



**U.S. Department of Energy
Hanford Site**

February 11, 2021

21-ECD-000548

Mr. David Bowen, Program Manager
Nuclear Waste Program
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Dear Mr. Bowen:

FEBRUARY 2021 QUARTERLY REPORT FOR THE STATE OF WASHINGTON VS. U.S. DEPARTMENT OF ENERGY, CASE NO. 08-5085-RMP, FOR WASTE TREATMENT AND IMMOBILIZATION PLANT CONSTRUCTION AND STARTUP ACTIVITIES AND TANK RETRIEVAL ACTIVITIES – OCTOBER 1, 2020, THROUGH DECEMBER 31, 2020

This letter transmits the U.S. Department of Energy February 2021 Quarterly Report (Attachment) under Section IV-C-1 of the subject Consent Decree, for the period of October 1, 2020, through December 31, 2020. Pursuant to the Consent Decree, this report provides the status and progress made during the reporting period.

As requested by the Washington State Department of Ecology, copies of the directives given to contractors for work required by the Consent Decree are included in the Attachment.

If you have any questions, please contact Thomas W. Fletcher, Assistant Manager, Waste Treatment and Immobilization Plant Project, Office of River Protection on (509) 376-4941, or Delmar Noyes, Assistant Manager, Tank Farms Project, Office of River Protection on (509) 376-5166.

Sincerely,

**BENTON
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Ben J. Harp
Deputy Manager
Office of River Protection

ECD:BRT

Attachment

cc: See page 2

Mr. David Bowen
21-ECD-000548

-2-

February 11, 2021

cc w/attach:

J. Burright, Oregon Energy
S. Cimon, Oregon Energy
E. A. Connell, EM-4.4
L. Contreras, YN
J. S. Decker, Ecology
N. Englander, Oregon DOJ
J. J. Lyon, Ecology
J. D. McDonald, Ecology
K. A. Ott, EM-3
S. R. Ross, EM-4.31
P. G. Rowe, Oregon DOJ
M. J. Turner, HMIS
M. Woods, Oregon Energy
Administrative Record (D-16C-03Q)
Environmental Portal
HMIS Correspondence

cc w/o attach:

J. Bell, NPT
G. Bohnee, NPT
R. Buck, Wanapum
S. L. Dahl, Ecology
D. R. Einan, EPA
S. Leckband, HAB
M. Murphy, CTUIR
J. B. Price, Ecology

Attachment
21-ECD-000548

Office of River Protection Quarterly Report
Period October 1, 2020, through December 31, 2020

(56 Pages Including Cover Sheet)

Office of River Protection
Quarterly Reporting Period
October 1, 2020, through December 31, 2020¹

Consent Decree, *State of Washington v. Dept. of Energy*, No: 08-5085-FVS (October 25, 2010)

Amended Consent Decree, *State of Washington v. Dept. of Energy*, No: 2:08-CV-5085-RMP
(March 11, 2016)

Second Amended Consent Decree, *State of Washington v. Dept. of Energy*,
No: 2:08-CV-5085-RMP (April 12, 2016)

Third Amended Consent Decree, *State of Washington v. Dept. of Energy*,
No: 2:08-CV-5085-RMP (October 12, 2018)²



2440 Stevens Center Place
Richland, Washington 99352
Office of River Protection

**BENTON
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B.J. Harp, Deputy Manager
Office of River Protection

Date

¹ Except where otherwise expressly stated, the narrative descriptions of progress in this report cover the period from October 1, 2020, through December 31, 2020. Earned Value Management System data and descriptions cover the period ending November 30, 2020.

² The Consent Decree, Amended Consent Decree and Second Amended Consent Decree are between the State of Washington and U.S. Department of Energy. For each of these decrees, there are companion, separate consent decrees with the State of Oregon, as Intervener, under the same case numbers.

