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Office of River Protection  
Quarterly Milestone Review Meeting Minutes

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Department of Ecology  
Richland, Washington

August 16, 2018



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Office of River Protection  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
August 16, 2018

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Approval:  *Alex Smith* Date: 10/1/2018  
**E.R. Skinnerland** (for A.K. Smith)  
*Ecology IAMIT Representative*

Approval:  Date: 9/13/2018  
**S.H. Pfaff** (for G.D. Trenchard)  
*DOE IAMIT Representative*

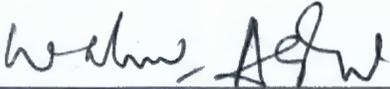
Approval:  Date: 10-9-2018  
**R.A. Lobos** (for D.R. Einan)  
*EPA IAMIT Representative*

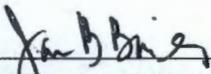
Minutes Prepared by:  Date: 8/30/18  
**M.J. Turner**  
*Mission Support Alliance*

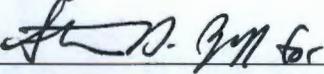


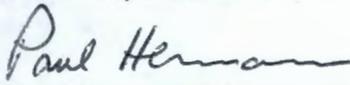
## PROJECT MANAGERS CONCURRENCE SIGNATURES

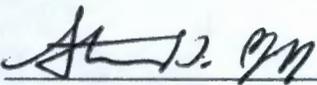
The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Tri-Party Agreement Quarterly Milestone Review Meeting.

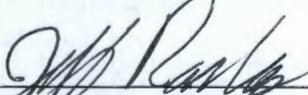
  
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Wahed Abdul, DOE-ORP  
Date: 9/4/18

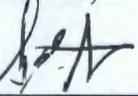
  
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Jan Bovier, DOE-ORP  
Date: 9/4/18

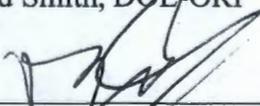
  
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Kaylin Burnett, DOE-ORP  
Date: 9/13/2018

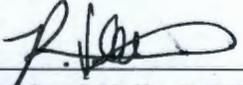
  
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Paul Hernandez, DOE-ORP  
Date: 9/4/18

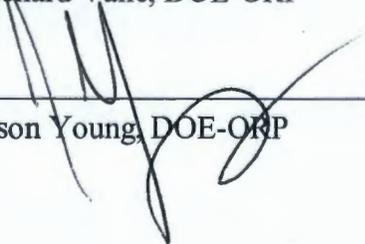
  
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Steve Pfaff, DOE-ORP  
Date: 9/13/2018

  
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Jeff Rambo, DOE-ORP  
Date: 9/4/18

  
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Sahid Smith, DOE-ORP  
Date: 9/4/18

  
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Dustin Stewart, DOE-ORP  
Date: 9/4/18

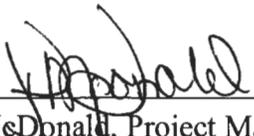
  
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Richard Valle, DOE-ORP  
Date: 09/04/2018

  
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Jason Young, DOE-ORP  
Date: 9/4/18



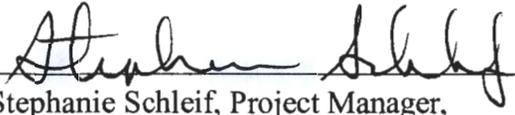
\_\_\_\_\_  
Jeff Lyon, Project Manager,  
Washington State Department of Ecology

Date: 10-5-18



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Dan McDonald, Project Manager  
Washington State Department of Ecology

Date: 10-3-18



\_\_\_\_\_  
Stephanie Schleif, Project Manager,  
Washington State Department of Ecology

Date: 10/3/18

# **TRI-PARTY AGREEMENT MILESTONE REVIEW AND MONTHLY SUMMARY REPORT**

## **1.0 ADMINISTRATIVE ITEMS/MILESTONE STATUS**

### **Upcoming Meetings**

The next ORP quarterly milestone review is scheduled for November 15, 2018, at the Ecology office in Richland, Washington. The next ORP project managers meeting (PMM) is scheduled for Wednesday, September 19, 2018, from 1:00 p.m. to 3:30 p.m. at the ORP office in Richland, Washington.

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

U.S. Department of Energy (DOE), Office of River Protection (ORP) provided the monthly Tri-Party Agreement (TPA) report, which will be submitted to the Hanford Administrative Record (AR).

ORP stated that the Consent Decree (CD) report has not been issued, but ORP will provide updates on the status of the CD milestones and the Waste Treatment Plant (WTP) project.

### **Tri-Party Agreement Milestone Status**

ORP stated that several of the M-045-92 milestone series under the Single-Shell Tank Closure program have been deleted and were replaced with new milestones via a TPA change control form that was signed at the end of June 2018. ORP noted that the new milestones are reflected in the TPA monthly summary report, and suggested removing the deleted milestones from the report. Ecology agreed that the deleted milestones could be removed from the TPA monthly summary report.

### **Office of River Protection/Washington State Department of Ecology Tri-Party Agreement and Consent Decree Agreements, Issues and Action items – August 2018**

(See agreements, issues and action items table).

**Issues:** ORP stated that the issue regarding the availability of the CD report for the monthly PMM has been resolved by moving the PMM to the first Thursday of the month. ORP suggested removing this issue from the table. Ecology responded that the issue has not been resolved yet since the CD report has not been issued and is not available for today's meeting. Ecology stated its preference for leaving the issue on the table until the new schedule for the PMM has been implemented. ORP agreed to leave the issue on the table.

### **Action No. 1 (TF-16-11-04)**

ORP stated that there was no change in status regarding the T-112 work plan. This action remains on hold.

**Action No. 2 (TF-16-11-05)**

ORP reported that a copy of the results of the four tanks that were visually inspected at ETF was sent to Ecology. ORP noted that the document doesn't have a public release stamp, but the contents of the document won't change. Ecology agreed that the action could be closed. This action will be closed.

**Action No. 3 (TF-17-04-01)**

ORP stated that a schedule has not yet been established for removal of the diesel generator. This action remains open.

**Action No. 4 (TF-18-11-03)**

ORP stated that there was no update to report regarding a meeting with Ecology on HNF-3484. This action remains open.

**Action No. 5 (TF-18-02-01)**

ORP stated that a resolution has been reached for revising the Waste Tank Summary report, and once the report has been updated, the action will be closed. This action remains open.

**Action No. 6 (TF-18-04-01)**

ORP stated that a discussion was held during the 7/19/18 PMM about rescheduling the PMMs, based on the availability of the CD monthly report. (See discussion above on issues). This action was closed.

