioning 16 percent complete.

BNI has initiated design activities to incorporate a permanent capability to directly feed LAW. Engineering activities are in progress to develop the preliminary design for BOF systems in support of direct feed LAW. Construction efforts are focused on the Standby Diesel Generator Facility, Steam Plant piping, and the nonradioactive liquid drain (54) facility.

Significant Past Accomplishments:

- Completed coatings applications for Steam Plant piping
- Installed 1,060 linear feet of pipe insulation primarily in the Steam Plant
- Received and placed nonradioactive liquid waste disposal (NLD) system motor control powerhouse

Significant Planned Actions in the Next Six Months:

- Complete heat trace insulation in the Cooling Tower Facility
- Complete heat trace insulation in the Water Treatment Building
- Turnover all major systems of the NLD facility, WTP Switchgear, and BOF Switchgear buildings for component level testing

Issues:

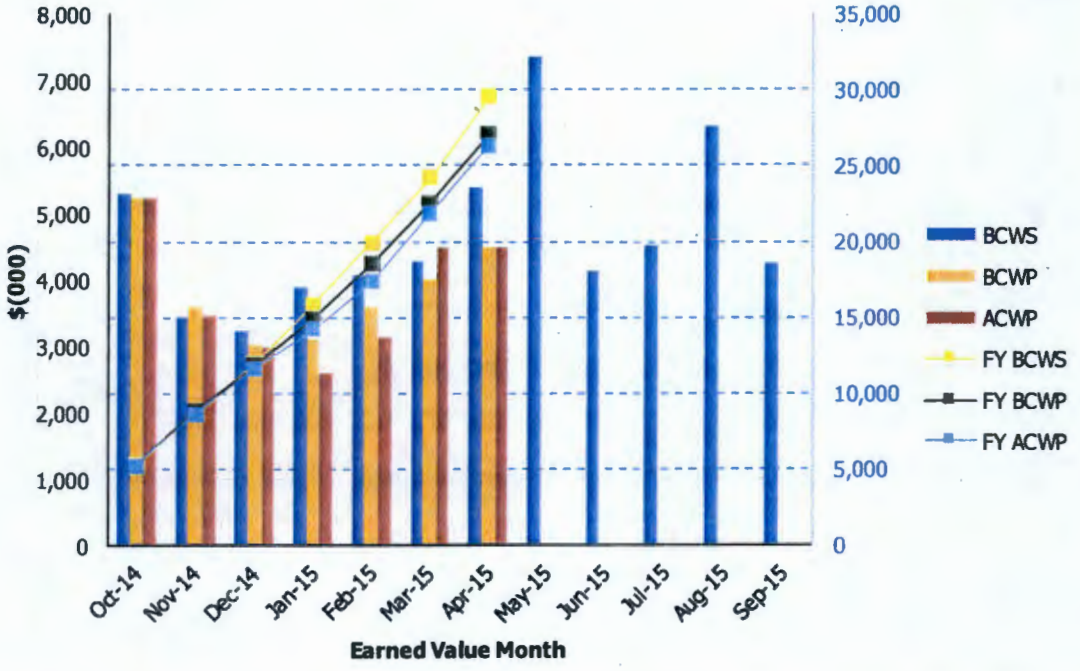
No major issues at this time.

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data Data as of: April 2015

River Protection Project
Balance of Facilities (WBS 1.05)

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 2014	$5,300	$5,238	$5,223	0.99	1.00	$5,300	$5,238	$5,223	0.99	1.00
Nov 2014	$3,429	$3,578	$3,454	1.04	1.04	$8,729	$8,816	$8,677	1.01	1.02
Dec 2014	$3,240	$3,023	$2,976	0.93	1.02	$11,969	$11,839	$11,653	0.99	1.02
Jan 2015	$3,885	$3,098	$2,584	0.80	1.20	$15,854	$14,937	$14,237	0.94	1.05
Feb 2015	$4,074	$3,578	$3,151	0.88	1.14	$19,928	$18,515	$17,388	0.93	1.06
Mar 2015	$4,270	$4,016	$4,491	0.94	0.89	$24,198	$22,531	$21,879	0.93	1.03
Apr 2015	$5,384	$4,497	$4,491	0.84	1.00	$29,582	$27,029	$26,370	0.91	1.02
May 2015	$7,347									
Jun 2015	$4,114									
Jul 2015	$4,529									
Aug 2015	$6,319									
Sep 2015	$4,246									
PTD	$376,249	$374,127	$373,500	0.99	1.00					

Analytical Laboratory

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

LAB = Analytical Laboratory.

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of April 2015, the LAB was 77 percent complete overall, with engineering design 83 percent complete, procurement 87 percent complete, construction 95 percent complete, and startup and commissioning 23 percent complete.

During this reporting period engineering efforts are focused on LAB system reviews to evaluate potential modifications or isolations in support of directly feeding LAW. Closure of nonconformance reports and construction deficiency reports continued. Construction efforts within the LAB construction will soon be suspended. The remaining construction work scope will be completed in parallel with system modifications and construction activities required to support the direct feeding of LAW.

Significant Past Accomplishments:

- Continued misc. cable pulls and terminations (95% complete)
- Continued installation of misc. conduit (99% complete)

Significant Planned Actions in the Next Six Months:

- Place LAB construction punch list activities on hold
- Initiate component level testing of select LAB systems
- Begin LAB system walk downs in support of direct feed LAW modifications

Issues:

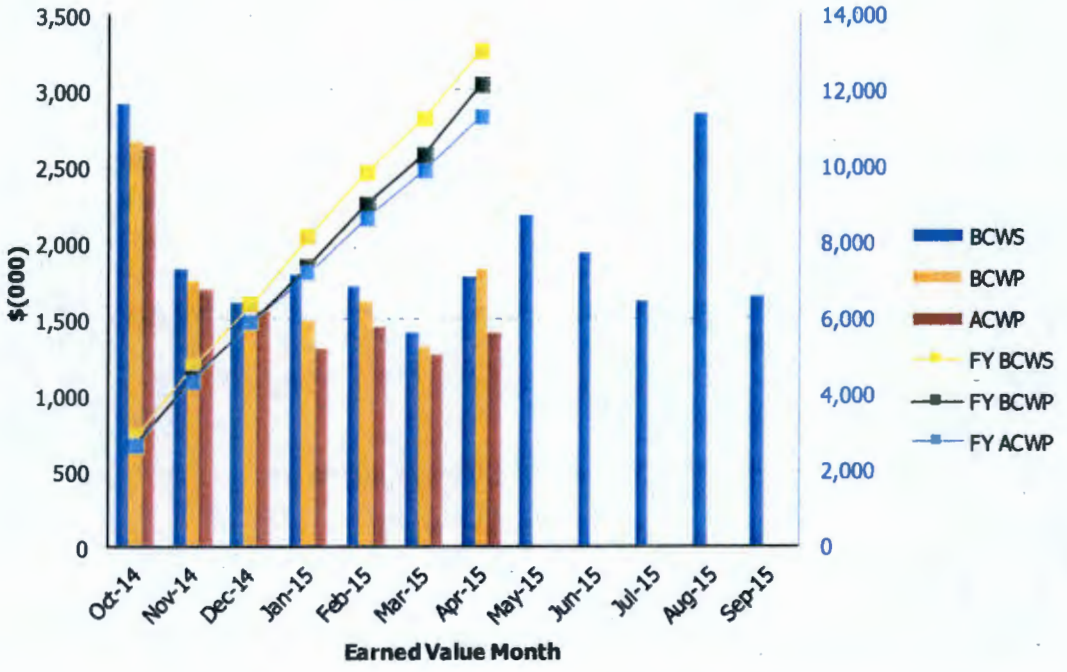
No major issues at this time.

EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2015 Earned Value Data Data as of: April 2015

River Protection Project
Analytical Laboratory (WBS 1.06)

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 2014	$2,920	$2,670	$2,645	0.91	1.01	$2,920	$2,670	$2,645	0.91	1.01
Nov 2014	$1,827	$1,748	$1,695	0.96	1.03	$4,747	$4,418	$4,340	0.93	1.02
Dec 2014	$1,614	$1,482	$1,552	0.92	0.95	$6,361	$5,900	$5,892	0.93	1.00
Jan 2015	$1,788	$1,490	$1,304	0.83	1.14	$8,149	$7,390	$7,196	0.91	1.03
Feb 2015	$1,716	$1,618	$1,447	0.94	1.12	$9,865	$9,008	$8,643	0.91	1.04
Mar 2015	$1,413	$1,322	$1,266	0.94	1.04	$11,278	$10,330	$9,909	0.92	1.04
Apr 2015	$1,781	$1,833	$1,407	1.03	1.30	$13,059	$12,163	$11,316	0.93	1.07
May 2015	$2,186									
Jun 2015	$1,940									
Jul 2015	$1,625									
Aug 2015	$2,854									
Sep 2015	$1,651									
PTD	$295,574	$295,094	$294,443	1.00	1.00					

Waste Treatment Plant Project - (LBL/Project Services) Percent Complete Status

Through April 2015

(Dollars - Millions)	Overall Facility Percent Complete Unallocated Dollars			Design/Engineering Unallocated Dollars			Procurement Unallocated Dollars			Construction Unallocated Dollars			Startup & Plant Operations Unallocated Dollars			Project Management & Shared Services Unallocated Dollars		
Facilities	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed (BCWP)	% Complete
Low-Activity Waste	1,511.9	1,073.3	71%	420.4	345.8	82%	318.8	247.7	78%	571.7	455.0	80%	197.0	20.7	11%	4.0	4.0	100%
Balance of Facilities	605.2	374.1	62%	123.2	98.0	80%	69.1	52.9	77%	228.4	192.8	84%	184.0	30.1	16%	0.5	0.5	100%
Analytical Lab	383.3	295.1	77%	90.2	75.1	83%	63.4	55.1	87%	156.1	147.5	95%	73.2	16.8	23%	0.5	0.5	100%
Direct Feed LAW	24.6	4.5	18%	21.5	3.6	17%	0.52	0.10	19%	0.1	0.1	40%	0.0	0.0	0%	2.5	0.69	28%
LBL Facility Services	90.2	25.6	28%	0.0	0.0	0%	20.0	5.6	28%	0.0	0.0	0%	29.4	8.0	27%	40.8	12.04	30%
Total LBL	2,615.2	1,772.6	68%	655.2	522.5	80%	471.8	361.4	77%	956.4	795.3	83%	483.6	75.6	16%	48.2	17.7	37%
Project Services	408.0	125.2	31%	49.6	14.8	30%	36.7	10.7	29%	124.1	39.9	32%	3.0	1.4	47%	194.7	58.4	30%
Total Project Services	408.0	125.2	31%	49.6	14.8	30%	36.7	10.7	29%	124.1	39.9	32%	3.0	1.4	47%	194.7	58.4	30%
Total LBL & Project Services	3,023.1	1,897.7	63%	704.8	537.3	76%	508.5	372.0	73%	1,080.4	835.3	77%	486.5	77.0	16%	242.9	76.1	31%
PT/HLW/SS Percent Complete Status Frozen as of September 2012 (due to project rebaselining efforts)																		
High-Level Waste	1,478.6	922.1	62%	364.4	325.2	89%	433.9	349.4	81%	561.1	243.2	43%	119.2	4.4	4%	n/a	n/a	n/a
Pretreatment	2,517.3	1,410.5	56%	761.7	645.8	85%	679.9	380.4	56%	890.0	378.6	43%	185.8	5.6	3%	n/a	n/a	n/a
Shared Services	4,726.9	3,632.6	77%	1,047.0	977.9	93%	451.7	395.0	87%	1,436.5	1,143.0	80%	453.5	133.2	29%	1,338.1	983.5	73%
Total HLW/PT/SS	8,722.8	5,965.2	68%	2,173.1	1,948.9	90%	1,565.5	1,124.8	72%	2,887.6	1,764.8	61%	758.5	143.2	19%	1,338.1	983.5	73%
Undistributed Budget	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	11,745.9	7,862.9	67%	2,877.9	2,486.2	86%	2,074.0	1,496.8	72%	3,968.0	2,600.1	66%	1,245.0	220.2	18%	1,581.0	1,059.6	67%

Source: Preliminary WTP Contract Performance Report - Format 1, Data for April 2015

Note: In September 2012, the LBL Replan was incorporated into the project OTB baseline resulting in increases/decreases to the LBL facility budgets, which correspondingly increased/decreased the facility/function to-date percent complete values. In October 2012, the PT/HLW/SS Interim Work Plan was incorporated into the project OTB baseline resulting in decreases to the PT/HLW/SS facility budgets, this was due to a work scope shift from the Distributed budget to UB. Percent Complete Values shown for PT, HLW and SS have been frozen with the September 2012 values due to the Interim Work Plan and budgets being moved into UB. UB value for the project for PT/HLW/SS is $2,014M. The percent complete values for the Total WTP are the current total LBL BCWP added to the frozen HLW/PT/SS BCWP values. In March 2014, Project Controls and Project Management work scope was moved out of Shared Services control accounts into the facilities with new control accounts being set up in the facilities. These will now be seen under Project Management/Shared Services by facility. The Shared Services PMB value has not been changed to reflect this change due to the freeze on HLW/PT and SS and the budgets remaining in UB. October 2014 data reflects the incorporation of Direct Feed LAW and the split of Shared Services into LBL Facility Services and Project Services.

June 2015 ORP TPA Project Managers Monthly Meeting
Tank Farms and WTP Areas
17 June 2015 1:00 pm - 3:00 pm

Name	Organization
Paul Hernandez	ORP
Ryan S Beach	ORP
SHELLEY CIMON	ODOE
DAN McDONALD	Ecy
Jeremy Johnson	ORP
RICHARD VALLE	ORP
Kathy Knox	Knox Court Reporting
Sharon Braswell	NorthWind / ORP Comm.
Rana Evans	ORP ECD
CAROLYN NOONAN	MSA
DaBrisha Smith	ORP
Susan Eberlein	WRPS
Jeff Luke	WRPS
WENDELL WRZESINSKI	ORP
Bryan Trimberger	ORP
ROB PIIPPO	MSA TOA
Dawn MacDonald	ORP
Jeff Lyon	Ecology
Tracy Crad	Ecology
Nitya Anandran	Ecology
Kelly Ebert	ORP
JUSTIN CARTER	ORP
Gary Olson	ORP

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – June 2015

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. T-111 and Other Single Shell Tank Level Decreases: ORP and WRPS have determined that 19 of the 20 single-shell tanks showing decreased liquid levels at the Hanford Site are not actively leaking. Evaluation documents are available online at: http://www.hanford.gov/page.cfm/SingleShellTankEvaluations

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – June 2015

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	TF-14-06-02	06/19/14	Schedule an oversight opportunity with ORP and ECY for the WMA C PA modeling	Open	Meetings were held on 09/11/14, 10/30/14, 12/16/14, and 12/17/14. Remains open and will continue status on this task in both ORP/ECY bi-weekly and a requested meeting with Whalen/Lyon on calibrating to the low end of the hydraulic conductivity curve.	Kemp / Beach	
2	TF-14-02-02	02/18/14	ECY would like a schedule/project management plan (if available) for the closure of WMA C.	Open	Closure contract modification still in progress. The contract pre-negotiation memorandum is with DOE-HQ and contract negotiations will begin. ORP has provided to ECY the sketches and tools available currently. Contract negotiations with WRPS will start with HQ approval of a pre-negotiation memorandum, expected in mid-June.	Kemp	
3	TF-13-12-01	12/19/13	ECY will provide a list of team members and their roles and responsibilities to ORP so that ORP can provide all applicable invitees to future meetings.	Open		Lyon / McDonald	

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – June 2015

Tank Farms Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
4	TF-13-02-03	02/21/13	ECY and ORP will continue to meet at the project manager level to discuss work on the WMA C PA and other options for M-045-82.	Open	ORP and ECY to schedule meeting in early June to discuss options for M-045-82. ECY has a draft TPA change package and commitment from Price/Kemp to meet between TPA PMs in June when Jeff Lyon returns from leave/training.	Kemp / Eberlein / Price	
5	TF-15-03-02	03/18/15	ECY has requested additional data for the next four 242-A Evaporator campaigns (i.e. tank chemistry, estimated volume reductions/goals, specific gravity before and after, etc.).	Open	Paul to discuss with interested regulators at a time and place that is convenient to them	Hernandez	
6	TF-15-03-05	03/18/15	ECY would like to obtain technical white papers supporting LAWPS design.	Open		Pfaff/ Wrzesinski	