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Acronyms and Abbreviations

AoA	analysis of alternatives
BNI	Bechtel National, Inc.
BOF	Balance of Facilities
COVID-19	coronavirus disease 2019
CV	cost variance
DFLAW	direct-feed low-activity waste
DOE	U.S. Department of Energy
Ecology	Washington State Department of Ecology
EMF	Effluent Management Facility
EVMS	Earned Value Management System
HLW	High-Level Waste (Facility)
LAB	Analytical Laboratory
LAW	Low-Activity Waste (Facility)
LBL	Low-Activity Waste Facility, Balance of Facilities, and Analytical Laboratory
PT	Pretreatment (Facility)
SV	schedule variance
WTP	Waste Treatment and Immobilization Plant

Introduction

The U.S. Department of Energy’s (DOE), Office of River Protection submits the following information to satisfy its obligation to provide “a written report documenting the WTP construction and startup activities and tank retrieval activities,” as required by Section IV-C-1 of the Second Amended Consent Decree in *State of Washington v. United States Department of Energy*, No: 2:08-CV-5085-RMP (April 12, 2016).

Except where otherwise stated, the narrative descriptions of progress in this report cover the period from October 1, 2020, through December 31, 2020. Earned Value Management System (EVMS) data and descriptions cover the period ending November 30, 2020; this includes the facility completion percentage estimates within various locations in the Waste Treatment and Immobilization Plant (WTP) section.

As the Washington State Department of Ecology (Ecology) has requested, written directives, not previously submitted for the period addressed by this report for work required by the Amended Consent Decree, are included with this report.

Tank Farm Actions and Milestones

Numbers	Titles	Due Date	Status
<i>Actions</i>			
D-16E-01	DOE must purchase by December 31, 2016, a spare E-A-1 reboiler for the 242-A Evaporator.	12/31/2016	Complete
D-16E-02	Have a spare E-A-1 reboiler available by December 31, 2018.	12/31/2018	Complete
<i>Milestones</i>			
D-16B-03	“Of the 12 SSTs referred to in B-1 and B-2, complete retrieval of tank waste in at least 5.”	TBD ^{1,2}	On Schedule
D-16B-01	“Complete retrieval of tank waste from the following remaining SSTs in WMA-C: C-102, C-105, and C-111.”	03/31/2024	Complete
D-16B-02	“Complete retrieval of tank wastes from the following SSTs in Tank Farms A and AX: A-101, A-102, A-104, A-105, A-106, AX-101, AX-102, AX-103, and AX-104. Subject to the requirements of Section IV-B-3, DOE may substitute any of the identified 9 SSTs and advise Ecology accordingly.”	TBD ^{1,2}	On Schedule/Under Analysis ³

¹ Third Amended Consent Decree, *State of Washington v. Dept. of Energy*, No: 2:08-CV-5085-RMP (October 12, 2018).

² On December 10, 2020, the United States District Court, Eastern District of Washington issued an order modifying the Amended Consent Decree in *State of Washington v. Brouillete, et al.*, No. 2:08-cv-05085-RMP on the basis that COVID-19 constitutes a force majeure event. The order established a method for calculating an extension of the B-2, B-3, A-7, A-8, and A-9 milestones in order to offset work interruptions due to COVID-19.

³ As discussed in the joint motion to amend the Consent Decree filed on October 1, 2018, DOE is engaged in ongoing analysis of non-vapors-related retrieval challenges and tank condition issues associated with Tanks A-104 and A-105 (i.e., two of the nine tanks currently specified for retrieval under the B-2 Milestone). These issues are under analysis, and could require issuance of a “serious risk” notice or another request for amendment of the Consent Decree (including the B-2 Milestone). DOE met with Ecology and attorneys from the Washington State Office of the Attorney General on August 30, 2018, to discuss the retrieval challenges and issues with the condition of tanks A-104 and A-105. Since August 2018, DOE has had several discussions with Ecology on this topic.

COVID-19 = coronavirus disease 2019.
 DOE = U.S. Department of Energy.
 Ecology = Washington State Department of Ecology.
 SST = single-shell tank.
 TBD = to be determined.
 WMA-C = C Tank Farm waste management area.