**Action No. 7 (TF-18-04-02)**

ORP stated that a meeting was held with Ecology to discuss the leak rate in LERF Basin 43, and this action was closed on 7/19/18. This action will be removed from the table next month.

**Action No. 8 (TF-18-07-01)**

ORP stated that it has attended several meetings with DOE-RL regarding Operable Unit 200-BP-5 and other integration issues, and suggested leaving this action open until the groundwater modeling issue is resolved. This action remains open.

**Action No. 9 (TF-18-07-02)**

ORP reported that Ecology's question about evaluating the concentration of chemicals in the tank at two feet versus two inches from the tank wall was discussed with the Tank Integrity Expert Panel (TIEP). ORP stated that the TIEP's conclusion was that the concentration is well mixed, and the TIEP is not considering any section of the top layer closer to the tank wall. ORP noted that when the minutes from the TIEP meeting have been finalized, they could be provided to Ecology. It was agreed to leave this action open until the minutes from the TIEP meeting have been provided to Ecology. This action remains open.

## 2.0 SYSTEM PLAN

ORP reported that the negotiations with Ecology regarding M-062-45 were extended from August 15, 2018 to November 15, 2018.

## 3.0 ACQUISITION OF NEW FACILITIES

ORP stated that there was no change in status for Acquisition of New Facilities, other than the extension of negotiations with Ecology regarding M-062-45 from August 15, 2018, to November 15, 2018, as reported under System Plan.

## 4.0 SUPPLEMENTAL TREATMENT AND PART B PERMIT APPLICATIONS

ORP stated that there was no change in status, other than the extension of negotiations with Ecology regarding M-062-45 from August 15, 2018, to November 15, 2018, as reported under System Plan.

## 5.0 DIRECT FEED LOW ACTIVITY WASTE PROJECTS

### Low-Activity Waste Pretreatment System (LAWPS):

#### **Significant Past Accomplishments**

ORP noted that the overall LAWPS project has changed a couple of times, moving from the original elutable ion exchange design to exploring a larger scale nonelutable ion exchange design. ORP stated that the LAWPS project has decided on a two-phased approach going forward, with phase 1 using the nonelutable ion exchange. ORP added that the Tank Side Cesium Removal (TSCR) module will be the ion exchange capability for the LAWPS project, conceivably for the first five years of the LAWPS project.

ORP noted that the direction given to Washington River Project Solutions (WRPS) to ramp down design and testing activities for the LAWPS permanent cesium removal capability is related to the larger scale, more permanent nonelutable ion exchange building. ORP stated that WRPS achieved about 45 percent design complete on the building, and Ecology will be invited to meetings scheduled in September 2018 to review the wrap-up of the 45 percent design complete status. At that point, the design will be suspended, along with the elutable ion exchange design, but those larger scale permanent capabilities will be available to consider again through a new alternative analysis that will be done in 2021. Ecology asked if there is a milestone associated with supplemental treatment in 2021. ORP responded that there is no milestone, but the logic is that the TSCR will be constructed and operating by 2021, and that will provide operating experience when the longer-term plan will be evaluated for meeting the feed demands for the WTP Low Activity Waste (LAW) facility.

ORP reported that Critical Decision 3A (CD-3A) was achieved. ORP noted that CD-3 approval would normally authorize full construction activities, and CD-3A is an earlier approval that will allow some initial site preparation and long-lead procurement. The CD-3A approval allowed WRPS to issue a subcontract to AVANTech for the TSCR module.

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

ORP stated that the 45 percent design review on the LAWPS permanent cesium removal capability will be held in September 2018. ORP noted that the LAWPS has evolved beyond just the TSCR module, including several hose-in-hose transfer lines that will need to be installed and some tank farm upgrades, and the design activities on all those parts of the project will continue to move forward.

### **Tank-Side Cesium Removal (TSCR):**

## **Significant Past Accomplishments**

ORP noted that a subcontract was awarded to AVANTech for the TSCR module, and that AVANTech has performed a lot of the nonelutable ion exchange associated with Japan and other places. ORP stated that AVANTech has also been the primary ion exchange vendor through all phases of the LAWPS project, and it is current on the events related to the removal of cesium at the Hanford Site.

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

ORP stated that a 30 percent design review of TSCR will be conducted from August 27 through September 12, 2018, and Ecology will be invited. ORP noted that the 60 percent design reviews of TSCR are planned for fiscal year 2019. ORP stated that the goal is to receive final construction authorization by the end of FY19 to allow the start of construction activities. Ecology asked if ORP has discussed with Ecology about issuing a permit at 60 percent design, and noted that no draft permit has been provided. ORP responded that there are meetings on a weekly basis with the Ecology permitting team. ORP noted that during prior iterations of the LAWPS project, there were negotiations in terms of when the appropriate design media would be available to allow full permitting and the possibility for temporary authorizations in advance of submitting all the design and completing the public comment periods. ORP added that those negotiations are still occurring with Ecology. Ecology stated that 60 percent design seems low for permitting the TSCR facility. ORP agreed, but pointed out that the design completion numbers tend to be averaged design completions, and some parts are farther along than others. Ecology suggested that the design completion and permitting is something that ORP would want to vet earlier than later.

Ecology asked if a fairly significant schedule of events was available that could be shared. ORP responded that there is an integrated schedule, but it is not quite ready to be shared with Ecology. ORP noted that the schedule includes not only the tank farm side with the LAWPS project, but all of the WTP activities have been incorporated. ORP stated that the goal is to have the schedule ready to share with Ecology by the end of August 2018.

EPA asked about the pathway for disposition of the ion exchange modules after they are loaded up with cesium. ORP responded that they will be flushed with caustic and then water, and then dried for several days and placed on a concrete pad. ORP stated that the ion exchange columns are self-shielded with several inches of lead around the outside, and it is a similar configuration to the hundreds of ion exchange columns that were used in Japan and placed on pads. ORP noted that the throughput at Hanford is far less than Japan has had, and there won't be as many ion exchange columns. ORP stated that the long-term disposition of the media could be

recovered and introduced into the high level waste melter feed stream. ORP noted that the ion exchange media crystalline silicotitanate (CST) will work as a glass forming material and carry the cesium with it into the melter. ORP stated that the final disposition of the media has not been discussed at great length nor a decision made, and the interim safe storage solution is to store them on a pad.

