

***Office of River Protection
Tri-Party Agreement Project Managers Meeting Minutes***

June 6, 2019

2440 Stevens Center
Richland, Washington

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CONCURRENCE SIGNATURES

The undersigned TPA Project Managers (or their delegates) indicate by their signatures that these meeting minutes reflect the actual occurrences of the above-dated Tri-Party Agreement Project Managers' Meeting.



Wahed Abdul, DOE-ORP

Date: 7/10/19



Kaylin Burnett, DOE-ORP

Date: 7/11/19



Janet Diediker, DOE-ORP

Date: 7/19/19



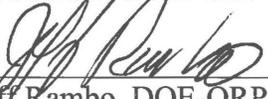
Paul Hernandez, DOE-ORP

Date: 7/17/19



Rod Lobos, DOE-ORP

Date: 7/23/19



Jeff Rambo, DOE-ORP

Date: 7/22/2019



Sahid Smith, DOE-ORP

Date: 7/22/2019



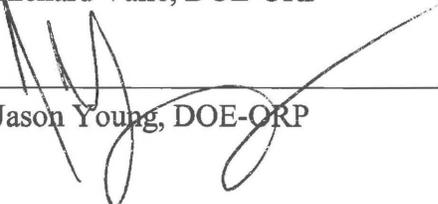
Dustin Stewart, DOE-ORP

Date: 7/18/19



Richard Valle, DOE-ORP

Date: 7/18/2019

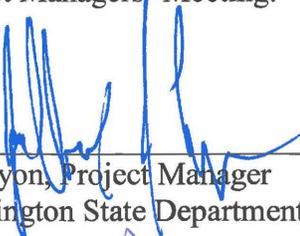


Jason Young, DOE-ORP

Date: 7/10/19

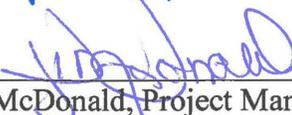
CONCURRENCE SIGNATURES (continued)

The undersigned TPA Project Managers (or their delegates) indicate by their signatures that these meeting minutes reflect the actual occurrences of the above-dated Tri-Party Agreement Project Managers' Meeting.



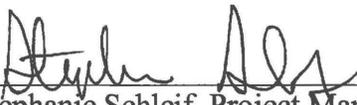
Jeff Lyon, Project Manager
Washington State Department of Ecology

Date: 7/23/19



Dan McDonald, Project Manager
Washington State Department of Ecology

Date: 7-29-19



Stephanie Schleif, Project Manager
Washington State Department of Ecology

Date: 7/25/19

TERMS

BBI	Best Basis Inventory
BOF	Balance of Facilities
CD	Consent Decree
CD-3B	critical decision
CERCLA	<i>Comprehensive Environmental Response, Compensation and Liability Act</i>
DFLAW	direct feed low-activity waste
DOE	U. S. Department of Energy
DST	double-shell tank
Ecology	Washington State Department of Ecology
EIS	Environmental Impact Statement
EM-1	DOE Office of Environmental Management, Assistant Secretary
EMF	Effluent Management Facility
EPA	U.S. Environmental Protection Agency
ERSS	Extended Reach Sluicer System
ETF	Effluent Treatment Facility
EVMS	earned value management system
FY	fiscal year
IAMIT	Inter-agency Management Integration Team
IMUST	Inactive Miscellaneous Underground Storage Tanks
IQRPE	Independent Qualified Registered Professional Engineer
LAW	Low-activity waste
LBL	LAW Facility, Balance of Facilities and Lab
LERF	Liquid Effluent Retention Facility
MUST	Miscellaneous Underground Storage Tank
ORP	U. S. Department of Energy, Office of River Protection
PA	Performance Assessment
PMM	project manager meeting
POC	Point of contact
PT	Pretreatment
RAD	Radiation absorbed dose
RCRA	<i>Resource Conservation and Recovery Act</i>
SST	single-shell tank
TC&WM	Tank Closure and Waste Management
TPA	Tri-Party Agreement
TSCR	tank-side cesium removal
TWRWP	tank waste retrieval work plan
UT	Ultrasonic Test
WMA-C	Waste Management Area C
WRPS	Washington River Protection Solutions LLC
WTP	Waste Treatment and Immobilization Plant

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TRI-PARTY AGREEMENT MONTHLY REPORT

1.0 ADMINISTRATIVE ITEMS/MILESTONE STATUS

Upcoming Meetings

The next Department of Energy-Office of River Protection (ORP) Tri-Party Agreement Project Managers' meeting is scheduled for July 4, 2019, which is a holiday. ORP suggested and the Washington State Department of Ecology (Ecology) agreed that the meeting could be cancelled due to the holiday. The next meeting is scheduled for August 1, 2019 at 2440 Stevens Center.