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – June 2015

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
1	WTP-14-10-01	10/23/14	ECY requests information on DOE's plans and timeline for the LAW (replacement) melter assembly building.	Open		Wendell Wrzesinski	
2	WTP-14-10-02	10/23/14	ECY would like to know what the plans are for operating BOF in support of DFLAW and then transitioning into full WTP operations.	Open	This issue is impacted by the ongoing CD judicial process.	Jason Young	
3	WTP-14-10-03	10/23/14	ECY and ORP need to discuss how to document LAB substantially complete milestone after completion of RLD vessel repairs.	Open	This issue is impacted by the ongoing CD judicial process.	Jason Young	
4	WTP-14-10-04	10/23/14	ECY requests a status update to include a schedule on the 8 technical team issues for HLW and PT.	Open	Completed for HLW. This issue is impacted by the ongoing CD judicial process.	Gary Olsen/ Wahed Abdul	
5	WTP-14-10-05	10/23/14	ECY requests on update on the details of the 2-year work plan for HLW and PT.	Open	Completed for HLW. This issue is impacted by the ongoing CD judicial process.	Gary Olsen/ Wahed Abdul	
5	WTP-14-06-02	06/19/14	ECY requests that DOE provide a presentation on how DOE incorporates, vets, and considers all technical issues (including the Safety Design Strategy).	Open		Joni Grindstaff	
6	WTP-14-06-03	06/19/14	ECY requests a briefing on the LAW Design and Operability review before the September timeframe.	Open	The Design and Operability Review Report is with the contractor for factual accuracy review. ORP will schedule a briefing once the report is issued.	Jeff Bruggeman	

ORP/Ecology TPA and CD Agreements, Issues, and Action Items – June 2015

WTP Action Items							
#	Action ID	Start Date	Action	Action Status	Updates / Needs for Closure	Actionee(s)	Date Closed
7	WTP-14-04-01	04/22/14	ORP and ECY have a placeholder action to hold a comprehensive briefing/discussion on the PT efforts.	Open		Joni Grindstaff	
8	WTP-15-01-01	1/22/15	ECY requests a presentation on SHSVD to include impacts and optimization in planning area 2, 3, and 4	Open	Impacts will be better understood in September with issuance of design studies.	Gary Olsen	
9	WTP-15-01-03	1/22/15	ECY requests a technical update on the LAB RLD vessels	Open		Jason Young	

WORKING ORP Key Documents List – June 2015

Milestone Title	Milestone Tie	Document	TPA Milestone Due Date (if applicable)[1]	ORP Delivery to Regulators Date[2]	Anticipated Regulatory Review Completion Date[3]	Final Completion Date[4]	DOE-ORP Lead	Contractor Lead	Ecology Lead	Comments/Issues
Submit to Ecology, in accordance with HFFACO secondary document review process, a phase 2 RCRA Facility Investigation (RFI) report Draft A for WMA C.	Supports M-045-61	WMA-C PA Initial Model Run Data Package		TBD			C. Kemp	S. Eberlein	J. Lyon	• Feeds input for M-045-61 and all Closure Plans
		WMA-C PA Initial Document		TBD			C. Kemp	S. Eberlein	J. Lyon	• Feeds input for M-045-61 and all Closure Plans
		WMA-C Characterization Summary 2013		TBD			C. Kemp	S. Eberlein	J. Lyon	• Feeds input for M-045-61 and all Closure Plans
	M-045-61	Phase 2 Draft A RFI Report for WMA C	12/31/14				C. Kemp	S. Eberlein	J. Lyon	• Reported as To Be Missed in the March 2013 TPA PMM. Discussions ongoing at the PM level. • TPA Change Package M-45-14-03 signed on 10/01/14 split up the WMA C RFI and CMS into separate deliverables.
Submit to Ecology, as a primary document, a Phase 2 Corrective Measures Study (CMS), and Revision 0 update to the RFI Report for WMA C	M-045-61A	Phase 2 CMS and Revision 0 of RFI for WMA C	12/31/16							• TPA Change Package M-45-14-03 signed on 10/01/14 split up the WMA C RFI and CMS into separate deliverables.
Submit to Ecology for Review and Approval as an Agreement Primary Document, a Phase 2 Corrective Measures Implementation Work Plan for WMA-C.	M-045-62	Phase 2 Corrective Measures Implementation Work Plan for WMA-C	06/30/15	TBD			C. Kemp	S. Eberlein	J. Lyon	• Reported as To Be Missed in the March 2013 TPA PMM. Discussions ongoing at the PM level.
Prior to beginning construction & at least one year before construction is to be complete, DOE will submit to Ecology a final design & monitoring plan for each interim barrier.	M-045-92O	Future Barrier Design 3	06/30/15	06/30/15			C. Kemp	S. Eberlein	J. Lyon	• ORP/ECY TPA Change Package M-45-12-04 modified this to a due date of 06/30/15.
	M-045-92P	Future Barrier Design 4	06/30/16	06/30/16			C. Kemp	S. Eberlein	J. Lyon	• ORP/ECY TPA Change Package M-45-12-04 modified this to a due date of 06/30/16.
M-045-91 Interim Milestones and Target Dates for SST Integrity Implementing the Expert Panel's Recommendations	M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	12/26/14	12/26/14			J. Johnson	R. Gregory	J. Lyon	
	M-045-91G-T04	Provide AOR Final Doc. for SSTS on 55,000 Gallon Tanks	01/30/15	01/30/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91B-T01	Provide Ecology report on the Concrete Core from TankA-106 or alt	01/31/15	01/31/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91F-T02	Provide Report of Liner Failures for SSTs	03/31/15	03/31/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91F	Provide Summary Conclusions Report on Leak Integrity	06/30/15	06/30/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91G	Provide Summary Conclusions Report of AOR for SSTs	07/28/15	07/28/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91H	Submit Change Pckg (if necessary) to est. Additional Milestones	07/31/15	07/31/15			J. Johnson	R. Gregory	J. Lyon	
	M-045-91I	Provide IQRPE Certification of SSTs Structural Integrity	09/30/18	09/30/18			J. Johnson	R. Gregory	J. Lyon	
Complete final design and submit RCRA Part B Permit Modification Request	M-062-31-T01	RCRA Part B Permit Modification--Final Design	04/30/16	04/30/16			S. Pfaff		D. McDonald	

[1] "TPA Milestone Due Dates" are the direct regulatory drivers for completion of milestones.
[2] "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.
[3] 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.
[4] "Final Completion Date" is entered after the document is reviewed, comments are incorporated, and any disputes are resolved. Any comment resolution issues or disputes will be noted under "Comments/Issues."

Bold red = DOE submittal within the next 90 days **Bold green = document is under initial ECY Regulatory Review** **Bold black = document under comment/review response or other actions** **Bold blue = document is completed**

WORKING ORP Key Documents List – June 2015

Topic Areas	Document	ORP Delivery to Regulators Date[1]	Anticipated Regulatory Review Completion Date[2]	Final Completion Date[3]	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	TBD			C. Kemp	S. Eberlein	J. Lyon	
	All Remaining Closure Plans for WMA-C	09/30/15			C. Kemp	S. Eberlein	J. Lyon	
	WMA-C Closure Conceptual Design	TBD			C. Kemp	S. Eberlein	J. Lyon	
	Tier 3 Closure Plans for Tanks Already Received	TBD			C. Kemp	S. Eberlein	J. Lyon	• 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		J. Lyon	
	Submit Part B Permit Application for Selected Supplemental Treatment Technology	TBD			L. Huffman		J. Lyon	
	Submit Wiped Film Evaporator Class 3 Permit Modification or Part B Permit Application	TBD			L. Huffman		J. Lyon	
	IDF Performance Assessment (ORP/WRPS has support role to RL/CHPRC)	TBD			T. Fletcher		J. Lyon	
OTHER DOCUMENTS	Submit Categorical TOC HIA	TBD					J. Lyon	
	Temporary Waste Transfer Line Management Program Plan (also known as Hose-In-Hose Transfer Lines (HIHTL) Management Plan), RPP-12711	TBD			C. Kemp		J. Alzheimer	• To be made into a TPA Primary Document with submittal of revision 7 per a TPA Project Managers Agreement, signed 01/22/2013
	Single-Shell Tank System Leak Detection and Monitoring Functions and Requirements Document, RPP-9937	TBD			J. Johnson		J. Alzheimer	• Discussions are underway for a number of revisions to this document
	WMA Quarterly Groundwater Reports	Ongoing Quarterly			D. Hildebrand		J. Lyon	• Ecology SST counterparts have been added to this distribution list as of March 2013 • ORP continues to provide reports to Ecology