Oregon Department of Energy (ODOE) inquired about the disposition and volume of the caustic that will be used for flushing. ORP responded that four of the AP tank farm tanks will be used for the Direct Feed Low Activity Waste (DFLAW) effort, and that AP-107 is the dedicated feed tank, with AP-105 serving as a staging tank to AP-107. The pretreated waste will go into AP-106, which will provide a 1.2-million-gallon lag storage tank of pretreated feed to ensure WTP always has a feed supply available. ORP stated that caustic or clean water flushes will go to AP-108.

Ecology asked if ORP is looking at air emissions, in terms of quantifying what they will be and how they will be handled, in conjunction with the permitting process. Ecology noted that there isn't the same flexibility with temporary authorizations for air permits, and there is a concern about the air permitting being on the critical path. Ecology added that it has the same questions and concerns regarding air permitting for the test bed initiative (TBI). ORP responded that air permitting has been a topic of discussion for several months with the air permitting team.

ORP continued by explaining that the TSCR module will have a ventilation system, but the air that is ventilating won't be in contact with any radioactive or hazardous chemicals, and it is essentially ventilating the box. ORP stated that the columns in the TSCR module vent back to the tank farms where the active AP tank farm exhaust system will handle the vapor streams, which will be very small. ORP added that as the vendor continues with the TSCR design, the Ecology permitting team members will be kept updated on the design details.

Ecology stated that it was looking for calculations that show whether or not the emission is insignificant and bounded within the existing air permits. ORP responded that the liquids that will be flowing through the TSCR module are double-shell tank liquids that are ventilated by AP Farm. ORP noted that there will be no thermal nature to the process, no chemicals will be added to the process, and nothing new will be created. ORP stated that the TSCR system will be filtering out suspended particles and running the filtered tank waste liquids through an ion exchange column and safely vent the columns to ensure there is no buildup of hydrogen in concentrations that could cause a problem. ORP added that the TSCR process won't create any unique vapors from what already exists in the tank farm head spaces for the AP Farm, specifically AP-107.

ORP stated that a briefing on TSCR needs to be provided to the air permitting team, which had expressed concern about the vapors going back to tank farms and whether any changes would be needed to the air permitting at that point.

## **6.0 242-A EVAPORATOR STATUS**

Significant Past Accomplishments - ORP stated that the EC-08 campaign was completed in May 2018. The EC-09 campaign was stopped after four days in June 2018, due to failure of the PB-1 recirculation pump, and there was a waste volume reduction of 20,000 gallons.

Significant Planned Actions in the Next Six Months - ORP noted that the current planning is under way to replace the PB-1 recirculation pump. ORP stated that the facility is being prepped for the test bed initiative (TBI). Ecology inquired about the path forward for the PB-1 recirculation pump. ORP responded that the current planning is to rebuild the pump that has been sitting in the loadout room and to build a new pump by an offsite vendor. Ecology asked if there are any physical activities to support the TBI, such as installation of nozzles. ORP responded that no nozzles are being installed, and the facility prep activities include maintenance of the bridge crane. Ecology inquired about a schedule for the TBI. ORP responded that there is a schedule for the TBI, which was received from the contractor two weeks ago, and it is being reviewed. ORP noted that a meeting is scheduled next week with Ecology to discuss the TBI, and the schedule would be made available during the meeting.

Ecology referred to the potential TBI initiative and a variety of other activities that require the 242-A Evaporator, and asked if ORP had considered the engineering of systems to determine how the mean time between failure and repair could be reduced. Ecology cited the replacement of the failed PB-1 recirculation pump as an example of the down time as pieces and parts continue to fail and need to be repaired or replaced. ORP responded that the goal is to complete the upgrades needed prior to the upcoming busier years because there won't be time between campaigns once retrieval starts. ORP indicated that the contractor is working on the issue, but a definitive plan is not available that could be presented to Ecology. Ecology suggested a higher level of urgency towards the 242-A Evaporator, given the increased activity that will be occurring in the next several years. Ecology recommended that the concerned parties assemble plans to mitigate or eliminate the possibility of failure and to decrease the issues that need to be recovered.

Ecology noted that a life extension upgrades document was prepared about ten years ago that contained information on estimates of recovery time for a failed piece of equipment or the type of work needed in the meantime to support campaigns. ORP stated that the life extension document provides a list of future upgrades, but noted that due to limited resources, the issue has not been addressed as a higher priority.

ORP added that the contractor is implementing a pilot program this year for predictive maintenance, which is being rolled out into one of the DST farms, and vibrations, sensors and thermal imaging will be looked at to provide better predictability. Ecology asked if ORP anticipated that the pilot program will be projected onto the 242-A Evaporator. ORP responded that it is anticipated for the 242-A Evaporator. ORP noted that in the case of the PB-1 pump, the choice would be to replace it with an exact duplicate, or to modify some of the indicators, such as vibration devices, that would be more predictive of impending failure. Ecology stated that modifying the PB-1 is an example of what it is suggesting moving forward, which is to become more proactive, rather than reactive, by doing these kinds of analyses in anticipation of what is likely to occur. ORP expressed agreement with Ecology's suggestion, and that it will continue the effort towards a more proactive approach regarding equipment maintenance.

## **7.0 LIQUID EFFLUENT RETENTION FACILITY/200 AREA EFFLUENT TREATMENT FACILITY (LERF/ETF)**

Significant Past Accomplishments - ORP stated that approximately 2.2 million gallons of waste have been processed, and the facility is working towards the goal of 3 million gallons processed

this fiscal year. ORP noted that Basin 42 was placed out of service in June 2018 for the cover replacement project. ORP reported that removal of the old cover has been completed, and installation of the new cover is under way for Basin 42. ORP stated that a tour was held for Ecology last week to view the Basin 42 cover replacement project, and the Washington State Department of Health toured the cover replacement project yesterday.

Planned Actions in the Next Six Months – ORP stated that processing will continue in Basin 43 towards the goal of 3 million gallons, which will be followed by a plant cleanout for corrective maintenance to allow the camera visual inspections for the ETF integrity assessment project. ORP added that the ETF air compressors are to be replaced. ODOE asked if the air compressors will be an off-the-shelf replacement. ORP responded that the air compressors are off-the-shelf and have already been procured. ORP noted that the Basin 42 cover replacement is to be completed by the end of this fiscal year in September 2018.

## **8.0 TANK SYSTEM UPDATE**

### ***Double-Shell Tank Integrity:***

#### **Significant Past Accomplishments**

ORP noted that although today's monthly summary report states there are no past accomplishments, ultrasonic testing (UT) for AZ-102 was completed earlier this week, and all three of the tanks planned for UT have now been completed.