Recent Items Entered Into the Hanford Administrative Record

The Office of River Protection Tri-Party Agreement and Consent Decree monthly reports for the period of April 1 - April 30, 2019, were entered on May 29, 2019.

Tri-Party Agreement Milestone Status

ORP stated all Tri-Party Agreement (TPA) milestones reported on were either On Schedule or In Abeyance (see pages 3-5 of the April 2019 ORP TPA Monthly Report).

Tri-Party Agreement Issues and Action Items

For reference, see attached, "ORP/Ecology TPA and CD Agreements, Issues and Action Items – June 6, 2019."

Action No. 1 (TF-16-11-04): ORP noted there was no change in status. Action remains On Hold.

Action No. 2 (TF-18-07-01): Ecology stated they are resolving the final comments on the Feasibility Study, which is required as part of the Interim Record of Decision (IROD) for Operable Unit 200-BP-5. Ecology anticipates going out with a proposed plan for public comment in the fall and will have the IROD issued by the spring of 2020. ORP requested this information be shared with all the Ecology staff. Action remains Open.

Action No. 3 (TF-18-10-01): ORP noted a meeting was held on May 20, 2019 with Ecology. From this meeting, there were some follow-on actions to provide Ecology with the factory acceptance test plan that outlines the method for extracting the crystalline silicotitanate (CST) from the ion exchange column. ORP will set up meetings with Ecology to observe the testing. ORP proposed and Ecology agreed to close this action and replace it with new actions. The new action will be for ORP to provide Ecology with the factory acceptance test plan, which outlines the testing methodology for extracting the CST and invite Ecology to observe the testing. This item is Closed.

Action No. 4 (TF-18-10-02): ORP stated this issue is currently in dispute resolution at the Inter-agency Management Integration Team (IAMIT) level. ORP suggested and Ecology agreed to leave this action open. Action remains Open.

Action No. 5 (TF-19-01-01): ORP stated this action was closed last month and will be removed from the list.

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Action No. 6 (TF-19-01-02): ORP stated this action was closed last month and will be removed from the list.

Action No. 7 (TF-19-04-01): ORP stated the list of Inactive Miscellaneous Underground Storage Tanks is not yet complete and they will furnish the list to Ecology and State of Oregon when it is available. ORP noted the list will not be done complete until end of the fiscal year (FY). Action remains Open.

Action No. 8 (TF-19-04-02): ORP noted the reports are still pending and will not be done until the end of the FY. Action remains Open.

Action No. 9 (TF-19-04-03): ORP stated this action will require Ecology to reach out to the U.S. Environmental Protection Agency (EPA) for engagement. Ecology agreed. Action remains Open.

2.0 SYSTEM PLAN

ORP reported TPA negotiations on System Plan, Rev. 8 are ongoing, with negotiations scheduled to continue until June 14, 2019.

ORP noted scenario-development discussions are ongoing for System Plan, Rev. 9. ORP has completed their scenario and Ecology is working on theirs. The letter identifying the scenarios is due at the end of October and ORP is On Schedule to meet the due date.

3.0 ACQUISITION OF NEW FACILITIES

ORP reported there has been no change in this activity and all milestones continue In Abeyance.

4.0 SUPPLEMENTAL TREATMENT AND PART B PERMIT APPLICATIONS

ORP reported there has been no change in this activity and all milestones continue In Abeyance.

5.0 TANK-SIDE CESIUM REMOVAL SYSTEM

Significant Past Accomplishments

ORP reported they completed the 60% design review for the ion-exchange column storage pad in April 2019, initiated the 90% design review of the TSCR system in April 2019, and completed the design reviews for the waste feed delivery system, as well as the upgrades associated with the tank farms, specifically in the AP farm, to support the TSCR system in May 2019.

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Significant Planned Actions in the Next Six Months

ORP reported the 90% design review for the tank farm upgrades will be completed in May 2019 and will complete the TSCR system and ion-exchange storage pad reviews in June 2019. ORP will have the following test reports coming out in July:

- Tall column testing,
- Batch contact testing,
- Gas generation testing with ion exchange media, and
- Ion exchange media drying test.

ORP will complete fabrication of the TSCR system in September and initiate the factory acceptance testing in October and invite Ecology to the testing. ORP anticipates the test plans will be available in the September timeframe for Ecology review.

Issues

ORP noted the issues have been the same for the past couple months and there were no changes.

6.0 242-A EVAPORATOR STATUS

Significant Past Accomplishments

ORP reported they received permission from Ecology to perform campaign EC-10 and completed the mechanical seal pressure testing on the PB-1 pump.

