

1249480

[0065 298H]

Office of River Protection
Quarterly Milestone Review Meeting Minutes

Department of Ecology
Richland, Washington

May 17, 2018



Office of River Protection
Quarterly Tri-Party Agreement Milestone Review
Meeting Minutes
May 17, 2018

Approval: 

Date: 6/12/18

A.K. Smith
Ecology IAMIT Representative

Approval: (N/A - Not in attendance)

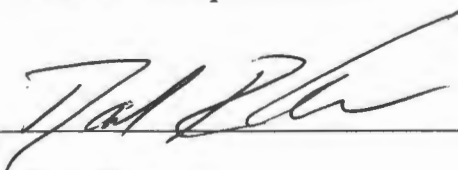
Date: _____

G.D. Trenchard
DOE IAMIT Representative

Approval: (N/A - Not in attendance)

Date: _____

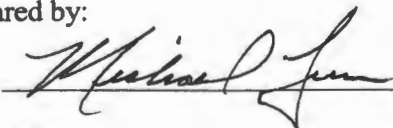
J.R. Franco
DOE IAMIT Representative

Approval: 

Date: 18 Jun 18

D.R. Einan
EPA IAMIT Representative

Minutes Prepared by:



Date: 5/29/18

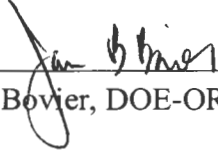
M.J. Turner
Mission Support Alliance

Project Manager concurrences of the above-dated TPA Quarterly Milestone Meeting:



Waheed Abdul, DOE-ORP

Date: 6/1/18



Jan Bovier, DOE-ORP

Date: 6/5/18



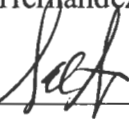
Janet Diediker, DOE-ORP

Date: 6/4/18



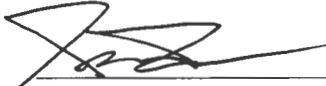
Paul Hernandez, DOE-ORP

Date: 6/5/18




Sahid Smith, DOE-ORP

Date: 6/5/18



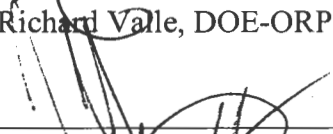
for Dustin Stewart, DOE-ORP

Date: 6/4/18



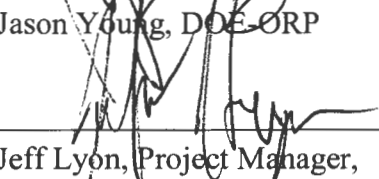
Richard Valle, DOE-ORP

Date: 6/29/2018



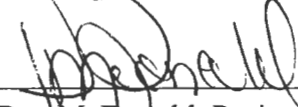
Jason Young, DOE-ORP

Date: 6/4/18



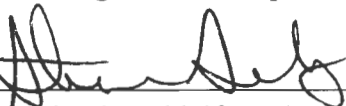
Jeff Lyon, Project Manager,
Washington State Department of Ecology

Date: 6/7/18



Dan McDonald, Project Manager,
Washington State Department of Ecology

Date: 6-7-18



Stephanie Schleif, Project Manager,
Washington State Department of Ecology

Date: 6/6/18

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 August 16, 2018, at the Ecology office in Richland, Washington. The next ORP project managers meeting (PMM) scheduled for Wednesday, June 20, 2018, will be rescheduled or deferred, due to Ecology staff attendance required at a prior out-of-town commitment.

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 Administrative Record (AR). ORP stated that the Consent Decree (CD) report has not been issued, but discussion will be provided today by ORP, based on notes and the draft CD report (see discussion under action item No. 9 (TF-18-04-01)).

Tri-Party Agreement Milestone Status

ORP noted that milestone M-045-56N requires an annual meeting in July, and a meeting will need to be scheduled.

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

(See agreements, issues and action items table).

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

ORP stated that the T-112 work plan is still in review. This action remains on hold.

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

ORP stated that the document associated with the four tanks that were visually inspected at ETF is still in the clearance process. This action remains open.

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

ORP reported that a schedule has not been established for the removal of the diesel generator. ORP indicated that the process for renewing the permit for the tank is being initiated since there is a certain amount of time allowed to complete an activity when the permit is halted. This action remains open.

Action No. 4 (TF-17-09-01)

ORP noted that this action was closed on 4/19/18, and it will be removed from the action item table.

Action No. 5 (TF-18-11-03)

ORP stated that a meeting has not been set up with Ecology regarding the DST pumping guide. This action remains open.

Action No. 6 (TF-18-02-01)

ORP stated that a meeting was held with WRPS to discuss the differences in the HNF-EP-0182 waste tank summary report and the vadose zone characterization reports. ORP provided direction to WRPS to change the waste tank summary report to reflect the new leak loss rates and vadose zone reports. ORP stated that the correct number is in the vadose zone characterization reports, and the waste tank summary report will be revised to reflect those numbers.

Ecology stated that there are the type and number of tanks that have leaked, and asked if ORP will be addressing those tanks or if they were discussed with WRPS. ORP responded that it was not aware that Ecology's inquiry today was part of the action item. Ecology stated that when the leak loss report was done, the technical evaluation team made recommendations that some of the tanks identified as leakers in the tank waste summary report did not leak. Ecology pointed out that there is an inconsistency between the two documents for the number of tanks that have leaked and the volume of the leaks. Ecology noted it had made the following suggestions, that ORP could add footnotes in the reports; ORP could do its evaluations and change the report; ORP could asterisk each tank that has a different status from the other report. ORP stated that a meeting is planned with WRPS to review the changes to the reports, and the points Ecology raised today will be discussed during the meeting with WRPS. This action remains open.