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

ORP reported that the crew is mobilizing in AP-107 for field testing with the air slot robots to do visual inspection. ORP stated that the robots will start at 180 degrees at opposite ends of AP-107 and move towards the middle of the tank.

ORP noted that the AY-102 annulus inspections were halted a while ago and are still on hold.

Secondary Liners – ORP stated that the next visual inspection for AP-102 is scheduled within a month, and UT will be done in FY 2019.

### ***Single-Shell Tank Integrity:***

#### **Significant Past Accomplishments**

ORP noted that the SST integrity assessment activities are under way. ORP reported that the CHEM-D-42 leak assessment on tank S-104 was completed, and the recommendation is to move the tank from assumed leaker to sound. ORP stated that a meeting will be scheduled with Ecology to discuss the S-104 leak assessment. Ecology will provide ORP dates in September 2018 to schedule the leak assessment meeting.

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

ORP stated that the draft SST integrity assessment report is in review and will be finalized in the next few weeks.

## ***Independent Qualified Registered Professional Engineer (IQRPE) Activities:***

### **Significant Past Accomplishments**

ORP stated that the additional UT testing was performed to provide more information for the ETF IQRPE.

ORP stated that Meier Engineering recently completed the 242-A Evaporator IQRPE, and comments are being prioritized. Meier Engineering is working on the SST IQRPE, which will be completed in the near future, and they will move to the 219-S IQRPE.

### **9.0 SINGLE-SHELL TANK INTEGRITY ASSURANCE**

ORP stated that the milestone for the SST IQRPE is on schedule to be met by September 30, 2018.

### **10.0 IN-TANK CHARACTERIZATION SUMMARY**

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

ORP noted that four tanks are planned to be sampled in the upcoming months. Ecology asked if the AY-102 grab sample will be from the annulus or the main tank. ORP responded that the AY-102 grab sample will be from the main tank.

### **11.0 SINGLE-SHELL TANK CLOSURE PROGRAM**

ORP pointed out that the M-045-92O milestone, on page 20 of today's monthly summary report, has been deleted due to a TPA change control form that was signed at the end of June 2018. ORP added that all of the M-045-92 milestones listed on page 21 of today's monthly summary have also been deleted because of the change control form, and page 22 lists all the new milestones associated with the change control form. ORP suggested removing the deleted milestones from the monthly summary report. Ecology agreed that the deleted milestones could be removed. Ecology suggested adding a clarification to M-045-92V to state that barriers 1 and 2 are the SX tank farm south and north barriers. M-045-92V also includes the SX "expansion" barrier, which is labeled as such in the milestone. ORP agreed to add the clarification to M-045-92V.

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

ORP stated that the SX south barrier is scheduled to be paved next week, which will take two to three weeks. The crew is prepping the SX north barrier to be paved, which is scheduled for next month. Ecology inquired about the status of the expansion barrier. ORP responded that the change for construction of the expansion barrier is being formalized with the contractor. Ecology suggested that the status of the expansion barrier should be included under M-045-92V.

#### **Issues**

ORP noted the two issues are associated with awaiting receipt of Ecology's final comments on approval of the Clean Closure Practicability Demonstration and the Tier 1 Closure Plan.

Ecology stated that the information in today's monthly summary does not accurately reflect the two issues. Ecology suggested that ORP discuss the first issue with DOE-RL to get their perspective, since Ecology is expecting a revised copy of the Clean Closure Practicability Demonstration in the next two weeks. Ecology added that a discussion is needed regarding the Tier 1 Closure Plan because the issue as stated does not represent the mutual understanding between Ecology and DOE-RL/ORP. ORP agreed to schedule a meeting with Ecology and DOE-RL to discuss the Tier 1 Closure Plan.

## **12.0 SINGLE SHELL TANK RETRIEVAL PROGRAM**

ORP reported that the work has started on the retrieval data report for tank C-105, and it should be completed in 12 months.

## **13.0 TANK OPERATIONS CONTRACT OVERVIEW**

ORP reported that there was a favorable cost and schedule variance for the month of June 2018 under base operations (5.01), due to completing more work than planned and at a cost less than anticipated. ORP noted that the fiscal year to date schedule performance index (SPI) of 0.97 and 0.99 for the cost performance index (CPI) reflect a slight lag in schedule. ORP stated that the positive CPI for the month was due to efficiency with field sampling for vapors and less engineering and project management support for the strobic air upgrades. ORP explained that the strobic air upgrade is a different type of exhauster system that allows the exhaust stream to travel further up into the air stream before diffusing.

ORP reported that there was an unfavorable CPI and SPI for waste feed delivery (5.03) during the month of June 2018. ORP stated that there was a good performance earlier in the month, and the performance during the previous months is now balancing out the EVMS reporting.

ORP stated that the reporting for treat waste (5.05) is associated with the DFLAW activities in the tank farms, particularly the Low Activity Waste Direct Feed project. ORP noted that the activities have tapered off in the last few months as design activities are wrapping up with the more permanent filtration and cesium removal capability. ORP stated that although the permanent facility design is not currently being done, boreholes are being drilled in the potential sites for both the TSCR module and for another location south of AP Farm where more modules can be placed or for a more permanent capability. ORP stated that the work is continuing with the drilling so it will be available when the alternative analysis is revisited in 2021. ORP noted that there was some difficulty getting the drilling subcontractor, so that work is slightly behind schedule.

Ecology inquired about the purpose of the boreholes. ORP responded that the boreholes are done when a site is identified where facilities will be placed. ORP stated that an understanding of the soil layers is needed to compare with the seismic analysis that was done on the Waste Treatment Plant site and on the tank farms. ORP noted that the assumption cannot be made that the soil layers are the same, and the seismic design for the new facilities needs to be based on the soil layers. ORP stated that the testing has indicated that the soil layers are close enough to allow the prior analysis that was done, but it needs to be confirmed. Ecology inquired about the depth of the boreholes. ORP responded that the boreholes aren't very deep, but it did not have the exact numbers.

ORP stated that there was a positive cost variance under 5.05, due to the design agent being more efficient with wrapping up the permanent facility design, and the goal is to wrap up all of those design activities by the end of FY 2018.

## CONSENT DECREE MONTHLY SUMMARY REPORT REVIEW

### 1.0 CONSENT DECREE MILESTONE STATISTICS/STATUS - CONSENT DECREE REPORTS/REVIEWS

(See Agreements, Issues and Action Items Table):

#### Action No. 1 (WTP-17-10-01)

A copy of the maintenance plan was provided to Ecology, and this action was closed on 7/19/18. This action item will be removed from the table next month.