Significant Planned Actions in the Next Six Months

ORP reported they will perform a short campaign on EC-10 and the deadline is June 27, 2019, which marks one year since 242-A ran its last campaign. ORP needs to run a campaign by this date to avoid a readiness review process and to maintain proficiency. ORP stated they decided to replace the feed pump in tank AW-102. ORP also noted the new slurry lines and upgrades should be completed by April 2022.

Issues

ORP stated it had provided Ecology with a second round of responses to Ecology's comments on the Independent Qualified Registered Professional Engineer (IQRPE) Integrity Report in April 2019 and did not know if the information provided to Ecology was sufficient. Ecology took the action to provide ORP an update at the next meeting.

7.0 LIQUID EFFLUENT RETENTION FACILITY AND 200 AREA EFFLUENT TREATMENT FACILITY

ORP reported on the Liquid Effluent Retention Facility (LERF) basin volumes for the month ending April 2019. ORP noted they are in the process of preparing for LERF Basin 44 cover replacement. LERF Basin 44 still has a heel remaining in it at 0.70 Mgal.

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ORP noted waste was actively being sent to LERF Basin 43. There were 22 tanker shipments of mixed waste leachate and 2 tanker shipments of the miscellaneous waste streams. ORP believes these leachate values are due to the extraordinarily wet February/March timeframe.

Significant Past Accomplishments

There was no change to the total volume processed at LERF for FY 2019.

ORP noted all the surge pump replacements were completed, and all the remaining fieldwork to support the Effluent Treatment Facility (ETF) Integrity Assessment was completed.

ORP also reported they are in the process of installing a bypass system for the ETF Peroxide Decomposer Vessel (PDV). There are two vessels in this system along with the associated piping and filters. The bypass will be used while the vessels are being replaced as part of the PDV upgrade project in FY 2019.

Ecology asked ORP the purpose of installing the PDV. ORP responded by saying they inject the waste streams with hydrogen peroxide and then expose them to ultraviolet light to destroy the organics. ORP stated they have not had to use the peroxide system but forecast receiving waste from direct feed low-activity waste (DFLAW) with high organics. Therefore, they are upgrading the system to prepare for the DFLAW waste stream.

Significant Planned Actions in the Next Six Months

ORP will begin fieldwork to upgrade facility stairs and ladders to improve personnel safety and ergonomics.

ORP noted they plan to complete work planning on:

- Upgrades to the backup power source for the Treated Effluent Disposal Facility (TEDF) Pump Station #2 to provide a connection for a portable-type generator, as opposed to the previous propane-fueled generator,
- Upgrades to the ETF rough filter and hoist to reduce processing down-time and worker exposure, and
- Repairs to the ETF Verification Tank B to replace the interior protective epoxy coating. Each of the three Verification Tanks will be repaired over the next 3 years (one per FY).

Issues/Other Items

ORP reported in April, while cleaning the ETF Vessel Off-Gas system moisture separator pad, water was seen leaking out of the system housing. The report RPP-OE-58547, *Operability Evaluation for the ETF Vessel Off-Gas Degraded Condition*, was developed and released to determine the extent to which the system should be operated. The report concluded that continued operation of the system was adequate with compensatory measures to mitigate the degraded condition while a permanent repair is evaluated and/or completed.

8.0 TANK SYSTEM UPDATE

8.1 Double-Shell Tank Integrity

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Significant Past Accomplishments

ORP reported the AY-101 comprehensive inspection was done in January 2019. The ultrasonic testing (UT) inspections were done on three tanks: 241-AP-107, 241-AP-108, and 241-AN-102 and air-slot inspections were done on 241-AP-108 and 241-AN-102. ORP also reported completion of the enhanced annulus visual inspections on tanks 241-AN-101 through 241-AN-107 and 241-AZ-102.

Significant Planned Actions in the Next Six Months

ORP reported planned UT inspections for tanks 241-AP-102 (annulus floor only), 241-AN-102 (ongoing), and 241-AP-106 (annulus floor only, air slots inspection).

8.2 Single-Shell Tank Integrity

Significant Past Accomplishments

ORP reported it had completed visual inspections for eight tanks in FY 2019: 241-B-102, 241-B-103, 241-BX-104, 241-B-110, 241-B-111, 241-B-112, 241-SX-114, and 241-U-106.

Significant Planned Actions in the Next Six Months

ORP stated they were working on some new technologies that will help inspect the bottom of the primary tank. ORP reported visual inspections are planned for seven tanks: 241-SX-115, 241-U-101, 241-U-109, 241-T-103, 241-T-108, 241-T-202, and 241-TY-106, as well as three miscellaneous underground storage tanks: catch tank 204-AR-TK-1, 241-A-302-A, and 242-A-302-B.