Action No. 7 (TF-18-03-01)

This action was closed on 4/19/18, and it will be removed from the action item table.

Action No. 8 (TF-18-03-03)

This action was closed on 4/19/18, and it will be removed from the action item table.

Action No. 9 (TF-18-04-01)

ORP stated that Ecology had requested options for moving the PMMs based on the availability of the CD monthly report. Ecology's request was raised through ORP management, and it is still being discussed. ORP noted that it is willing to move the PMM date, but there are logistics and other issues that make it difficult to settle on a date. ORP stated that a new step in the review cycle has been added by senior management, which poses a challenge with identifying a specific date for scheduling the PMM. Ecology asked if the PMM could be scheduled the last week of

the month. ORP responded that the CD is required to be issued and submitted to the AR on the last day of the month, and there have been challenges with meeting that requirement. ORP noted that there have been discussions about scheduling the PMM at the beginning of the month, but that also has raised some issues.

ORP stated that control of the current review cycle for the CD report and the timing for issuing the report is with senior management. ORP suggested that if needed, a separate meeting could be scheduled with Ecology for further discussion. Ecology expressed appreciation for the update and ORP's perspective on the issue. This action remains open.

Note: Ecology stated that its staff will be unavailable for the June 20, 2018 PMM, and it will need to be rescheduled or deferred to the following month. ORP requested that Ecology email proposed new dates to replace the June 20, 2018 PMM.

Action No. 10 (TF-18-04-02)

ORP stated that a meeting is scheduled with Ecology on June 12, 2018 to discuss the leak rate in LERF Basin 43. Ecology stated that this action could be closed. This action was closed.

Action No. 11 (TF-18-04-03)

ORP stated that originally the sampling that was scheduled for AY-102 was intended for a third technology, which may not be needed, and there are discussions with WRPS regarding the path forward. Ecology stated that it attended a meeting on Tuesday (5/15/18), and WRPS provided the information about sampling for AY-102 and the supporting logic. Ecology stated that this action could be closed. This action was closed.

2.0 SYSTEM PLAN

ORP stated that there have been some meetings with Ecology to discuss System Plan 8. Ecology stated that a meeting is scheduled next week.

3.0 ACQUISITION OF NEW FACILITIES

ORP reported that there was no change to report, and the milestones continue to be in abeyance.

4.0 SUPPLEMENTAL TREATMENT AND PART B PERMIT APPLICATIONS

ORP stated that the status of the milestone series listed on page eight in the TPA monthly summary report continue to be in abeyance, and the status of the milestones on page ten has not changed.

5.0 DIRECT FEED LOW ACTIVITY WASTE PROJECTS

Low-Activity Waste Pretreatment System (LAWPS)

Significant Past Accomplishments – ORP reported that WRPS and AECOM continue to work on the design efforts for the optimized LAWPS. ORP stated that an email was sent to Ecology earlier this week, which was updated yesterday, that the 45 percent design review will be

commencing for LAWPS. ORP stated that Ecology is invited to attend, and the appropriate documentation will be provided as it becomes available. Ecology asked if the design that is currently being reviewed is the proposal that WRPS sent about a month ago. ORP responded that that is the design being reviewed, which is the smaller footprint located near AP Farm that is being called LAWPS south.

ORP stated that it is anticipated formal 60 and 90 percent design reviews will be done in FY 2019. ORP noted that the LAWPS path forward is in under evaluation. Ecology asked for more details about the evaluation that is under way. ORP responded that the key performance parameters have changed, which is why the size of the LAWPS facility could be reduced. ORP noted that Ecology has been briefed on the relatively new Tank Side Cesium Removal (TSCR) system, which is moving forward. The current plan is to use TSCR to allow staging before LAWPS in the 2021-2022 time frame, which provides risk mitigation to ensure the requirements are met for the Waste Treatment Plant (WTP).

Tank-Side Cesium Removal (TSCR)

Significant Past Accomplishments - ORP reported that the Source Evaluation Board (SEB) evaluated the best and final offers from the vendors for the TSCR system, and the SEB provided a vendor recommendation. WRPS is currently evaluating the SEB's recommendation, and the contract negotiations with the recommended vendor will be initiated in the near future.

Significant Planned Actions in the Next Six Months – ORP stated that the contract for the design, fabrication and factory acceptance testing of the TSCR system will likely be issued in the June 2018 time frame.

Issues – Ecology asked for clarification regarding the appropriate funding streams and project management approaches for TSCR that are being assessed. ORP responded that as indicated in the discussion under LAWPS, the plan is to use TSCR to provide feed in the 2021-2022 time frame, and the funding source is being evaluated by headquarters. ORP stated that the TSCR system is currently funded with expense funds, and there is a potential that capital funds allocated to LAWPS could be used to make TSCR capital funded. ORP added that there would be no impact to the overall cost and schedule, and that TSCR is a top priority for Direct Feed LAW (DFLAW). ORP noted that TSCR is included in the budget profile and will be funded.

6.0 242-A EVAPORATOR STATUS

ORP reported that the EC-08 campaign has been completed, and a waste volume reduction of 166,000 gallons was achieved. ORP stated that preparations are under way for the EC-09 campaign, which is tentatively scheduled for June 21, 2018, and the samples have been taken and are being analyzed. ORP stated that the control room air conditioner has been completed, and the fire alarm control panel will be replaced after the EC-09 campaign has been completed. Ecology asked what the net waste volume reduction is anticipated for FY 2018. ORP responded that the performance based incentive is in excess of 260,000 gallons.