#### Action No. 2 (WTP-18-04-01)

ORP stated that Ecology was briefed on the Documented Safety Analysis on August 2, 2018. This action was closed.

#### Action No. 3 (WTP-18-05-01)

Ecology suggested closing this action since the quarterly milestone meetings and the information provided are going to be reformatted. Ecology also suggested that after a couple of quarterly milestone meetings are held, this action could be revisited. ORP provided a brief update on the changes to the meeting format for the ORP project manager meetings (PMMs) and the quarterly milestone review. ORP stated that the PMMs will be moved to the first Thursday of the month to allow the CD monthly summary report to be briefed, and the PMMs will be held every month. The quarterly milestone meetings will continue to be held on the third Thursday, and they will consist of a more high-level briefing for senior management versus the more detailed discussions held during the PMMs. The first quarterly meeting under the new format will be held in February 2019. Ecology stated its assumption that the quarterly meeting will still discuss accomplishments and issues, but at a higher level. ORP responded that the information generated for the quarterly meeting will be done in conjunction with Ecology input. Ecology requested that the quarterly meetings continue to focus on policy issues, philosophies, and programmatic contingencies. This action was closed.

#### Action No. 4 (WTP-18-07-01)

ORP stated that a briefing will be scheduled with Ecology in the next few weeks on the general readiness strategy and not the operational readiness review (ORR). This action remains open.

### 2.0 SPARE REBOILER REQUIREMENT STATUS

The spare reboiler has been delivered to the site, meeting the Consent Decree milestone.

### 3.0 SINGLE-SHELL TANK RETRIEVAL PROGRAM

Significant Past Accomplishments - ORP stated that an old pump in AX-104 could not be removed, and WRPS devised a method for moving the pump aside that allowed the new pump to be installed for waste transfers and retrievals. That activity concluded the removal of long-length equipment from AX-104 and AX-102. The cleanout of AX-103 03A pit was completed,

and one of several pumps was shipped out and another pump will be shipped later this month. The removal of caustic and water lines was completed from the A285 Building to the POR 496 water manifold skid, and that activity will continue, along with removal of the caustic and water lines into AX Farm. The POR 107 exhauster in C Farm was disconnected, capped and removed from service. The power and water are being disconnected from the raw water skids as well as isolating the POR 357 hot water skid servicing C Farm.

ORP stated that work is continuing with the electrical infrastructure installations in AX Farm and the control trailers to the AX Farm. Installation of conduit lines for the stack monitors will be completed, along with installation of two control room trailers for AX Farm. ORP stated that the electrical panels were installed, and when the conduit is completed in AX Farm, the signal and power wire to AX Farm will be run to AX Farm and A285 to control that system as well as tagging into the POR 126/127 exhausters. Ecology asked what the stack monitors will be monitoring. ORP responded that it will be monitoring ammonia from the vapors program, and it was an efficiency opportunity to install the conduit for the stack monitors while the area is being excavated.

ORP reported that direct push sampling activity continues at tanks A-104 and A-105, and boreholes are being installed around the two tanks. ORP stated that one borehole has been completed down to about 240 feet, the second borehole is down to about 210 feet, and a third borehole will be worked on this year. ORP added that three boreholes will be installed next year. Samples of soil conditions will be taken around the boreholes, and soil sampling has started around the first borehole, along with some moisture sampling. ORP noted that the sampling is in support of the decision process for tanks A-104 and A-105.

Ecology asked if high resistivity resolution (HRR) posts will be placed in the same boreholes. ORP responded that HRR posts will not be installed at this time, but they will be later in the process. Ecology asked where the HRR posts will be placed. ORP responded that it depends on the results of the soil sampling and analysis. ORP stated that if there is a leak under the tank, it may change the effectiveness of the HRR by the salt contamination, and the HRR post would be moved to a different location. ORP added that the HRR posts will be installed in AX Farm prior to A Farm, which will allow time to make the decision about placement of the HRR post.

Planned Activities in the Next Month – ORP stated that pumps will be shipped out when they are removed. Cleanout of the AX04 1A pit is planned, but has been delayed while some of the retrieval crew has been moved over to the AX barrier due to a shortage in resources. ORP noted that the pit cleanout is not on the critical path and will not impact retrievals in AX-102 and AX-104.

ORP stated that riser investigations will be completed in tanks A-101, A-103, A-104 and A-106. ORP noted that there had been a concern that the thermocouple trees were grouted into the riser because of a note that was in the drawings. The concern was eliminated after the crew used a crane to lift all of the thermocouple trees and they all came free.

#### **4.0 TANK WASTE RETRIEVAL WORK PLAN STATUS**

There were no updates to report on the tank waste retrieval work plans.

## **5.0 SINGLE-SHELL TANK RETRIEVAL MONTHLY FISCAL YEAR EARNED VALUE MANAGEMENT SYSTEM (EVMS) DATA**

ORP reported that for the month of June 2018, tank farms retrieval and closure (5.02) reflected a schedule performance index (SPI) of 1.19 and a cost performance index (CPI) of 0.97. The fiscal year to date SPI of 0.87 and CPI of 0.91 follows the normal trend during the summer months of making up a lot of progress. The positive schedule variance was due to the receipt of Ecology's approval of the Waste Management Area C RCRA Field Investigation and Corrective Measures Study earlier than planned, and the work on pump riser 14 went faster than expected. The unfavorable cost variance was due to the overtime for field installation of the interim barrier at SX Farm.

## **6.0 WASTE TREATMENT AND IMMOBILIZATION PLANT PROJECT**

It was noted that the CD report was not available for today's meeting. ORP provided the percent completes for the Direct Feed Low Activity Waste (DFLAW) project and for the LAW, Balance of Facilities, and Analytical Laboratory (LBL collectively). DFLAW is 47 percent complete overall, and LBL is 65 percent complete overall.

ORP stated that a key activity for the Pretreatment Facility (PT) and High Level Waste facility (HLW) is the independent parametric analysis that was done by the U.S. Army Corps of Engineers (USACE). The USACE analysis was requested by DOE in the November 2017 timeframe regarding the effects of deferring PT and HLW for three-to-five years. ORP reported that a letter was sent to Ecology regarding the USACE analysis as well as the Bechtel analysis that was done. ORP stated that a follow-on meeting will be held with Ecology in the coming weeks to provide more in-depth discussions on the analyses and reports, and a presentation package is being developed.