ORP plans to perform TFC-ENG-CHEM-D-42, *Tank Leak Assessment Process* on tanks 241-T-101 and -103, though it was reported that, as of today's meeting, 241-T-101 was complete and 241-T-103 was near completion.

Issues/Other Items

ORP had no issues to report.

8.3 Independent Qualified Registered Professional Engineer Activities

Double-Shell Tank System

ORP noted no changes from last month's reporting - the inspection report was completed in 2016.

Single-Shell Tank System

ORP stated they are working on a change control form to include a new TPA milestone for the next single-shell tank (SST) IQRPE, as well as additional TPA milestones for other inspection-related schedules and deliverables, and noted the change control form was with Ecology in legal review.

TRI-PARTY AGREEMENT MONTHLY REPORT

242-A Evaporator

ORP noted the action Ecology has to provide ORP the status on the IQRPE and in the interim agreed to do the IQRPE assessment every 10 years – as is already stated in the *Resource Conservation and Recovery Act* (RCRA) permit.

ETF

ORP stated they continue to work with the IQRPE and is expecting a final report by the end of September 2019.

219-S Tank System

ORP stated fieldwork is still ongoing and anticipates the final report by the end of the calendar year (December 2019).

Issues/Other Items

ORP noted no changes from last month's reporting.

9.0 IN-TANK CHARACTERIZATION AND SUMMARY

9.1 Reports Completed or Released

ORP noted three reports were completed in April 2019 (the reporting period) and one report was released (see April TPA monthly report for list).

9.2 Tank Sampling

Significant Past Accomplishments

ORP reported grab sampling was completed on tank 241-AW-103 and samples were sent to be analyzed.

Significant Planned Actions in the Next Six Months

ORP highlighted the planned core sampling of tank 241-AY-101, noting a core sample had not been obtained from that tank in some years. ORP noted the core sampling may be pushed out to early July, after the fourth of July holiday, due to available resources. ORP also noted that it had provided Ecology the Sampling and Analysis Plan for this activity.

9.3 Best-Basis Inventory Updates

Significant Past Accomplishments

ORP noted there were no Best Basis Inventories (BBI) done in April.

Significant Planned Actions in the Next Six Months

ORP reported there are seven BBIs scheduled to be completed in May.

10.0 SINGLE-SHELL TANK CLOSURE PROGRAM

TRI-PARTY AGREEMENT MONTHLY REPORT

Milestone Update

ORP highlighted that construction was completed on the expansion barrier in the 241-SX farm. ORP will be working with Ecology to document milestone M-045-92V being met and DOE will transmit a completion letter to Ecology.

Significant Past Accomplishments

ORP noted no changes from last month's reporting.

Significant Planned Activities in the Next Six Months

ORP noted no changes from last month's reporting.

Issues

ORP noted they are addressing Ecology comments on some documents. ORP indicated one document was the Baseline Risk Assessment for Waste Management Area C (WMA-C). There were four issues that had to be elevated to the IAMIT to resolve and two of the four issues have been resolved thus far and they were awaiting resolution of the remaining two issues.

ORP also noted they are working on the Tier 1, 2, and 3 Closure Plans for WMA-C. The Tier 3 closure plan is almost complete; however, there may be issues in getting the Tier 1 and 2 closure plans completed. For example, one of the issues still outstanding that will aid ORP with the Tier 1 and 2 closure plans, is Ecology's approval of the Clean Closure Practicality Demonstration for the Single-Shell Tanks (DOE/ORP-2014-02).

ORP reported the dispute regarding the denial of request for waiver for TPA Waste Retrieval Criteria for SST 241-C-106 is still at the IAMIT level for resolution.

Ecology asked about the Grout Testing Program and stated there is a Washington Administrative Code (WAC) requirement to have the engineering studies Professional Engineer (PE) certified and included in the Permit eventually. ORP asked that Ecology provide the WAC citation so they can get it captured. Ecology took the action to provide the citation.

11.0 SINGLE-SHELL TANK RETRIEVAL PROGRAM

ORP reported on milestone M-045-86 – the tank 241-C-105 retrieval data report is On Schedule and should be completed in June 2019.

Significant Past Accomplishments

Refer to the Consent Decree (page 9) section of these meeting minutes.

Significant Planned Activities in the Next Six Months

Refer to the Consent Decree (page 9) section of these meeting minutes.

Issues

Refer to the Consent Decree (page 10) section of these meeting minutes.