AOR = Analysis of Record
DOE = U.S. Department of Energy.
Ecology = Washington State Department of Ecology.
EIS = environmental impact statement.
N/A = not applicable.
ORP = U.S. Department of Energy, Office of River Protection.
PM = project manager.
PMM = project manager's meeting.
RCRA = Resource Conservation and Recovery Act.
RDR = Retrieval Data Report
RFI/CMS= RCRA Facility Investigation/Corrective Measures Study.
SST = single-shell tank.
TBD = to be determined.
TPA = Tri-Party Agreement.
WMA-C = Waste Management Area C.
WRPS = Washington River Protection Solutions LLC.

[1] 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.

[2] 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.

[3] 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."

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AY-102 Recovery Project
Schedule Review – Tuesday, June 16, 2015

Agenda:
- May Accomplishments
- Look ahead in June/July activities
- Status of challenges and risks
- Status of critical project milestones

Project accomplishments to date and look ahead

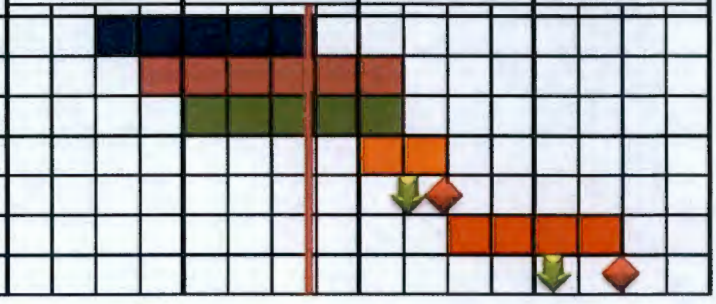
Last 4 weeks	Next 4 weeks
Engineering & Design	
✓ Completed WRS equipment and installation design ("Standard sluicer" or "Sluicing cannon" configuration), started Extended Reach Suicer System (ERSS) configuration ✓ Permitting: Diffuse and Fugitive license approved ✓ Started ventilation design on tie-in to POR127	✓ Complete design with ERSS configuration ✓ Complete Public comments period and response on Toxic Air permit Rev.2.
Procurement & Fabrication	
✓ Major procurements 100% started ✓ Received Pumps, Hydraulic Power Units, Hose In Hose Transfer Lines, Standard sluicers	✓ Receive Pump Assemblies, Electrical skids, Shield boxes, Riser adaptors, Annulus pumping eq., Splitter box, Control Trailer.
Tank upgrades: Equipment removal & pit rehabilitation	
✓ AY-02B pit: Completed pit rehabilitation, shipped pump to ERDF ✓ AY-02E pit: Completed pump removal and pit rehabilitation ✓ AY-02C pit: Started pit repairs	✓ AY-02E pump disposal ✓ Complete AY-02C pit repairs => AY-102 ready for new equipment installations ✓ Mobilize for AP-02A mixer pump removal
Installation & Construction	
✓ Started HIHTL route construction ✓ Started electrical installation in AY Farm	✓ Start mechanical installations in AY-102: Sluicers, Control trailer ✓ Start Electrical inst. In AP Farm
Testing & Commissioning	
✓ Approved WRS readiness as ORC, released draft OR checklist ✓ Prepared Test Requirements Matrix and Test Plan	✓ Prepare OR Checklist for AP-02A transfer pump sub-system ✓ Develop Turnover screening document

Project challenges and risks

- **Insufficient ERSS readiness + procurement delays**
  - Potential impact: + 4 to 6 months on readiness to pump
  - Mitigation: start retrieval with standard sluicers
  - **Status: Refurbished equipment delivered, ready for installation**
- **AY-102 ventilation insufficient to support retrieval operations**
  - Potential impact: shutdowns slow operations (maintain vacuum + in-tank visibility)
  - Mitigation: restore recycling loop cooling/demisting function, and mobilize a portable exhauster during operations, as needed.
  - **Status: On-going design and permitting actions to support both activities**
- **AP Exhauster Replacement Not Complete When Required**
  - Potential impact: delay start of pumping operations
  - Mitigation: accelerate construction schedule and explore extension of existing system's operation
  - **Status: implementing schedule acceleration on the existing system replacement, and planning permitting actions to support potential existing system extension of use as a backup strategy.**
- **Vapor controls impact productivity + insufficient resources to meet needs**
  - Potential Impact: could delay start of retrieval by ~4 months
  - Mitigated by work acceleration (add. crews and OT).
  - **Status: mobilized (hired + trained) 3 construction crews and ramping up towards 5**
- **Execution of other activities delay AY-102 and/or DST space insufficient to support retrieval**
  - Potential impact: could delay start of retrieval by several months
  - Mitigated by modelling of available tank space and scheduling of transfers and evaporator campaigns and related equipment maintenance activities to support AY-102 readiness for retrieval
  - Status: **delays in transfers is causing concerns, AP-02A supernatant pump modified to support decants**

Status of project schedule and critical milestones

Scope	Status as of 06/2015	Schedule
		FY14 / FY15 / FY16 / FY17
Engineering and Design	95%	
Procurement	60%	
Construction & Installation	40%	
Commissioning	5%	
Ready to Pump 3/4/16	*1/7/2016*	
Operations	0%	
Waste removal completed by 3/4/17	10/23/2016	



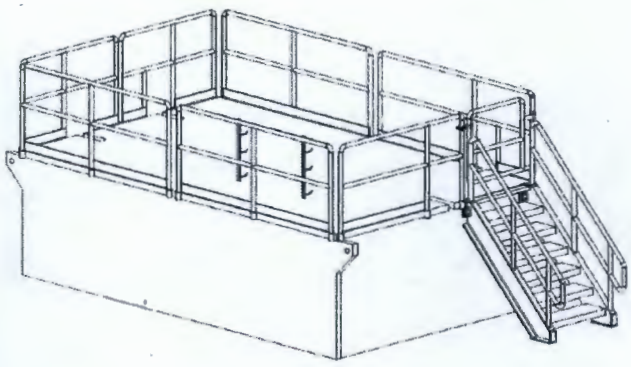
- Readiness to pump: projected at January 7th, 2016 (vs March 4, 2015)
  - ~ 2 month of float but no contingency for risk realization
  - critical path through AY-02A and AP-02A pit work & equipment procurements and installation
- Retrieval completion: projected at October 21st, 2016 (vs March 4 2017), without contingency for equipment failure, and based on 3 month outage at mid retrieval to swap from standard sluicers to ERSS.