ORP noted that the spare reboiler was delivered to the site last week ahead of schedule, and it is sitting in the 2101-M warehouse. Ecology inquired about the milestone associated with the spare reboiler. ORP responded that the spare reboiler is reported in the CD monthly summary, and it is

not associated with a CD milestone, but it is an activity with a due date of December 2018. ORP added that there will be formal paperwork to close out the spare reboiler requirement.

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

Significant Past Accomplishments - ORP noted the waste received in LERF Basin 43, which is being processed. Ecology referred to the 210,000 gallons listed in the table from the 242-A Evaporator campaign and asked if that was from the end of the campaign. Ecology noted that in today's monthly summary report, the 242-A Evaporator campaign hadn't been reported as completed. ORP responded that the 242-A Evaporator campaign started on April 20, 2018, and the information in the monthly summary report would have been through April 30, 2018. ORP added that the campaign ended around May 3, 2018, and the 210,000 gallons are from the campaign.

ORP stated that repairs were completed to the ETF UV/OX system. Ecology asked what needed to be repaired. ORP explained that the system is comprised of lamps and tubes, which have been problematic, and they had to be replaced.

Significant Planned Actions in the Next Six Months – ORP stated that planning for the LERF Basin 42 cover replacement and camera visual inspections in support of ETF will continue. Ecology asked if the camera visual inspections for the integrity assessments are for the tanks at ETF. ORP responded that that is the purpose of the camera visual inspections.

Ecology asked if there are any plans to restart the AZ-301 tanker shipments in the next six months. ORP responded that the pump replacement work is being completed, and the plan is to restart the shipments in early June 2018.

8.0 TANK SYSTEM UPDATE

Double-Shell Tank Integrity

Significant Past Accomplishments – ORP noted that a Tank Integrity Expert Panel (TIEP) meeting was held in Phoenix, AZ during April 2018, and a TIEP meeting is scheduled onsite for June 27-28, 2018. ORP stated that Ecology has been invited to the TIEP meeting, and when a preliminary agenda has been set, it will be provided to Ecology.

Significant Planned Actions in the Next Six Months - ORP stated that the enhanced annulus visual inspections that are planned should be completed by the end of FY 2018. ORP noted that the ultrasonic testing (UT) was completed on AY-101. The UT crew has moved on to AZ-101, and will follow with UT on AZ-102. ORP stated that UT will then be done on AP-107, which was replaced with AZ-102.

Secondary Liners – ORP noted that the modeling for potential water ingress routes into the annulus systems is wrapping up, and a report will be issued. Ecology asked if the modeling report would be issued within the next two months. ORP indicated that the modeling report should be issued in a couple months.

Single-Shell Tank Integrity

Significant Past Accomplishments – ORP noted that several in-tank video inspections have been completed, and the same crew is moving on to the enhanced annulus visual inspections.

Significant Planned Actions in the Next Six Months – ORP stated that the SST Independent Qualified Registered Professional Engineer (IQRPE) report should be completed by August 2018, and it will be shared with Ecology when it has been issued.

Independent Qualified Registered Professional Engineer (IQRPE) Activities

Significant Past Accomplishments - ORP noted that the SST IQRPE will be completed this year, and the ETF and 219-S IQRPEs are in process.

9.0 SINGLE-SHELL TANK INTEGRITY ASSURANCE

ORP stated that this topic is included in the monthly summary report because of the one remaining milestone for the SST IQRPE, and there will be a slight change in the organization for next month's report in an effort to eliminate repetition. ORP noted that the SST IQRPE is due September 30, 2018, and it is anticipated to be received by August 2018, if not earlier.

10.0 IN-TANK CHARACTERIZATION SUMMARY

Significant Past Accomplishments – ORP noted that the AZ-102 and AY-101 liquid grab samples were taken to compare the liquid air interface (LAI) and the supernate body to determine whether there are different surface concentrations and bulk supernate concentrations.

Significant Planned Actions in the Next Six Months – ORP stated that AY-101 and AZ-102 samples will be taken to again compare the liquid surface and the supernate body.

11.0 SINGLE-SHELL TANK CLOSURE PROGRAM

ORP noted that there was no change in status to the milestones on pages 21 through 24. ORP stated that a meeting was held with Ecology, and it was agreed to split the barriers-related draft change control form into two change control forms. ORP stated that the first change control form should address most of the milestones that are at risk, and the items in the second change control form will need to be negotiated. ORP stated that the first change control form with the new milestone dates is being prepared, and it will be provided to Ecology in the next two weeks. ORP noted that a decision on what the changes will be in the second change control form will be made within a month or two.

Significant Past Accomplishments - ORP noted that construction of the SX evapotranspiration basin was completed, and field work is under way to prep the northern barrier, which should be asphalted in the late June, early July 2018 time frame. The asphaltting takes about two to three weeks. ORP stated that it is in the process of getting a proposal from WRPS for the expansion barrier, which would probably be asphalted in the October 2018 time frame. ORP stated that meetings were recently held with Ecology to discuss the barrier coverage for TX Farm, and agreement was reached on a three-panel design. ORP indicated agreement was reached with Ecology to expand the southwest panel to cover a suspected uranium plume.

12.0 SINGLE SHELL TANK RETRIEVAL PROGRAM

(See discussion under CD section 3.0).

13.0 TANK OPERATIONS CONTRACT OVERVIEW

ORP reported that the schedule and cost performance index for base operations (5.01) are within the threshold for the month and the contract to date. ORP noted that the biggest unfavorable cost variance was due to an increase of labor and materials associated with the restart of ETF and additional labor costs for tank AX-102 cover block removal.