Ecology asked if ORP was far enough along to know whether or not PT and HLW milestones will be declared at risk. ORP responded that a determination has not been made. ORP added that it is conducting an analysis, along with DOE-Headquarters, which will take about two more months to complete. Once the analysis has been completed, a determination regarding any risk to the milestones would be made. ORP noted that discussions with Ecology will continue during that time to provide transparency during the process. Ecology stated that it was important to ensure the community understands that no milestones have been declared at risk for PT or HLW, and negotiations have been extended to November 15, 2018.

ORP stated that the USACE and Bechtel analysis reports were sent to the Hanford Advisory Board (HAB), the stakeholders, and the Oregon Department of Energy (ODOE). ORP indicated that EPA will also be provided the reports for an overall site perspective, even though EPA does not have a direct link to PT and HLW.

WTP Earned Value Management System – ORP reiterated that the cost and schedule variances for DFLAW are tied to the original baseline, and the current work that is ongoing is associated with the target schedule that Bechtel provided. ORP has been working with Bechtel to implement their target schedule with additional changes into the baseline over the next two months. ORP stated that when the contractor set the baseline, the working level execution had a significant number of planning packages that represented long-duration activities. The

contractor is breaking the packages out into more detail and incorporating additional logic that will follow through to commissioning and startup. ORP stated that the process has changed the logic for sequencing activities that were originally placed in the baseline. ORP added that the goal is to not touch the scope or milestones from a contract standpoint, but to re-plan the work scope to go from an execution standpoint and not from a contract scope or cost standpoint.

ORP stated that the milestones in the contract or project baseline initiatives will remain the same, and the only change will be the execution strategy to get to the end point and how the strategy will be considered from a construction/startup sequencing standpoint. Ecology pointed out that the construction start sequencing standpoint may have an effect on the permitting sequencing. ORP agreed that it could have an effect on permitting, and it is being integrated into the overall permitting strategy for DFLAW. ORP added that any change should be reflected in the permitting strategy as a target because that is what is loaded in the DFLAW schedule as the target. Ecology asked if the baseline change proposal (BCP) is still planned for the September/October, 2018 timeframe. ORP responded that the BCP is currently targeted for the October time frame, and there will be discussions with DOE-Headquarters next week to ensure a smooth transition with the BCP and resetting variance analyses that will accurately reflect progress going forward. ORP noted that the milestone dates will not change.

ORP cited an example of restructuring work scope at the Effluent Management Facility (EMF) that resulted in a negative schedule variance that was carried for some time. The excavation and installation of the waste transfer piping was delayed to allow progress with construction and avoid a major interference. ORP pointed out that construction is not the main concern, but it is with the startup waterfall and the commissioning waterfall and where the most visibility is needed.

ORP reported that overall the negative schedule variance was about \$1.3 million, mainly due to delayed staff increased that were needed, and with LAW construction and DFLAW construction having some deferral of BOF installation at EMF. ORP noted that the positive cost variance of \$17,000 was below threshold reporting.

## **7.0 PRETREATMENT FACILITY**

ORP noted that the work in PT continues to be the preventative maintenance activities and technical issue resolution. ORP stated that there have been several discussions and meetings with Bechtel regarding the technical issue associated with erosion/corrosion (T5). ORP added that most of Bechtel's documents will be issued by the end of this month, and Bechtel is expected to submit a letter in September 2018 for closure of T5. ORP stated that Bechtel's plan regarding the structural issue (T7) has been accepted, and the closure letter is expected by the end of August 2018. ORP stated that Bechtel has submitted all of the reports for the high solids vessel testing (T4), and the remaining piece is a final verification for the low solids vessels, which is expected in September 2018. ORP noted that the low solids vessel issues were not significant, and there were a few calculations that needed to be done. ORP stated that once Bechtel has submitted the final closure letters for T4, T5, and T7 in September 2018, ORP will prepare a letter to send to DOE-Headquarters and the Defense Nuclear Facilities Safety Board (DNFSB) within one to two months.

## 8.0 HIGH-LEVEL WASTE FACILITY

ORP stated that preventative maintenance activities continue in HLW. In addition, there is some RLD vessel procurement under way, and the RLD-7/8 vessels are expected to be delivered by the end of this year.

ORP reported that there is some technical work re-planning under way based on additional funding that was received for FY 2018. ORP noted that the funding was received halfway through the fiscal year, and the staff resources Bechtel is using for HLW are coming from DFLAW and LBL, which has been a slow process. The five to ten additional resources will mainly be focused on implementing the PDSA that was approved last year into the safety design documents (SDDs) and also planning the design work that will start in October 2018. ORP stated that the key work starting in October 2018 will initially be for the P&IDs and the process flow calculations, along with the design review of the RLD system and the off-gas system.

ORP stated that a briefing could be provided to Ecology in October 2018 on the detailed plan for HLW during FY 2019. Ecology requested the briefing as an action item.

***ORP Action: ORP to provide Ecology a briefing on the FY19 plan for HLW.***

Ecology asked if re-planning for the baseline will be far enough along to inform the FY19 plan for HLW. ORP responded that it could inform the latter half of HLW planning. ORP noted that the challenge will be if the point is reached that serious risk to the milestones is determined and negotiations are needed, what can be done to continue the work and focus on a certain area to reduce risk.

## 9.0 LOW-ACTIVITY WASTE FACILITY

ORP stated that a key activity is implementation of the changes from the documented safety analysis (DSA). ORP referred to the Plan Design and Probability Improvement (PDAPI) that is under way to mature some of the systems that were not fully developed with the full hazard analysis when the DSA was done. ORP noted that there will be some design reviews held later this year to ensure the changes are implemented, and Ecology will be notified and invited to attend.

ORP stated that there are a number of engineering punch list items generated for turnover from construction to the startup organization. The punch list items are in categories A and B. The A category punch list items must be completed before they are turned over to startup, and engineering is working on closing the A category items. ORP stated that construction is also completing activities for turnover of systems to the startup organization by conducting system walk downs. An eight-week walk down is conducted to identify items that need to be addressed before turnover to startup, and then a three-week walk down is done to determine whether the items have been completed and can be turned over, and also if a new item has been identified. ORP noted that several systems have been turned over to startup, and several more systems are planned for turnover to startup next month. ORP stated that the startup organization is expected to complete testing next month on the low voltage electrical system 2, C1 ventilation system 2, and UPS 1.

Ecology inquired about the ratio between category A and B items, and if there are more items in the A category than expected. ORP responded that there are more items identified in the A category during the initial eight-week walk down, and they are reduced as the items are completed. ORP noted that the B category items that are carried over into startup become A category items. Those items are then divided into A and B categories, with the B category identified as items that can be left open for commissioning to address. Ecology clarified its question by asking if there is repetition within the A and B categories in which a trend could be identified that is larger than the particular issue.