Miscellaneous

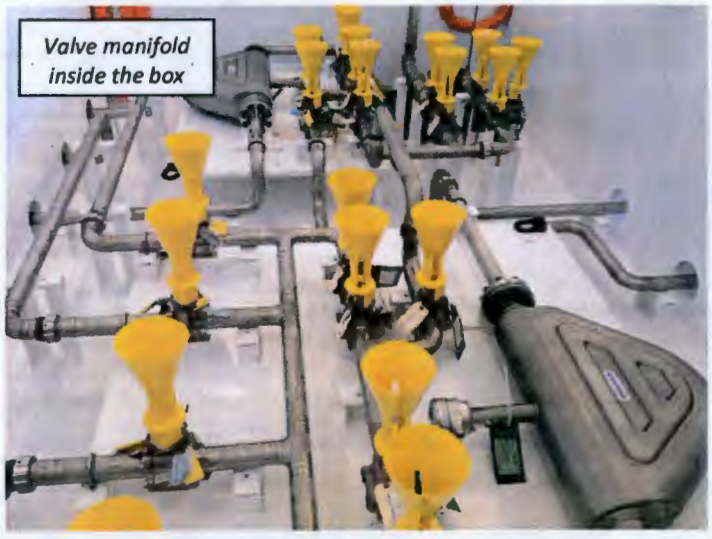
- Status of Monitoring Plan Approval
- Status of Toxic Air permitting process (DE11NWP-001 modification)

AY-102 Recovery Project Making progress on the Waste Retrieval and Transfer System Equipment Procurements

Splitter box in final assembly



Splitter box assembly



Valve manifold inside the box

Splitter box top plate

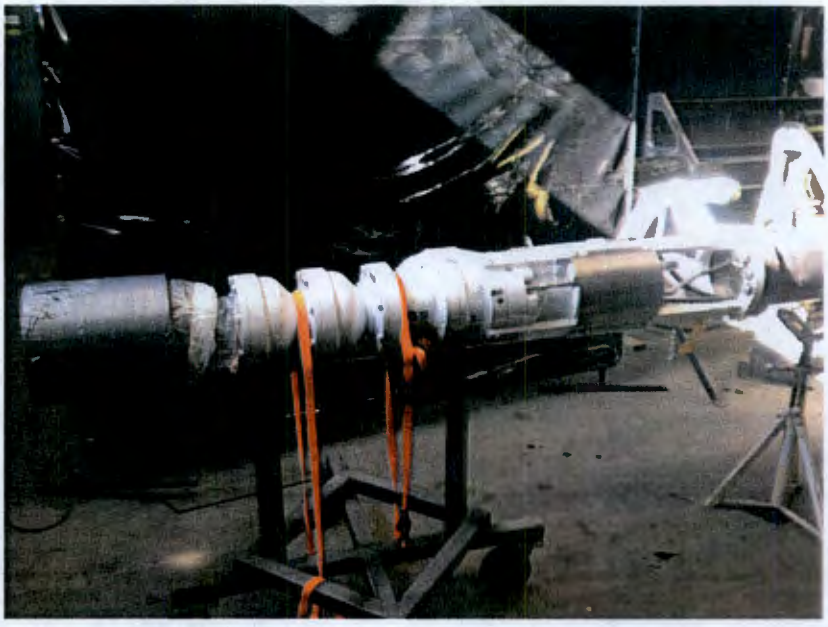
Pit Shielded Cover Plate

Riser adaptor assemblies for the installation of sluicers in AY-02B and AY-02D pits

Slurry distributor assembly and hydraulic test

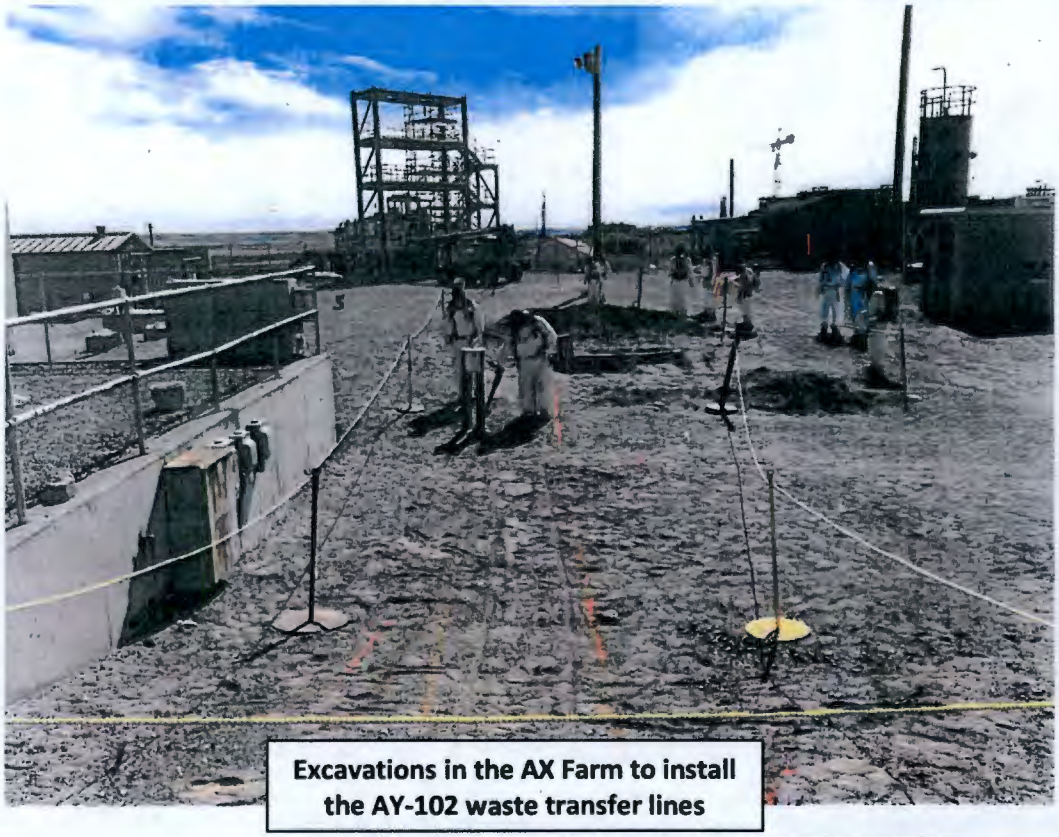
Standard Sluicers tested, delivered and received

Slurry and Supernatant Pump Assemblies in Fabrication



AY-102 Recovery Project Making progress on the Hose In Hose Transfer Route construction

Started excavation to build the AX farm section of the route



Excavations in the AX Farm to install the AY-102 waste transfer lines

AY-102 Recovery Project

Schedule Review – Tuesday, May 19, 2015

Agenda:

- April Accomplishments
- Look ahead in May/June activities
- Status of challenges and risks
- Status of critical project milestones

Project accomplishments to date and look ahead

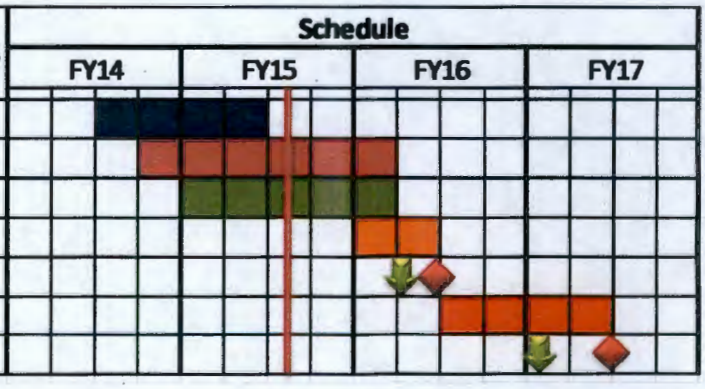
Last 4 weeks	Next 4 weeks
Engineering & Design	
✓ Completed WRS equipment and installation design (standard sluicers configuration) ✓ Permitting: Diffuse and Fugitive license approved	✓ Review WRS design with ERSS configuration ✓ Start ventilation ducting design to tie AY-102 to POR-127
Procurement & Fabrication	
✓ Major procurements 100% started ✓ Received Pumps, HPUs, HIHTL, Temp. monitoring	✓ Receive Std sluicers, Electrical skids, Dog Houses, Riser adaptors, Annulus pumping equipment
Tank upgrades: Equipment removal & pit rehabilitation	
✓ AY-02B pit: Completed pit rehabilitation ✓ AY-02E pit: Completed pump removal and started repairs ✓ AY-02C pit: Started pit repairs	✓ AY-02E & C pits: Complete pits repairs
Installation & Construction	
✓ Awarded and started mobilization for HIHTL route construction ✓ Awarded and started mobilization for electrical installation	✓ Start HIHTL Route construction, and elec. PWR/I&C installation ✓ Start WP planning and mobilization for out-of-Tank installation
Testing & Commissioning	
✓ Approved WRS readiness as ORC ✓ Prepared Test Requirements Matrix	✓ Release OR Checklist for the waste retrieval and transfer system