Ecology referred to first bullet under the unfavorable schedule variance for Waste Feed Delivery/Treatment (5.03) and inquired about the delay being incurred and what the recovery will be. ORP responded that there was not a significant delay, and it is associated with doing the video inspection in tank AP-107. ORP stated that it is not impacting the progress with the upgrades work, and a meeting will be scheduled with Ecology to present the scope of work for the upgrades project.

ORP stated that the \$13.8 million in March 2018, which is highlighted in red under treat waste (5.5), was a point adjustment associated with a baseline change request (BCR) that was approved. The BCR removed the scope of work associated with the previous LAWPS design that was paused and then moved forward with LAWPS south. ORP stated that the scope of work was unperformed activities, and it reflected an inaccurate status of the baseline. ORP stated that the unfavorable cost variance continued to be the inefficiency with transitioning from the previous non-elutable design to the current non-elutable design. ORP noted that this variance should not be reflected as the project moves forward. Ecology asked if the high labor cost of the architect engineer was due to the changes in the non-elutable design. ORP responded that the costs were associated with AECOM's estimates that were lower than what was needed. ORP noted that a subcontractor is not allowed to do a baseline change request to revise estimates and be provided additional funds.

CONSENT DECREE MONTHLY SUMMARY REPORT REVIEW

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

ORP noted that there was a discussion during the tank farms' portion of today's meeting regarding the availability of the Consent Decree (CD) report and moving the meeting to allow time for the CD report to be reviewed. ORP is continuing to follow up with the logistics of moving the meeting, and noted that there are challenges with ensuring the CD would be available for a proposed new meeting date. ORP also noted that Ecology will not be available for the June 20, 2018 PMM, and alternative dates will be proposed for the PMM.

Ecology initiated a discussion regarding the CD quarterly report. Ecology stated that the report contains a significant amount of information, and it requested an action to schedule a meeting with ORP that would allow time for an in-depth discussion. Ecology stated that the questions/discussions will be facility-specific and related to schedule and quality, and will also pertain to the DOE/Bechtel letter exchanges that are referred to in the last CD quarterly report. ORP requested that Ecology send an email with an outline of the subjects for discussion to ensure staff are available during the meeting to answer questions.

ORP Action: *ORP to schedule a meeting with Ecology to discuss information in the last CD quarterly report.*

(See Agreements, Issues and Action Items Table):

Action No. 1 (WTP-15-01-01)

This action was closed on 4/19/18, and it will be removed from the action table.

Action No. 2 (WTP-17-08-01)

This action was closed on 4/19/18, and it will be removed from the action table.

Action No. 3 (WTP-17-10-01)

ORP reported that the maintenance plan is in the process of being approved, and a copy will be sent to Ecology as soon as it has been approved. This action remains open.

Action No. 4 (WTP-18-04-01)

ORP reported that there was a signing ceremony today for the LAW DSA. ORP will set up a briefing with Ecology on the DSA. This action remains open.

2.0 SPARE REBOILER REQUIREMENT STATUS

ORP stated that the spare reboiler was delivered to the site ahead of schedule, and it is sitting in the 2101-M warehouse. ORP noted that the due date for delivery of the spare reboiler is December 2018.

3.0 SINGLE-SHELL TANK RETRIEVAL PROGRAM

Significant Past Accomplishments - ORP reported that procurement is under way for replacement of the self-contained breathing apparatus (SCBA) assemblies. There have been a number of stop-works in the last few months related to the SCBA assemblies, and one of the factory representatives was brought out to go through the SCBAs. The decision was made to replace all of the SCBAs purchased before 1998, which has been impacting work with the shortage of SCBAs, but the issue should be resolved in the next couple of months. ORP stated that there were a number of problems with the SCBA assemblies that required too much maintenance. ORP noted that there were 250 SCBA assemblies in service before the 1998 time frame, and a total of 450 SCBA assemblies have been ordered.

Ongoing Activities – ORP stated that the caustic and water system piping from the A-285 Building to the AX Farm are being installed. ORP noted that some of the piping is above-ground on stanchions, and some of it is placed underground in areas where access is needed for the crew, trucks and cranes. ORP stated that isolation of the A Farm ventilation ducts is under way, and isolation of all six of the ventilation ducts should be completed by the end of this month.

Significant Planned Activities in the Next Six Months – ORP stated that planning is under way to remove three pumps from AX-102 and AX-104. ORP stated that the effort to pull some of the pumps is being held up due to the degradation of materials inside the tank, and the engineering analysis continues on the approach to pulling out the pumps. ORP noted that a video inspection was done, and the bolts anchoring and tying the pump to the flanges looked undersized, so the strength of the bolts is being evaluated.

ORP stated that Ecology should be receiving a draft C-105 retrieval completion certification report within a week. ORP noted that 23 hydraulic power units and 27 electrical skids will be removed from C Farm. ORP stated that the hydraulic power units were used to power pumps and sluicers, and are being drained of oil and removed from the farm.

Issues – ORP noted that the SCBA issue was already discussed. ORP stated that removal of some of the long-length equipment has been impacted by winds.

4.0 TANK WASTE RETRIEVAL WORK PLAN STATUS

ORP stated that 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 stated that the EVMS for March 2018 followed the same trends as most of the year. ORP noted that the main causes related to the schedule performance were discussed, and it is expected to recover during the summer and early fall months.