TRI-PARTY AGREEMENT MONTHLY REPORT

12.0 TANK OPERATIONS CONTRACT OVERVIEW

ORP noted the numbers for February and March were impacted due to adverse weather and there should be a significant increase in work in April and May, which will be reflected in the numbers when they come in. The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on pages 27-28.

WBS 5.01 - Base Operations

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on pages 29-30.

WBS 5.02 – Retrieve and Close Single-Shell Tanks

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on pages 31-32.

WBS 5.03 - Waste Feed Delivery/Treatment Planning

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on pages 33-34.

WBS 5.05 – Treat Waste

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on pages 35-36.

13.0 ADDITIONAL UPDATES FOR MEETING MINUTES

Ecology stated for the meeting minutes, TPA milestone M-045-84 should be reported as “In Abeyance”, because they believe the milestone is covered in the Agreement in Principle (AIP) for the System Plan negotiations. Ecology further stated that even though the milestone was completed because negotiations were initiated, it is called out in the AIP. ORP responded by saying they would look at it.

Ecology called attention to the last bullet on page 25 of the April 2019 TPA Report, which states: “ORP’s Statement of Dispute suggests that Ecology’s C-106 regulatory waiver denial could cause significant time and cost impacts the tank closures schedules.” Because of this statement, Ecology wanted their position recorded: “Ecology’s position is that Ecology is not preventing ORP from doing anything and is not directing ORP to do anything.” In addition, Ecology wanted to note in the meeting minutes, “Ecology has made an offer to DOE on schedules, including schedules for closure. So I think that addresses the concern here about delays in schedule.”

CONSENT DECREE MONTHLY REPORT

1.0 CONSENT DECREE MILESTONES/ADMINISTRATIVE ACTIONS

Consent Decree Milestones

ORP reported all milestones are either On Schedule or Under Analysis.

Consent Decree Issues and Action Items

For reference, see attached: "ORP/Ecology TPA and CD Agreements, Issues and Action Items."

Action No. 1 (WTP-19-04-01): ORP stated this action was closed last month and will be removed from the list.

2.0 SINGLE-SHELL TANK RETRIEVAL PROGRAM

Consent Decree Milestones

ORP noted no changes from last month's reporting.

Significant Accomplishments during the Prior Month

ORP reported there is a lot of work happening in A and AX Farms.

ORP reported the following:

- Completed Phase II of the AX-102/AX-104 tanks control trailer installation (POR471 and POR498),
- Completed installation of AX-102 electrical backbone,
- Completed installation of AX-102 and AX-104 on dome electrical work, and
- Completed placement of the A Tank Farm ventilation system exhaust manifold and supports.

Ongoing Activities

ORP reported the following:

- Installation of the electrical infrastructure (power and control systems) in the A Tank Farm,
- Field activities for long-length equipment removals at Tank AX-103,
- Direct-push sampling of soil near Tanks A-104 and A-105 (installation of remaining additional borehole),
- High-resolution resistance leak detection monitoring fabrication and installation,
- Installation of A Tank Farm ventilation system,
- Waste retrieval design for A Tank Farm (Tanks 101, 102, 103, and 106), and
- The A-285 Building construction acceptance tests and operational acceptance tests to support Tank AX-102 retrieval operations.

Significant Planned Activities in the Next Month

ORP reported on the following planned activities:

- Complete power up of the AX-102/AX-104 tanks control trailer installation (POR471 and POR498),

CONSENT DECREE MONTHLY REPORT

- Complete installation of the electrical infrastructure (power and control systems) in the AX Tank Farm and begin construction acceptance tests,
- Remove the A-103 riser 2 thermocouple,
- Initiate installation of AX Tank Farm lighting upgrade,
- Complete installation of retrieval equipment at Tank AX-102,
- Initiate integrated construction acceptance test for AX-102 retrieval operations, and
- Complete removal of Tank AX-103 R7C thermocouple (bottom section).

Issues/Other Items

ORP noted no changes from last month's reporting.

3.0 TANK WASTE RETRIEVAL WORK PLAN STATUS

Significant Planned Activities in the Next Month

ORP is modifying RPP-RPT-58933 to update schedule and vapor-monitoring sections. The draft report is being reviewed and finalized.

4.0 RETRIEVE AND CLOSE SINGLE-SHELL TANKS

WBS 5.02 EVMS Data

ORP reported unfavorable cost and schedule variances, primarily due to the February and March adverse weather impacts. However, ORP noted the summer months typically make up for lost time in the field and the months of April and May were much better.