Project challenges and risks

- **Insufficient ERSS readiness + procurement delays**
  - Potential impact: + 4 to 6 months on readiness to pump
  - Mitigation: start retrieval with standard sluicers
  - **Status:** design of standard sluicer configuration completed, equipment refurbishment on-going
- **AY-102 ventilation insufficient to support retrieval operations**
  - Potential impact: shutdowns slow operations (maintain vacuum + in-tank visibility)
  - Mitigation: restore recycling loop cooling/demisting function, and mobilize a portable exhauster during operations, as needed.
  - **Status:** started design on both activities, preparing for procurements on recirculation system equipment
- **AP Exhauster Replacement Not Complete When Required**
  - Potential impact: delay start of pumping operations
  - Mitigation: accelerate construction schedule and explore extension of existing system's operation
  - **Status:** implementing schedule acceleration and planning permitting actions to support potential existing system extension
- **Vapor controls impact productivity + insufficient resources to meet needs**
  - Potential Impact: could delay start of retrieval by ~4 months
  - Mitigated by work acceleration (add. crews and OT).
  - **Status:** mobilizing (hiring + training) additional crews to support construction ramp up
- **Execution of other activities delay AY-102 and/or DST space insufficient to support retrieval**
  - Potential impact: could delay start of retrieval by several months
  - Mitigated by modelling of available tank space and scheduling of transfers and evaporator campaigns and related equipment maintenance activities to support AY-102 readiness for retrieval
  - Status: delays in transfers is causing concerns, AP-02A supernatant pump modified to support decants

Status of project schedule and critical milestones

Scope	Status as of 05/2015
Engineering and Design	95%
Procurement	50%
Construction & Installation	35%
Commissioning	5%
Ready to Pump 3/4/16	*1/4/2016*
Operations	0%
Waste removal completed by 3/4/17	10/17/2016

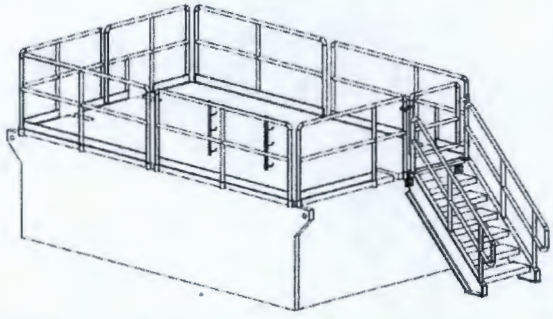


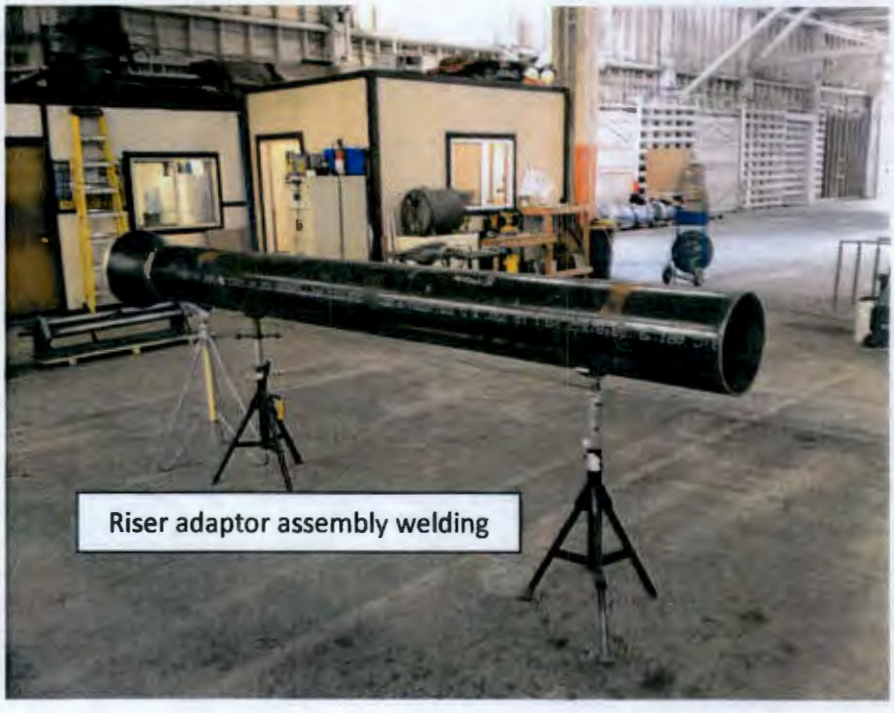
- Readiness to pump: projected at January 4th, 2016 (vs Dec.23, 2015)
  - ~ 2 month of float but no contingency for risk realization
  - critical path through AP pit work & equipment procurements and installation
  -
- Retrieval completion: projected at October 17th, 2016 (vs March 4 2017), without contingency for equipment failure, and based on 3 month outage at mid retrieval to swap from standard sluicers to ERSS.

Miscellaneous

- Status of Monitoring Plan Approval
- Status of Toxic Air permitting process (DE11NWP-001 modification)

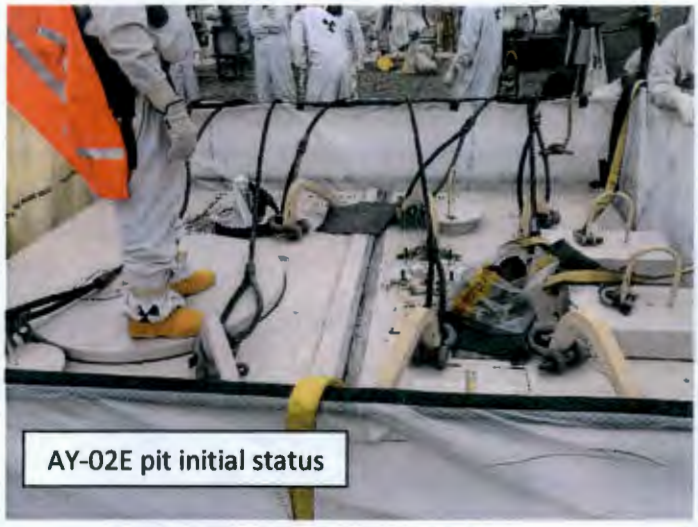
AY-102 Recovery Project Making progress on the Waste Retrieval and Transfer System Equipment Procurements



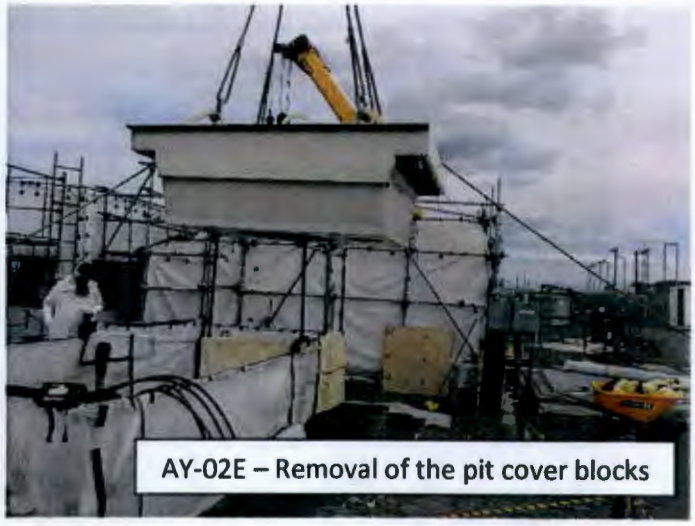


AY-102 Recovery Project Making progress on the AY-102 Tank upgrades to prepare for new equipment installation