6.0 WASTE TREATMENT AND IMMOBILIZATION PLANT PROJECT

ORP provided an overview of the schedule and cost performance for the month of March 2018. ORP noted that the WTP has been carrying an unfavorable schedule variance for several months, and much of it is related to the restructuring and replanning for some of the work. There have

been schedule delays associated with the Effluent Management Facility (EMF) plant equipment and with procurements. ORP noted that one of the biggest challenges with EMF is procurement of bolts, pipes and valves and receiving them in a timely manner to allow buildout to continue or be completed. ORP stated that with construction, one of the main drivers for the unfavorable schedule variance is the excavation and installation of the waste transfer line piping. ORP noted that a large amount of the waste transfer piping has been received and staged around the site, but the work scope has been delayed to allow access in front of the areas of EMF to complete work with cranes and other equipment. ORP stated that the schedule variance will continue to be carried until the waste transfer piping work scope is reconciled through a baseline change proposal. ORP noted that part of the schedule variance is associated with procurement of the piping, which has been received, which will decrease the schedule variance somewhat moving forward.

Ecology expressed appreciation with the discussion regarding the variances, noting that it will be one of the topics for discussion of the CD quarterly report during the meeting to be scheduled as the new action item. Ecology pointed out that there is a baseline for LAW, BOF and LAB (LBL) and an internal forecast for HLW and PT, which makes it difficult to understand how all the schedules are being integrated. Ecology stated that schedule integration and the plans for moving forward in a holistic manner will also be topics for discussion during the upcoming meeting with ORP. ORP responded that currently the contract and the EVMS performance is based on LBL and everything needed to support Direct Feed LAW (DFLAW). ORP added that while HLW and PT are being tracked and planning is starting for those two facilities, the reporting from an EVMS perspective is for LBL.

ORP stated that another key driver for the unfavorable schedule variance was purchasing less diesel fuel than planned, due to a later startup time for PT and not needing to run the boilers. ORP stated that this is the window for bringing in a large amount of diesel fuel, and a baseline change proposal was processed that reflected about a \$10 million difference. ORP noted that the reduced amount of diesel fuel being purchased will contribute to the negative schedule variance for the next couple of months.

ORP stated that there was a slight positive cost variance for the month of March 2018, which is partly driven by the need for less support services than planned. Ecology noted that many of the variances are not associated with work not getting done, but it has to do with support service or equipment that's brought in early or late. ORP agreed with Ecology, adding that when there are opportunities to find efficiencies or improving the approach to an activity, it results in cost and schedule variances. ORP stated that until the efforts that started in September 2017 are reconciled and go through the change control process, the variances will continue.

7.0 PRETREATMENT FACILITY

ORP stated that technical issue resolution is nearing completion, and the anticipation is that the paperwork for the pulse jet mixing issue (T4) and structural integrity (T7) will be completed by the end of this month. ORP noted that the reports will be sent to the Defense Nuclear Facilities Safety Board (DNFSB) for review and comment, and T4 and T7 could stay open for several months while the DNFSB goes through its process. ORP stated that the committee that was set up to review all of Bechtel's documents for erosion/corrosion (T5) is expected to complete its review in June 2018. Ecology asked if Bechtel has issued the update to the test basis document

for T5, noting that it originally was planned for release in April 2018. ORP responded that it would follow up with Ecology's inquiry regarding the update to the test basis document for T5. Ecology added that it would need a copy of the updated test basis document for T5 when it's available.

ORP stated that preservation and maintenance of the PT facility continues on a routine basis.

ORP stated that demobilization of the onsite test facility is being planned with WSU, and the facility will be returned WSU.

8.0 HIGH-LEVEL WASTE FACILITY

ORP reported that \$75 million for FY 2018 was recently allocated to HLW. ORP noted that the funding was received halfway through the fiscal year, and it is too late to effectively plan work for FY18. ORP also noted that funding for FY 2019 is uncertain, which poses limitations on planning or hiring new staff. ORP added that the plan is to utilize LBL staff for HLW as the work scope is completed in the LBL facilities. ORP stated that about \$20 to \$22 million of the \$75 million will be used during this fiscal year, and the rest of the money will be carried over into FY19.

Ecology asked if Bechtel has provided a plan for the \$75 million. ORP responded that Bechtel has provided a high-level plan and is developing a detailed plan. ORP stated that as a top priority, Bechtel plans to incorporate the safety basis into the system design descriptions (SDS), which will restart the production engineering. ORP stated that another area that the additional funding will be used for is the rebaselining effort, which was put on hold when the DFLAW effort became a funding priority.

ORP reported that the draft report was provided by the U.S. Army Corps of Engineers (USACE) regarding its independent evaluation on the impacts to meeting the CD milestones if activities associated with PT and HLW are slowed for three years. ORP stated that management reviewed and provided several comments, and initially the report was to be completed in May 2018. The time frame for completing the report has moved to July 2018, due to USACE subcontractors not being available to work on the report until June 2018. ORP estimated that the report would be available for Ecology to review in the August 2018 time frame. ORP noted that the USACE subcontractors moved to another project while ORP management was reviewing the report.

ORP stated that fabrication of the RLD-7 and RLD-8 vessel continues, and delivery of the vessels is anticipated by the end of this year.

ORP noted that preservation and maintenance activities continue in HLW.