5.0 WASTE TREATMENT AND IMMOBILIZATION PLANT PROJECT

Project Schedule and Cost Variance Performance

ORP reported for March 2019, it had a negative schedule variance of \$11 million dollars, mostly driven by Effluent Management Facility (EMF) construction delays. ORP reported an unfavorable schedule variance mostly due to material delays pushing out EMF steel/vessel platform installation, and weather-related site closures. Schedule was also impacted by an unplanned de-energization at the Low Activity Waste (LAW) Facility. ORP reported an unfavorable cost variance of \$8 million dollars primarily due to weather-related site closures and equipment or component failures requiring additional testing and troubleshooting. ORP also reported the unfavorable cost variance was due to Balance of Facilities (BOF) Plant Management corrective maintenance needed to support startup testing and additional technical issue resolution was higher than planned for the water treatment building, chiller compressor plant, and resolving the water chemistry issues in the BOF water system.

Ecology asked if ORP was maintaining an up-to-date corrective maintenance profile so they know what corrective maintenance needs to be done or what they may need to defer as they get closer to startup. Ecology stated they will continue to ask this question until ORP gets to the point of certification for startup.

CONSENT DECREE MONTHLY REPORT

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on pages 14-16.

6.0 PRETREATMENT FACILITY

ORP reported pretreatment (PT) continues to be focused on technical issue resolution. ORP reported they are almost done, as Bechtel National, Inc. (Bechtel) is working on the last technical issue T4, which should be completed in June. Ecology again requested a comprehensive briefing in the June/July timeframe on all the technical issues to address where the facility stands, what resolution means, and the path forward.

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on page 20.

7.0 HIGH-LEVEL WASTE FACILITY

ORP noted the design phase for the HLW is ahead of schedule and anticipate completing the 60% design review in August 2019.

ORP reported Bechtel completed and issued an engineering study on April 1, 2019, for the HLW Facility hydrogen control strategy in alignment with the safety basis.

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on page 23.

8.0 LOW-ACTIVITY WASTE FACILITY

ORP reported the turnover of 56 of 94 systems from construction to startup.

Ecology asked ORP what the delta was between the baseline and what systems have been turned over to date. ORP took the action to respond to Ecology with the answer.

ORP highlighted receiving the following procurements from vendors:

- Upper steel to support installation of active gas analyzer in room L-0304G,
- Quality-grade level three-way ball valves, and
- Input switchgear breaker for melter power supplies.

ORP reported construction turned over the process and mechanical handling closed circuit television system (PTJ-L-01) to the Startup organization.

ORP noted Bechtel had completed system available for use status for the Process service water (PSW-L-01).

ORP reported Bechtel's Plant Management completed refurbishment of the following systems:

- Plant cooling water system 5 (PCW-L-05), and
- LAW Facility C1 ventilation system (C1V-L-01).

CONSENT DECREE MONTHLY REPORT

ORP also reported the LAW Facility annex control room is staffed 24/7 by Plant Management and Startup organization personnel, enabling the operation of their respective DFLAW/LBL systems.

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on page 27.

9.0 BALANCE OF FACILITIES

ORP reported that as of today's meeting, all 54 BOF systems have been turned over from the Construction to Startup organization. In addition, 28 of 57 systems have been handed over from Startup to Plant Management.

ORP reported construction is focused on installation of the EMF pipe racks between the process building and utility buildings.

ORP reported all six of the vessels (repurposed PT vessels) had been received.

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on page 30.

10.0 ANALYTICAL LABORATORY

ORP noted no changes from last month's reporting.

The earned value data can be viewed in the April 2019 ORP TPA Monthly Report on page 32.

ORP/Ecology TPA and CD Agreements, Issues, and Action Items –June 6, 2019

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. A briefing to senior management will occur if any follow-on actions arise.
3. 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 distribution will occur 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.

Issues:

1. Appendix H step 2b, has not been completed. USDOE have submitted Single-Shell Tank (SST) WMA (Waste Management Area)-C Closure Plans without any indication of the role and participation for Nuclear Regulatory Commission (NRC), or a plan for completing this step.
2. Appendix I – USDOE has presented an inaccurate process for closure of the Tank Farms, and of WMA-C. Appendix I has defined the expectations of the Tri-Parties, and a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) decision has not been an assumption from any of the Tri-Parties.
 - a. Appendix I, Section 3.1 states: “Ecology¹ is the lead regulatory agency responsible for the closure of the SST system. EPA² is the support regulatory agency providing oversight of the state’s authorized program.”; “The Parties’ expect that this Agreement Appendix I will incorporate Agreement Section 5.5 processes to provide a mechanism for avoiding duplicative regulation between Ecology and the EPA through the lead agency concept.”; “EPA will evaluate the need to provide additional comments based on its review of proposed modifications to WMA closure action plans, and issue additional comments to Ecology as necessary.”
 - b. Appendix I, Section 3.2 states: “A consistent groundwater monitoring, protection, and risk assessment methodology will also be realized through close integration of activities, as described in the Hanford Site Groundwater Strategy (DOE/RL-2002-59). Consistent application of the requirements of this Appendix I will serve to aid the Parties in ensuring cost effective and consistent cleanup on the Central Plateau.”
 - c. Section 5.5 of the TPA (Action Plan): “The information necessary for performing RCRA³ closures/post-closures within an operable unit will be provided in various RFI⁴/CMS⁵ documents. The initial work plan will contain a Sampling and Analysis Plan (SAP) for the associated RCRA units and it will outline the manner in which RCRA closure/post-closure plan requirements will be met in the work