Completed E-Pit equipment removal



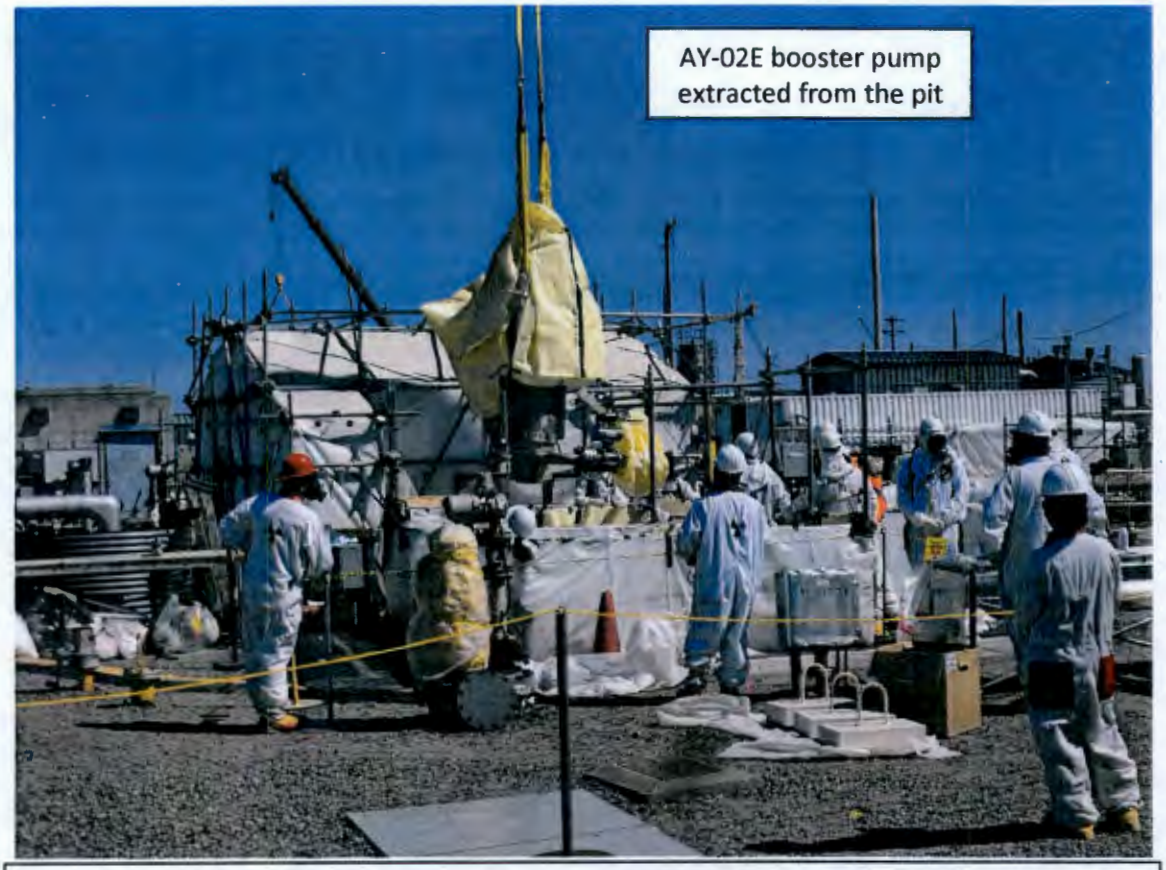
AY-02E pit initial status



AY-02E – Removal of the pit cover blocks

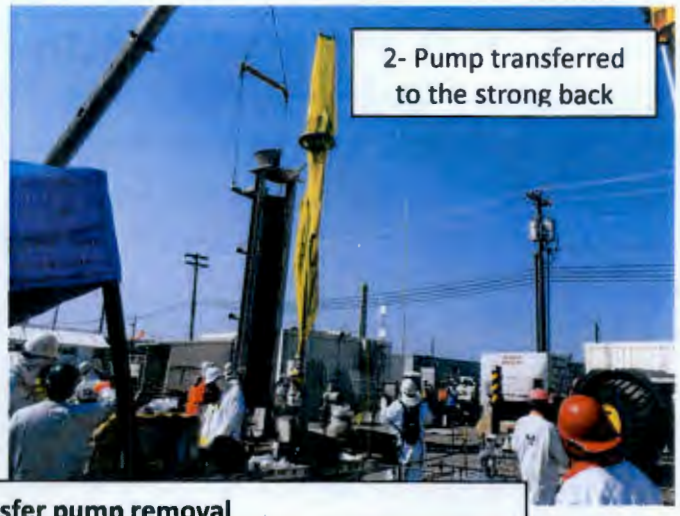
AY-02E pit initial status

March 2015: AY-02E pit opened to prepare for equipment removal



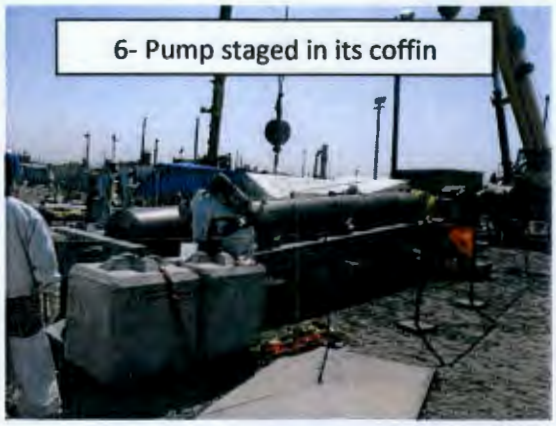
April 2015: Removal and disposal of the AY-02E booster pump

April 2015: Dry run on the AY-02E transfer pump removal lift



April 30, 2015: AY-02E Transfer pump removal

4 & 5- Lay down of the pump



ORP TPA Project Manager's Meeting Action Item from March 18, 2015

Ecology requested before and after waste specific gravities and other properties for the four planned Fiscal Year 2015 evaporator runs.

Planned FY 2015 Evaporator Campaign Characteristics

Campaign	Feed SpG	Target Slurry SpG	Feed (kgal)	WVR (kgal)	Comments
EC-01	1.23	1.43	980	447	Based on AW-102 samples and boildown
EC-02	1.22	1.40	877	400	Based on AZ-102 samples and boildown
EC-03	1.21	1.43	864	412	Projected AZ-102 SpG and assumed target SpG
EC-04	1.28	1.41	866	338	Based on AW-106 samples and boildown

Preliminary estimates. Waste volume reduction targets may be changed during campaign and pre-flush estimates.
SpG = specific gravity.
WVR = waste volume reduction.

Ecology asked how the Hanford Tank Waste Operations Simulator (HTWOS) model is used to determine which tanks are staged and combined for an evaporator campaign and the factors involved.

The HTWOS modeling tool is a dynamic event-simulation tool, governed by prescribed initial conditions, constraints, and operating logic used to simulate the full duration of the Office of River Protection (ORP) mission. The HTWOS modeling tool accounts for the major systems required to accomplish the River Protection Project (RPP) mission to store, process, and immobilize the Hanford tank wastes for disposal.

HTWOS simulates the movement of waste material through the tank farm system in support of single-shell tank (SST) retrieval, 242-A Evaporator operation, waste retrieval from double-shell tank (DST) farms, feed delivery to the Waste Treatment and Immobilization Plant (WTP), as well as supplemental treatment systems and transuranic (TRU) waste processing. This enables WRPS to evaluate impacts to processing throughput caused by possible changes in event-driven activities such as pumping, sampling, storage, recycle, separation, and chemical reactions.

The HTWOS modeling tool uses information about waste properties, system configurations, desired end-states, target milestones, and other parameters associated with waste processing scenarios to:

- Simulate the waste storage, retrieval, feed staging, and treatment processes,
- Evaluate the relationship between tank waste retrieval and treatment activities,
- Link and evaluate new facility capacities, project requirements and schedules, and contractor integration,
- Evaluate integration across multiple process steps and programs,
- Verify existing plans for accomplishing the RPP mission, and
- Develop future plans.

Assumptions documented in ORP-11242, *River Protection Project System Plan*, Rev. 7, Section B3.3.4, and RPP-17152, *Hanford Tank Waste Operations Simulator (HTWOS) Version 7.9 Model Design Document*, Rev. 11, include the following:

- A 4-month period is allocated for the sampling and analysis of dilute feed staged in one or more double-shell tanks and for preparation of the process control plan before that feed can be run through the evaporator.
- The 242-A Evaporator processes waste at a slurry rate of 30 to 70 gpm, between a minimum waste volume reduction of 15 percent and a maximum boil-off rate of 40 gpm.
- Dilute waste will be concentrated until it reaches a bulk concentration of 1.43 g/mL; feed will not be evaporated if it would achieve less than a 15-percent waste volume reduction at 1.43 g/mL or at 80 percent of the maximum product source term.
- A minimum campaign feed volume of 500 kgal.
- Campaign slurry receiver double-shell tank in AP or AW Farms. Once the campaign is complete, the waste may be transferred to other farms.

Assumptions may be modified for a given HTWOS scenario. Near-term campaigns and transfers are typically scripted and programmed into HTWOS, then the model determined subsequent transfers based on the embedded assumptions.

Ecology inquired about projected tanks/feed sources for the next few years and associated specific gravities (before and after).