Ecology inquired about the March 2018 workshop regarding options for advancing HLW. ORP responded that there were several different options presented during the workshop, which are being evaluated and will be discussed with DOE-Headquarters. ***ORP stated that it would follow up with Ecology's inquiry regarding the options for advancing HLW.*** Ecology pointed out that it has a vested interest, in terms of permitting and oversight, with understanding the path forward for HLW. Ecology added that the decisions for HLW will affect engineering, procurement, construction and permitting, and Ecology has a need to understand those decisions as soon as they can be shared. ORP acknowledged Ecology's comments, and noted that the first priority is

with DFLAW, followed by restarting HLW as the second priority, with PT being a distant third priority. Ecology agreed that most of the priorities are sequential in nature, but noted that some of the activities will be concurrent, which is why an understanding is needed about what is being planned and what the timing will be.

Ecology inquired about the test bed initiative. ORP responded that the test bed initiative is separate from the WTP project.

9.0 LOW-ACTIVITY WASTE FACILITY

ORP reported that there is construction activity occurring in LAW, but there are also several walk-downs and systems being turned over to the startup organization.

ORP reported that efforts continue to validate Bechtel's declaration that it has completed the A-5 contract milestone for construction. ORP noted that the milestone represents a significant amount of construction, but it has several exclusions and differentiates from the CD construction substantially complete milestone, which will incorporate the changes from the Documented Safety Analysis (DSA). ORP stated that June 28, 2018 is the target date for approval of the A-5 milestone in which Bechtel would receive the full milestone fee. ORP stated that the validation team has been going through the A-5 paperwork and conducting inspections since last month. ORP noted that the team has selected samples from the paperwork for the inspections.

ORP stated that the A-5 milestone validation team has raised some quality issues, including issues with the structural steel, and Bechtel will need to provide more verification or do more work to verify the quality. Ecology expressed appreciation to ORP for discussing Bechtel's issues with quality and schedules. Ecology indicated its skepticism about Bechtel meeting particular dates, noting that Bechtel has not provided the logic or shown good performance metrics for its revised schedule dates. Ecology stated that Bechtel's schedules would be a topic for discussion during the meeting that will be scheduled with ORP as an action item. ORP agreed with Ecology's concern regarding Bechtel's rationale for recovering schedule. ORP added that Bechtel has been incorporating ORP's comments into the schedule, and it has shown improvement, but it will be another month or two month before there may be an acceptable schedule. ORP stated that currently Bechtel is seven to eight months behind the contract milestone date of January 2022 for commissioning of the DFLAW facility.

Ecology reiterated that the changes in schedule affect Ecology's ability in terms of permitting and oversight, and it is difficult to understand and plan as the schedules ebb and flow. ORP pointed out that the January 2022 date is not a hard date, but it is in the middle of a band of time in the structured incentive milestone fees where Bechtel would not received any extra or lose any fees. ORP added that it has been pushing Bechtel for improved schedule transparency and performance, which has not been the case with their past performance, and there has been an improvement with Bechtel's willingness to acknowledge that the critical path is behind schedule. ORP noted that when the critical path is shown as behind schedule, it will reflect a negative schedule variance and point to where the effort needs to be focused. Ecology stated that the community needs to understand it is not Ecology's job to accommodate and make up for any critical path that is behind schedule.

ORP noted that the CD milestone for hot commissioning is December 2023, and there is no indication the milestone will be impacted, but the goal has been to target an earlier date for meeting the December 2022 CD milestone for cold commissioning.

Ecology shifted back to the subject of quality and schedule, and asked if ORP is involved with all the decisions on accepting supply remediation requests that impact the long-term operability and maintainability of the facility. ORP responded that every SGD is not reviewed, but assessments are done in different areas and findings are sent to Bechtel to come up with a corrective action plan. ORP added that if the finding is significant, Bechtel would be required to do an extent of condition review. ORP noted that the assessment of the structural steel quality was that the issue was not as significant as originally documented. ORP added that Bechtel has a process through their routine QA inspection that any staff can submit a condition report (CR). ORP stated that the process has been effective and allowed engineers, construction or nuclear safety staff to submit a CR. ORP noted that a significant number of CRs have been written and submitted, which have to go through a formal logging, tracking and closure process.

Ecology asked about the overall impact regarding the power supply for the melters that was removed. ORP noted that the power supply for the melters is not a critical path, but it is for the gas analyzer. *ORP agreed to follow up with Ecology's request and respond via email.*

10.0 BALANCE OF FACILITIES

ORP stated that the Balance of Facilities (BOF) continues to progress, and that 45 of 56 systems have been turned over from construction to the startup organization. The electrical distribution system has been started up and is running, the water systems are progressing, and the drain system is in operational control. ORP stated that the water treatment facility has completed all of its functional testing and will be transitioning to the operations group within the next few weeks. The next big step will be to take the cooling tower through its functional test. ORP noted that a leak was detected in a valve in the underground piping for the low point drain, and some excavation will be needed near the PT facility where the drain is located to explore the cause of the leak.

ORP stated that there has been an intense focus on the chiller compressor plant and the steam plant, which are the two most complicated BOF facilities. ORP noted that all of the systems for the chiller compressor plant have been turned over to the startup group. The steam plant will start turning over its systems within the next two months to the startup group.

ORP reported that equipment package No. 2 has been approved, which is a positive step forward. Ecology stated that the approval letter for the package will be issued today, with an effective date of June 17, 2018.

Ecology referred to an issue in the CD quarterly report that states: Continued delays during BOF system completion and turnover to startup, as described below, impacting the project schedule. Ecology asked if ORP has a specific recovery plan to address the schedule impacts. ORP responded that there are plans to address schedule impacts, and noted that the issue Ecology is referring to has been in the CD quarterly report since the report started being issued. ORP stated that most of the buildings in BOF were built five to ten years ago, and the equipment in the buildings have been maintained, but the maintenance plan was for a piece of equipment that has

an operating life of three to five years. ORP cited an example of switch gear buildings 87 and 91 where the switch gear had been maintained, but all of the major breakers had to be rebuilt. ORP noted that those types of issues impact the schedule.