ORP responded that the A, B and C categorization is not oversight of a process where errors are identified that are categorized, but it is a situation where a piece of equipment or a part that has been sitting and needs to be addressed. ORP cited potential examples of a frozen pump that needs to be replaced, which would be an A item, or rust on a valve stem that would be a B item and could be addressed by the startup organization. ORP referred to Ecology's question about leading up to a trend, and stated that it isn't a situation where there are several items that would indicate a larger programmatic issue. ORP added that the contractor has been responding very quickly to items that are identified, and then moving quickly to the downstream systems that are planned in the next month or two for turnover in an effort to get ahead of an issue.

Ecology stated that it was helpful to know how the contractor is addressing and responding to the punch list items, noting that there seems to be more reaction and passivity moving forward. Ecology expressed an interest in seeing a more proactive attitude in an effort to mitigate or eliminate the problems before they surface. ORP responded that the startup and commissioning organizations are very different from the construction organization, and a proactive mind-set is mandatory in the commissioning and startup world, with no allowance for passivity. ORP stated that the lists for startup or commissioning might initially be substantial, but they are well detailed by system. ORP added that when an A or B item is encountered, the personnel responsible is immediately identified to respond to the item and to ensure the downstream item is not impacted.

ORP noted that the nature of startup is that items will be discovered while going through the process, but there is a very proactive approach in the field. ORP stated that it has been very satisfied with the approach taken by the startup team. ODOE inquired about the overall cost impact for the project. ORP responded that scope of work for addressing the punch list items is running over cost, although there is funding built into in the budget for aging and obsolescence. ORP added that there are many pieces and parts that have been sitting for years and that have been exposed, which presents a much larger hurdle than would normally be expected on a project. ORP noted that Bechtel's contract has \$29 million built-in for aging and obsolescence in Balance of Facilities, and that startup and commissioning is almost all the way through and has not gotten close to the \$29 million.

ORP reported that a letter was sent to Bechtel on July 13, 2018, confirming that interim contract milestone A-5 was completed. ORP noted that the A-5 milestone was for the LBL physical plant completion, and it is different from the Consent Decree milestone.

ORP reported on the status of the findings regarding the commercial grade dedication (CGD). ORP stated that an extent of condition review has been under way with Bechtel, QA, engineering and senior management, and a plan is being developed that will support the DSA requirements for safety and safety significant systems and functional requirements in terms of equipment

procurement. ORP stated that the focus is on requirement verification metrics that are specific towards ensuring all of the quality and safety requirements are met by the vendor. ORP noted that Bechtel has been working on some pilot systems to provide examples that its process for the path forward will be successful, and the plan is to start in October 2018. ORP stated that it has been working closely with Bechtel to reach a conclusion regarding the CGD findings.

## **10.0 BALANCE OF FACILITIES**

ORP reported that the current focus in BOF is the chiller compressor plant and the steam plant, and all systems within the chiller compressor plant have been turned over to the startup organization. ORP added that there are some software issues associated with the chiller compressor plant, and efforts are under way to be able to run a certain portion of the chillers and compressors as a stand-alone configuration. ORP noted that the subcontract for the software is in place, and the vendors are in-house to assist with lining out the various versions of software between older and newer systems. Ecology asked if new software or new subroutines are needed. ORP responded that subroutines are needed in most cases.

ORP stated that component testing is under way for some of the individual systems in the steam plant. ORP noted that there is a push to obtain procurement of a dump valve, or a sky valve, that will facilitate startup of the systems.

ORP noted that there isn't any design work in BOF from an engineering perspective, and it has transferred to plant engineering in support of startup.

ORP reported that the standby diesel generator and motor set has been refurbished and returned to the site and reinstalled ahead of schedule. Currently the work with the standby diesel generator is associated with the C issues and where certain electrical equipment is positioned. The work is to ensure all the electrical equipment that will support the interface of the standby diesel generator with the rest of the plant is compliant.

ORP stated that operational custody of the main BOF switch gear building and the water treatment building was transferred to the plant management organization, which means those facilities will be operated under their normal operating procedures going forward.

ORP turned to the status of the Effluent Management Facility (EMF), and noted that there were some schedule variance issues. ORP stated that the key challenge is associated with getting bulk procurements through and delivered to the site so that placement of the racks and piping on the racks can be accelerated. ORP pointed out that originally the schedule sequence called for placing the vessels as they became available, but it became apparent that the racks and piping needed to be set in place ahead of the vessels. The logic for changing the sequence was that when the vessels are being placed, the majority of the overhead buildout would be done and minimize the interference between the overhead work and work that needed to be done on the floor with the vessels. ORP noted that there haven't been any delays that have cascading impacts regarding the large procurements such as the vessels, and the challenge is receipt of bulk piping, racks and spools. ORP pointed out that Bechtel has taken a proactive approach by having staff permanently stationed at the vendor shops. ORP added that the main procurement challenge is with piping, and the subcontractor brought in their subsidiary company to expand their capabilities.

ORP stated that another driver associated with the negative schedule variance is the delay of transfer line piping, which is being done from a more logical sequencing perspective, and it is being moved around in the upcoming re-plan.

ORP stated that two key areas of focus for the EMF is installation of the stainless steel liner plate in the low point drain area and the evaporator feed area. ORP noted that the low point drain area is the most important planning area from a critical path perspective, and many of the key elements are within 100 days of total float. ORP stated that installation of the stainless steel liner plate in the low point drain area will be closely followed with installation of the low point drain vessel and pumps and then placement of structural steel so the roof can be placed.

ORP stated that the evaporator has been sitting next to the EMF for quite some time, and it is scheduled to be placed in the evaporator cell in the September/October 2018 timeframe. ORP noted that there is a lot of work in the C3 area where all the pumps and filters are contained, as well as in the evaporator cell.

ORP reported that the glass former facility and ammonia reagent facility will be turned over in the next couple months to the startup organization, which represents some of the final turnovers for BOF. ORP stated that everything except for the communication systems will be turned over by the end of FY18, with the bulk of startup testing under way and nearing completion. ORP noted that at this point, BOF is supporting the LAW needs for startup testing.

Ecology asked if most of EMF will be closed in by winter. ORP responded that most of it will be closed in by winter, and that two-thirds of the roof for the C3 area will be placed in mid-September 2018, with a minor section of roof to follow.