¹ Washington State Department of Ecology

² Environmental Protection Agency

³ Resource Conservation & Recovery Act

⁴ RCRA Facility Investigation

⁵ Corrective Measure Study

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plan and subsequent documents. The selected closure/post-closure method and associated design details will (unless otherwise agreed to by the parties) be submitted as part of the CMS report at a later date, as specified in the work plan.” “In any case, the parties agree that CERCLA remedial actions and, as appropriate, HSWA⁶ corrective measures will comply with ARARs⁷.”

- d. Section 5.6: “The EPA and Ecology have selected a lead regulatory agency approach to minimize duplication of effort and maximize productivity. Either the EPA or Ecology will be the lead regulatory agency for each operable unit, TSD⁸ group/unit or milestone. The lead regulatory agency for a specific operable unit, TSD group/unit or milestone will be responsible for overseeing the activities covered by this action plan that relate to the successful completion of that milestone or activities at that operable unit or TSD group/unit, ensuring that all applicable requirements are met.”

⁶ 1984 Hazardous and Solid Waste Amendments

⁷ Applicable or Relevant and Appropriate Requirements

⁸ Treatment, Storage, and/or Disposal

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#	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) No change (01/03/2019)	Dusty Stewart	On Hold
2	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)	Held several meetings with RL/ORP on this and other integration issues in July and August. RL has the lead for groundwater monitoring program. ORP proposes closing. (10/18/2018) Ecology wants clarification when BP-5 Interim Record of Decision (IROD) is expected to be issued and that there is action from RL to address technetium-99 contamination. Action item to remain open (10/18/2018) No change (01/03/2019)	Rod Lobos	Open
3	TF-18-10-01 10/18/18	Follow up meetings for discussion and resolution of tank-side cesium removal (TSCR) related activities.	Schedule a meeting to further discuss concerns related to crystalline silicotitanate (CST) compatibility with HLW glass, long term storage, ion exchange column design, potential for resolution concepts (in the early stage). ORP will schedule first meeting within the next couple of weeks. Additionally Ecology would like a invite to witness the tall column test. 4-4-19: ORP expects the meeting to occur prior to the end of April. Dan will provide list of Ecology names and available dates. The meeting should be scheduled for a couple of hours. Ecology would like clarification regarding the resin extracted from the column, which is purposed to be put in the high level waste stream. Currently there is no study to validated compatibility/treatment via HLW. Clarify disposition of the physical hardware. 30 May 2019: Meeting held on April 20th. ORP recommends closing this action.	Sahid Smith	Open

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#	Action ID Start Date	Action	Updates / Needs for Closure	Actionee(s)	Status/ Date Closed
4	TF-18-10-02 10/18/18	Ecology and DOE to meet to discuss Ecology email (see Updates)	The HFFACO is the current working agreement and Ecology is confident that the HFFACO has adequately described our expectations for WMA-C Closure. USDOE and Ecology will meet and discuss the areas where USDOE have not fulfilled the TPA requirements for SST Closure or are inconsistent with Tri-Party agreements and understanding. USDOE and Ecology will agree to a resolution to those deficiencies where USDOE have not fulfilled the TPA Requirements. If USDOE has concerns regarding the HFFACO, then our respective senior managers should provide direction to the TPA Project Managers for resolving those concerns. (Email Jeff Lyon, Oct 22, 2018) Meeting between ORP and Ecology occurred on 11 Dec 2018 to discuss these issues. ORP is preparing a response for Ecology.	Rod Lobos	Open
5	TF-19-01-01	Slurry line replacement schedule	Provide a slurry line replacement schedule. (01/03/2019) ORP provided preliminary schedule for SL-167 and SL-168 replacement at the 242-A Evaporator. Closed per Ecology email dated March 11, 2019.	Paul Hernandez	Closed 5-2-19
6	TF-19-01-02	Dump valve usage for cold/hot test may not be compliant with RCRA permit.	Meeting with Ecology scheduled for February 14 th (01/24/19). Meeting held on February 28 th due to adverse weather shut downs. Follow on meeting has been set for March 18 th . Ecology concerns are not with 242-A Evaporator RCRA permit but with the DR-335 integrity/fit for use rating. March 18, 2019 email from Ecology identified EC-10 actions are compliant with 242-S Evaporator RCRA	Paul Hernandez/Rana Evans	Closed 5-2-19