ORP stated that when the startup testing with the non-liquid drain (NLD) in the water treatment building needed a power source, permanent power was not available from Buildings 87 and 91. ORP pointed out that the site temporary power was brought in and has been used through construction, which made up for the lag in getting permanent power from Building 87 to Building 91 and then out to all of the BOF facilities.

ORP stated that the intent is to ensure there is a plan B as issues are encountered during the startup testing sequence. Ecology stated that a topic of discussion during the meeting that will be scheduled to discuss the CD quarterly report will not only be the plan B, but the attempts at recovery and mitigation and elimination of the problems moving forward. ORP responded that what Ecology is describing has been discussed during the PMMs for the past year and a half, and more specifics about every step taken can be provided during the upcoming meeting. Ecology asked if these types of details are included in the maintenance plan. ORP responded that they are not in the maintenance plan, and this discussion pertains to startup testing.

Oregon Department of Energy (ODOE) inquired about the scale of replacement parts and the associated budget regarding equipment that has been sitting for several years. ORP responded that \$26.1 million is included in Bechtel's contract as their responsibility for aging and obsolescence. ORP noted that most of the pumps in almost every building have been sent off for refurbishment, which goes against the \$26.1 million, and less than \$10 million has been used. ORP added that the majority of BOF has gone through startup testing, although upgrading or repairing a boiler or a chiller set would be a major procurement against the \$26.1 million. ORP stated that there is additional contingency built into its budget, and obsolete equipment has been recognized and carried in the risk program.

ORP reported that the second lift walls of the Effluent Management Facility (EMF) have been completed, which represents all of the structural concrete for EMF. The second lift wall has also been completed for the low point drain facility, and the ring beam for the low point drain tank is in the process of being placed. ORP provided two photos of the EMF evaporator and the low point drain tank, which have been delivered to the site. ORP noted that a tower will be built to house the evaporator. ORP stated that the low point drain tank that was received is the first of the AL6XN tanks, and it will be installed when the ring beam and the topping slab are in place and the permit is approved.

ORP stated that several vessels will be delivered to the site in the upcoming months, including the large vessels in storage at the fabricator that will go to LERF/ETF. The plan is to set up a vessel placement campaign toward the end of this year, and the focus is to install or set in place piping and other commodities in lower levels. ORP noted that once a vessel is set in place, it will create a two-level work area that will reduce the efficiency of installing commodities due to worker safety issues.

11.0 ANALYTICAL LABORATORY

ORP reported that walk-downs are under way in the Analytical Laboratory (LAB), and systems are being turned over to the startup organization. The low voltage electrical has been energized, and blow-downs of all the air systems have been completed using the pressurized PSA lines. The startup process is under way for all of the mechanical systems within the LAB building, and 16 of 30 systems have been turned over to the startup organization for testing.

ORP stated that the offsite lab space has been leased from Columbia Basin College (CBC), where the methods development and analytical work is being done prior to installing the analytical equipment in the LAB. ORP noted that no new methods will be developed for the LAB. The offsite lab staff will be looking at the overall flow of an analysis that needs to be done to support the process and identifying the number of samples needed for each type of verification step that is required. The staff will also ensure the proper sizing of the equipment, and that the equipment that has been selected will provide the information that is needed. Based on those results, the procurement process will be started for the final equipment to be installed in the LAB. ORP stated that one of the final steps in the LAB will be installment of the equipment, followed by certification of the equipment to support startup of WTP.

ORP noted that the main mechanical systems in the LAB are the autosampling system (ASX) and the ventilation systems (C1, C3 and C5). The three-week walk-down of the C5 ventilation system was completed, and the final turnover package for the C5 ventilation system is anticipated within the next month and a half.

Ecology asked what the project's plan is to keep all of the systems running and functional during the time delay between completion of a walk-down and startup. ORP responded that most of that area falls under the maintenance plan. ORP explained that during the eight-week walk down, verification is done that all the work has been completed, and a list is generated of A and B items that have to be done. ORP stated that the A items have to be done before turnover, the B items are usually done before turnover, and another handful of items can be done during the startup time frame.

ORP stated that at that point, the construction organization will transition custody to the startup organization. The startup organization will conduct startup testing, which culminates with the functional testing. ORP noted that when functional testing is completed, it represents testing of all the equipment and verification that it is functioning as intended. The next step is to transition to plant management, which handles the overall plant commissioning and operations group. ORP stated that throughout all this time, most of the BOF will be operating, albeit at a reduced capacity, and few components will be sitting. ORP noted that the LAB systems will be sitting, but they will be in a maintenance period.

ORP stated that there will be integrated plant operations during commissioning, and another phase of testing will be done to ensure all the equipment is working. ORP noted that the maintenance plan dovetails with the spare parts plan during this time. ORP added that there is also a replacement program that comes into play when identifying the need for a spare part or if it is obsolete. ODOE asked how much of the equipment in LAB would be considered one of a kind. ORP responded that very little equipment falls into that category, but there are a few pieces of equipment that were specifically engineered and backups are now being obtained.