## **11.0 ANALYTICAL LABORATORY**

ORP reported that the LAB has been very active with startup of individual systems. ORP stated that the goal for Bechtel is to turn over all of the systems to the startup organization within calendar year 2018, with the majority of turnover occurring within FY18. The current focus, from a systems testing perspective, is the ventilation systems. ORP noted that there is a tremendous amount of ventilation in LAB, and the entire ventilation system has been turned over to the startup organization to work through their testing sequences. The energized testing of the C1 and C5V ventilation systems is under way, and energized testing of the C2 and C3 ventilation systems will be initiated in the next month or two.

ORP stated that from an engineering perspective, there is no design engineering ongoing as it focuses on all of the support activities for startup.

ORP stated that there have been some interface challenges with the LAB, LAW and BOF, and efforts are under way to address issues with the water systems to ensure the proper water chemistry when transporting water in between the facilities. ORP noted that it isn't impacting any schedules, but the goal was to achieve some acceleration with the water chemistry program.

ORP pointed out that the cost variance of \$17,000 that was noted earlier does not reflect much of a variance and represents an accomplishment. ORP stated that traditionally there have been very high positive cost variances that were driven by level of effort (LOE) accounts that were not well detailed, and it did not provide the best clarity on performance. ORP stated that Bechtel has

placed a concerted effort into some of those control accounts that may not have been properly aligned, which resulted in positive cost variances month to month without the forward progress that is needed. ORP has been putting pressure on Bechtel for the past six to eight months to change that practice, which Bechtel has been doing, by breaking more of the accounts into discrete accounts where appropriate. ORP stated that it is a positive step towards the overall re-plan that will allow Bechtel to become better aligned for a re-plan.

Ecology asked about Bechtel's performance as compared to the target schedule. ORP responded that compared to the target schedule, the LAB is well ahead of schedule, but BOF continues to struggle. ORP noted that as discussed with BOF, issues arise when a system doesn't work the way it was planned. ORP cited the site streams pumps on the cooling tower that had to be rebuilt three times by the vendor. ORP pointed out that temporary pumps were brought in, and there are ways to work around the issues, and to date the downstream testing needed for LAW has not been affected.



## ORP/Ecology TPA and CD Agreements, Issues, and Action Items –August 2018

### Agreements:

1. Per an Ecology standing request (4/21/2016), ORP agrees to include any written directives given by DOE to the contractors for work required by the CD in future quarterly CD Reports (see CD Section IV-C-1-e).
2. The ORP and Ecology 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:

Ecology and ORP have agreed to move the TPA/CD PMM meeting to the first Thursday of the month starting in January 2019. The TPA and CD Monthly reports will be distributed by the end of December via link to the Admin Record. This will be the format for report distribution and monthly meetings going forward for calendar year 2019. Calendar invites will be corrected.

**ORP/Ecology TPA and CD Agreements, Issues, and Action Items –August 2018**

#	Action ID Start Date	Action	Updates / Needs for Closure	Actionee(s)	Status/ Date Closed
1	TF-16-11-04 11-17-16	ORP to provide Ecology the T-112 work plan	In legal review. (07/19/2018)	Dusty Stewart	On Hold
2	TF-16-11-05 11-17-16	ORP to provide Ecology results of the four tanks that were visually inspected at ETF	Internal review complete. On track to be released for public in July 2018. (07/19/2018)	Richard Valle	Open
3	TF-17-04-01 4-20-17	ORP to provide Ecology with schedule updates on the removal of the 242-A Evaporator diesel generator.	Provide layout of phased plan to include short and long term activities. Schedule has not been established yet. (07/19/2018)	Paul Hernandez	Open
4	TF-18-11-3 12-1-17	ECY requests ORP to meet on HNF-3484 Double Shell Tank Pumping Guide		Jeremy Johnson	Open
5	TF-18-02-01 02-15-18	ORP to revise the leak loss estimates in the HNF-EP-0182, <i>Waste Tank Summary Report</i> to be consistent with the most current estimates from vadose zone characterization reports.	Waste Tank Summary Report will be corrected. The volume of waste leaked from tanks will be reviewed and updated to match other reports. (07/19/2018)	Jeremy Johnson	Open
6	TF-18-04-01 04-19-18	ORP to propose different time for the monthly meeting based on the availability of the CD Monthly Report	<a href="#">Discussion on first page under Issues.</a>	Bryan Trimberger	Closed 07/19/18
7	TF-18-04-02 04-19-18	Schedule meeting to discuss leak rate in LERF Basin 43	Meeting with Ecology held on June 12, 2018 (07/19/2018)	Richard Valle	Closed 07/19/18
8	TF-18-07-01 07/19/18	Integrate the ground water modeling for WMA-C PA with BP-5 remedial design for pump and treat at WMA-C (Jeff Lyon)	<a href="#">Held several meetings with RL/ORP on this and other integration issues in July and August</a>	Jan Bovier	Open
9	TF-18-07-02 07/19/18	<a href="#">Inquire if the concentration of chemical at 2" from the wall and 2' from the wall is compared. Is the recirculation capturing true concentration representing the whole</a>		Dusty Stewart	Open

**ORP/Ecology TPA and CD Agreements, Issues, and Action Items –August 2018**

#	Action ID Start Date	Action	Updates / Needs for Closure	Actionee(s)	Status/ Date Closed
		tank? Has this issue been evaluated by the corrosion panel? (Jeff Lyon)			
10					

#	Action ID Start Date	Action	Updates / Needs for Closure	Actionee(s)	Status/ Date Closed
1	WTP-17-10-01 10/19/17	ORP to provide Ecology a copy of the maintenance plan	Provided by email on 07/25/2018	Wahed Abdul	Closed 07/19/18
2	WTP-18-04-01 04/19/18	Schedule early June DSA/TSR comprehensive briefing for LAW Facility. Ecology engineering shall be included.	Signing ceremony was on May 17, 2018. Briefing to Ecology pending.	Wahed Abdul	Open
3	WTP 18-05-01 05/17/18	Ecology meeting with WTP to review quarterly report in depth. One meeting with key players to discuss facility specific items, schedule, and quality of BNI responses. Include Dan McDonald, Jay Decker. Expect a 5-6 Ecology personnel will participate.	Jason/Wahed will set up the meeting. ORP is waiting for highlights/concerns from Dan, in order to invite the applicable personnel to the meeting to provide briefing to Ecology. (07/19/2018)	Wahed Abdul	Open
4	WTP-18-07-01 07/19/18	ORP Strategy briefing to Ecology (Jay Decker)	Delmar's group will coordinate.	Wahed Abdul	Open