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#	Action ID Start Date	Action	Updates / Needs for Closure	Actionee(s)	Status/ Date Closed
			permit. Additionally, Ecology concurred that DR-334 and DR-335 are compliant with 40 CFR 265.191. ORP considers this action closed.		
7	TF-19-04-01	Provide list of IMUSTs	Oregon and Ecology would like to see the list.	Rana Evans/Dusty Stewart	Open
8	TF-19-04-02	Provide the FY2018 DST Visual Inspection (Enhanced Visual Inspections) Reports to Ecology (Steve Lowe)	Reports are still pending.	Dusty Stewart	Open
9	TF-19-04-03	Demonstrate compliance with Appendix I for SST closure. (Jim Alzheimer)	Clarify how integration between RL and ORP is being coordinated for consistent action and compliance related to closure for CERCLA/RCRA and rad on similar type tanks. Clarify if this is captured in Tier 1, Tier 2 or Tier 3 closure plans. How are the separate closure documents providing compliance with Appendix I How is EPA involved?	Rod Lobos	Open

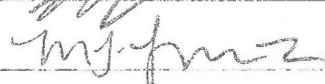
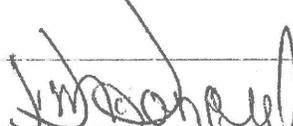
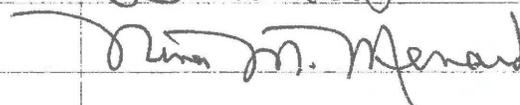
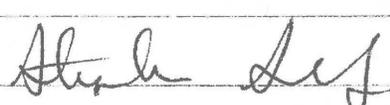
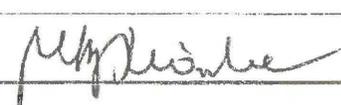
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#	Action ID Start Date	Action	Updates / Needs for Closure	Actionee(s)	Status/ Date Closed
1	WTP-19-04-01	Ecology request a briefing on the current status and schedule on all tech issue resolution		Wahed Abdul	Closed 5-2-19
2					
3					

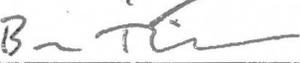
June 6, 2019
Office of River Protection
Tri Party Agreement Consent Decree Meeting

PRINT NAME	SIGN NAME	ORG
Abdul, Wahed		ORP
Alzheimer, Jim		ECY
Barnes, Mike		ECY
Beehler, Steve		ORP
Brasher, Stephanie		MSA
Burnett, Kaylin		ORP
Cameron, Craig		EPA
Carlson, Annette		ECY
Cimon, Shelley		OR State
Decker, Jay		ECY
Diediker, Janet		ORP
Einan, Dave		EPA
Evans, Rana		ORP
Fletcher, Tom		ORP
Gao, Tracy		ECY
Hall, Katie		ECY
Harkins, Brian		ORP
Hastings, Rob		ORP
Hernandez, Paul		ORP
Irwin, Mat		ORP
Johnson, Jeremy		ORP
Jones, Mandy		ECY
Joyner, Jessica		WRPS

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PRINT NAME	SIGN NAME	ORG
Keith, Colleen		ORP
Kemp, Christopher		ORP
Lobos, Rod		ORP
Lopez, Maria		WRPS
Lowe, Steven		ECY
Lucatero, Yoana		ECY
Lyon, Jeffery		ECY
Martell, John		DOH
Mathey, Jared		ECY
McDonald, Dan		ECY
Menard, Nina		ECY
Mulkey, Charies		WRPS
Parker, Dan		WRPS
Pfaff, Stephen H		ORP
Pomiak, Andrew		ECY
Price, John		ECY
Qualheim, Jane		MSA (note taker)
Rambo, Jeffrey		ORP
Rochette, Beth		ECY
Schleif, Stephanie		ECY
Schmidt, John		DOH
Serafin, Shane		ORP
Skorska, Maria		ECY

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PRINT NAME	SIGN NAME	ORG
Smith, Sahid		ORP
Stewart, Dustin		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
Whitelely, Craig		ORP
Yasek, Donna		BNI
Young, Jason		ORP
Schroder, Paul		ORP
Martinez, Meagan		WRPS