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

#	Action ID Start Date	Action	Updates / Needs for Closure	Actionee(s)	Status/ Date Closed
1	WTP-15-01-01 1/22/15	Ecology is requesting a summary briefing in February 2018 as soon as the testing results are available. Discussion will include path forward. (12/20/17) Ecology requests a presentation on standardized high-solids vessel design (SHSVD) to include impacts and optimization in planning area 2, 3, and 4 and DNFSB issues	Conceptual design study from Bechtel is expected around Sept 2018 Ecology is requesting a summary briefing in February 2018 as soon as the testing results are available. Discussion will include path forward. (12/20/17) T5 is delayed and under evaluation by an independent team. ORP expects to receive comments in April. Meeting will be rescheduled until T5 information is available. (03/14/18)	Wahed Abdul	Closed 04/19/18
2	WTP-17-08-01 8/17/17	Ecology requests ORP to set up a meeting to discuss how the margins were developed for the T5 corrosion report.	Plan for a meeting in February. T5 is delayed. Meeting will be postponed if necessary until T5 information is available. (01/18/18) See above for update	Wahed Abdul	Closed 04/19/18
3	WTP-17-10-01 10/19/17	ORP to provide Ecology a copy of the maintenance plan	Overall long-term maintenance plan not approved by DOE yet. Waiting for final long-term preservation plan (pending internal legal review). Maintenance (what needs to be done) vs Preservation mode (why it needs to be done) (03/14/18)	Wahed Abdul	Open
4	WTP-18-04-01 04/19/18	Schedule early June DSA/TSR comprehensive briefing for LAW Facility. Ecology engineering shall be included.		Wahed Abdul	Open


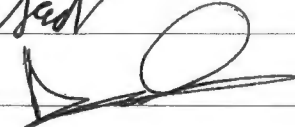
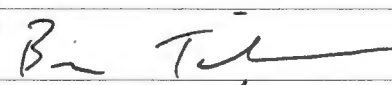
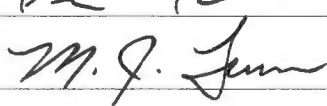
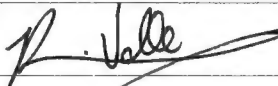


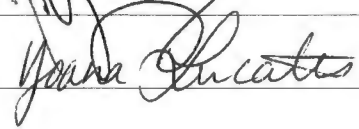
ORP/Ecology TPA and CD Agreements, Issues, and Action Items –May 2018

#	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. (3/14/2018)	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	In clearance process Has been released to SmartPlant for internal review. Expect to be released for public soon (3/14/2018)	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. (3/14/2018)	Paul Hernandez	Open
4	TF-17-09-01 9-20-17	ORP and Ecology will meet to discuss appropriate venue for requests related to DSTs	TBD. Discussion will be added to either the TPA or the permitting meeting.	Bryan Trimmerger	Closed 04/19/18
5	TF-18-11-3 12-1-17	ECY requests ORP to meet on HNF-3484 Double Shell Tank Pumping Guide		Jeremy Johnson	Open
6	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.		Jeremy Johnson	Open
7	TF-18-03-01 03-14-18	Ecology requests that the design documents clarify the barriers descriptively e.g . north, south and or expansion vs only referencing the barriers as 1, 2, 3, or 4.	Jan will ensure that this happens in future updates. Currently Barrier 1 is SX South Barrier, Barrier 2 is SX North Barrier, Barrier 3 is TX Farm, and Barrier 4 is U farm. The Expansion Barrier at SX Farm does not have a number associated with it.	Jan Bovier	Closed 04/19/18
8	TF-18-03-02 03-14-18	CD SST retrieval section EVMS (March report page 12) discusses SX Tank Farm	Work crews are currently excavating for the diversion box and piping for the	Jan Bovier	Closed 04/19/18

May 17, 2018
Office of River Protection
Tri Party Agreement Consent Decree Monthly Meeting

PRINT NAME	SIGN NAME	ORG
Abdul, Wahed	<i>Wahed Abdul</i>	ORP
Alzheimer, Jim	<i>James Alzheimer</i>	ECY
Barnes, Mike		ECY
Beehler, Steve	<i>Beehler</i>	ORP
Bovier, Jan	<i>Jan Bovier</i>	ORP
Brasher, Stephanie		MSA
Brown, Dennis		ORP
Burnett, Kaylin		ORP
Cameron, Craig		EPA
Cimon, Shelley	<i>Shelley Cimon</i>	OR State
Curn, Barry		BNI
Decker, Jay	<i>J Decker</i>	ECY
Diediker, Janet	<i>Janet Diediker</i>	ORP
Doughty, John	<i>JD</i>	WRPS
^{gone} Eakins, Reggie Jr		ORP
Einan, Dave	<i>Einan</i>	EPA
Evans, Rana	<i>R Evens</i>	ORP
Fletcher, Tom		ORP
Gao, Tracy		ECY
Grindstaff, Joni		ORP
Hall, Katie		ECY
Hernandez, Paul	<i>Paul Hernandez</i>	ORP
Jeremy, Johnson	<i>Jeremy Johnson</i>	ORP

May 17, 2018
Office of River Protection
Tri Party Agreement Consent Decree Monthly Meeting

PRINT NAME	SIGN NAME	ORG
Serafin, Shane		ORP
Skorska, Maria		ECY
Smith, Alex		ECY
Smith, Sahid		ORP
Stewart, Dustin		ORP
Trenchard, Glyn		ORP
Trimberger, Bryan		ORP
Turner, Michael		MSA
Turner, Vanessa		ORP
Utley, Randell		DOH
Valle, Richard		ORP
Van Mason, Eric		WRPS
Walmsley, Mign		ECY
Wang, Oliver S		ECY
Whalen, Cheryl		ECY
Whitelely, Craig		ORP
Wold, Kristi		ECY
Young, Jason		ORP
Lucateno, Yoana		ECY