	Campaign	Passes/ Batches	Date	Feed (kgal)	WVR (kgal)	WVR (%)	Starting SpG
Scheduled Campaigns (blended	EC-05	1	FY 16 – 1Q	950	300	32%	1.29
	EC-06	2	FY 16 – 1Q	1100	200	18%	1.35
	EC-07	1	FY 16 – 2Q	500	150	30%	1.30
Projected Campaigns	EC-08	1	FY 16 – 2Q	1,000	500	50%	1.21
	EC-09	1	FY 16 – 2Q	750	350	47%	1.23
	EC-10	1	FY 16 – 3Q	800	350	44%	1.24
	EC-11	1	FY 17 – 2Q	500	200	40%	1.26
	EC-12	2	FY 18 – 1Q	1,900	1,000	53%	1.20
	EC-13	1	FY 18 – 4Q	850	500	59%	1.17

Note: Final SpG of 1.43 assumed, until boildown is completed.

Source: One System System Planning and Modeling presentation.

Ecology inquired which documents describe the modeling and estimating process and results.

- ORP-11242, *River Protection Project System Plan*, Rev. 7
- RPP-17152, *Hanford Tank Waste Operations Simulator (HTWOS) Version 7.9 Model Design Document*, Rev. 11.

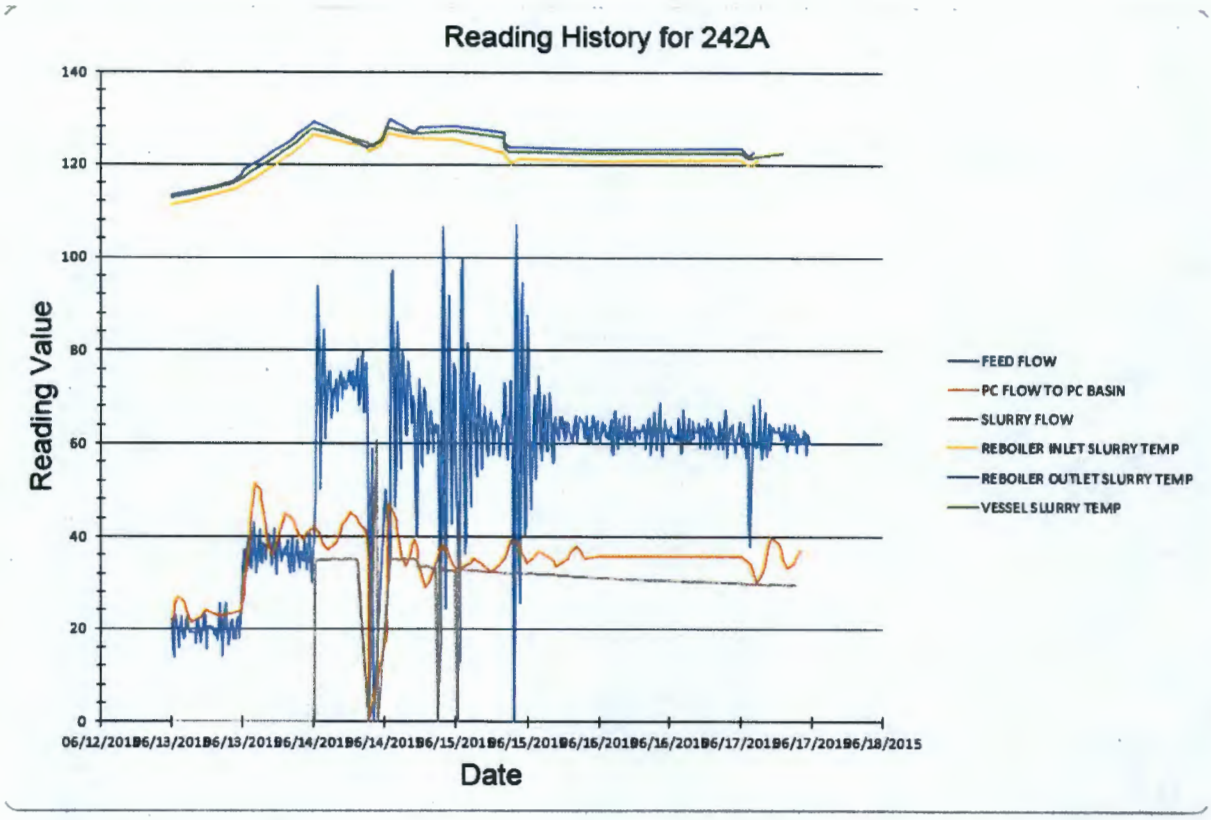
Ecology requested information about projected waste volume reduction estimates compared to historic results.

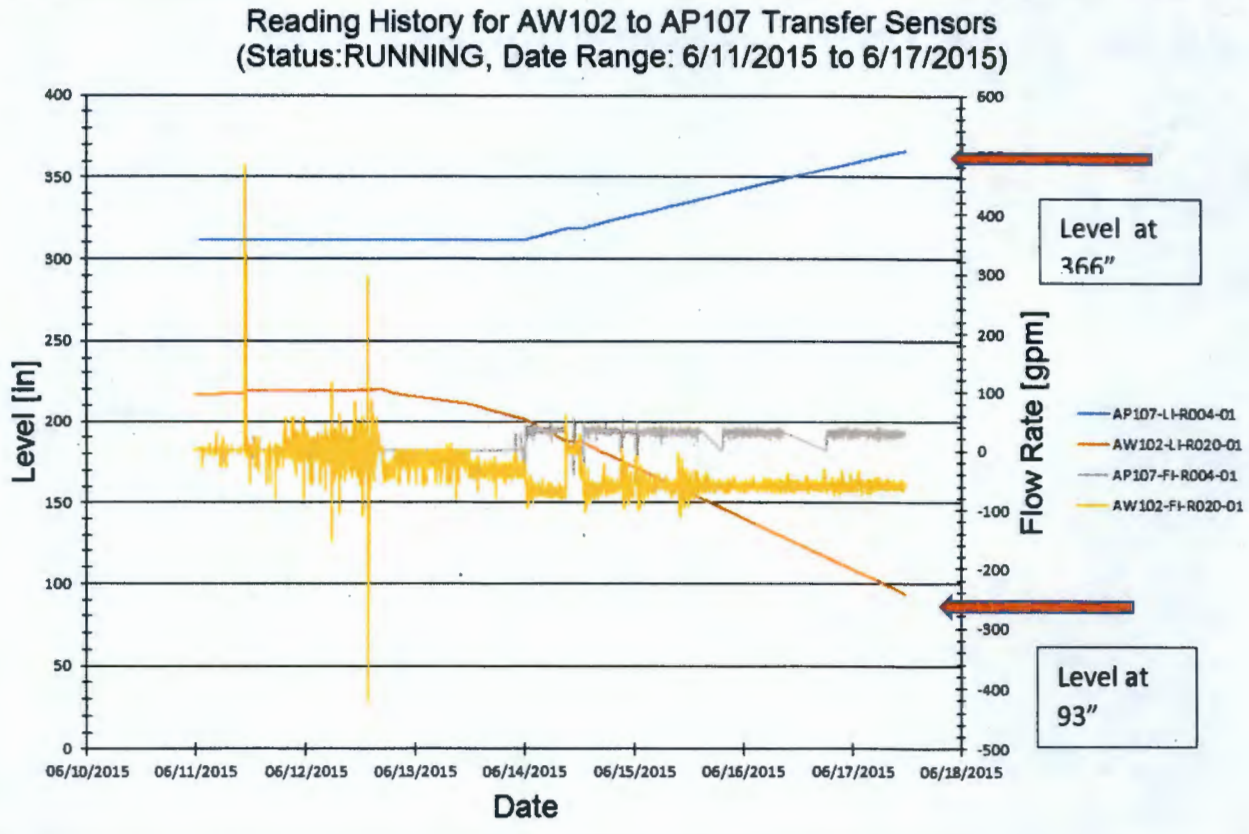
History of Waste Volume Reductions

Campaign	Projected WVR (kgal)	Actual WVR (kgal)
07-01/07-02	1220	1216
09-01/09-02	935	948
10-01/10-02	560	523
13-01 (2014)	410	790

WVR = waste volume reduction.

242-A Status on 06 17 2015





242-A Status on 06 17 2015