Single-Shell Tank Retrieval Program

Tank Farms Assistant Manager: Delmar Noyes

Technical Lead: Jeff Rambo

Quarterly Statement: Tank retrieval activities have complied with milestones already come due as of the date of this report. There are no missed milestones that may affect compliance with other milestones.

On October 1, 2018, the United States and the state of Washington filed a joint motion to amend the Consent Decree, along with a proposed stipulation and order modifying the Amended Consent Decree between DOE and the state of Washington in *State of Washington v. Dept. of Energy*, No: 2:08-CV-5085-RMP. The parties requested that the court amend the Amended Consent Decree by extending the completion dates for the B-2 and B-3 milestones. On October 12, 2018, the court granted the joint motion and entered the Third Amended Consent Decree, which extended the B-3 Milestone due date to June 30, 2021, and the B-2 Milestone to September 30, 2026.

On March 24, 2020, the Hanford Site moved to an essential mission-critical operations posture in recognition of increasing coronavirus disease 2019 (COVID-19) concerns. During this time, the majority of the Hanford Site workforce transitioned to telework and a limited number of workers reported to the site to perform activities necessary to maintain the site in a safe condition, protective of the community, region, and the environment.

On May 20, 2020, DOE authorized the Hanford Site to move to Phase 1. Hanford Site operations began Phase 1 on May 26, 2020. During Phase 1, essential mission-critical operations were continued and targeted mobilization and low-risk workscope, such as implementation of COVID-19 protocols to infrastructure and facilities, required training, medical evaluations, and limited construction activities, were added.

On May 21, 2020, the United States Department of Justice, on behalf of DOE, sent a letter to the Washington State Office of the Attorney General with a proposal to amend the Consent Decree in *State of Washington v. Brouillete, et al.*, No. 2:08-cv-5085-RMP (E.D. Wash.). The proposal included schedule extensions due to force majeure events associated with the COVID-19 pandemic.³

The Hanford Site transitioned to Phase 2 beginning on August 31, 2020. In Phase 2, the workforce that has been performing portable work via telework generally continued to telework. The majority of the workforce whose work was not portable returned to the site incrementally through September 30 to progress work activities leveraging established COVID-19 controls.

On December 9, 2020, DOE and the state of Washington filed a Joint Motion to Amend Consent Decree, and on December 10, 2020, the United States District Court, Eastern District of Washington issued an order modifying the Amended Consent Decree in *State of Washington v.*

³ ENV_DEFENSE-#919846, 2020, "Proposal to Amend Consent Decree in *State of Washington v. Brouillete, et al.*, No. 2:08-cv-5085-RMP (E.D. Wash.), Due to *Force Majeure* Event," (external letter to A.A. Fitz, Office of the Attorney General, Ecology Division), from A.D. Saylor, C.H. Kolman, and S. Shea, United States Department of Justice, Environmental Defense Section, Washington, D.C., May 21.

Brouillete, et al. on the basis that COVID-19 constitutes a force majeure event. The order established a method for calculating an extension of the B-2, B-3, A-7, A-8, and A-9 milestones to offset work interruptions due to COVID-19. DOE and its contractors are engaged in ongoing analysis of work schedule impacts. DOE is continuing to evaluate the information and COVID-19 potential impacts to the Consent Decree, and if other actions may be necessary.

Since March 24, 2020, when moving to the essential mission-critical operations posture due to COVID-19 concerns, the site experienced numerous impacts related to COVID-19 restrictions and requirements. The following highlight some examples of impacts that occurred October 2020 through December 2020:

- Equipment exposure to a radiation field longer than planned, during the COVID-19 delays, may have resulted in equipment damage. Tank AX-104 waste retrieval equipment will undergo operational acceptance testing prior to the start of retrieval operations.
- The contract tracing process executed by the occupational medical service provider has resulted in approximately 50 to 70 workers in a quarantined status each day during the reporting period. COVID-19 facility cleaning/decontamination protocols are in place and implemented when a potential facility exposure is identified. These activities require the temporary evacuation and isolation of work areas for cleaning.
- Potential exposure of workers to COVID-19 and the need for quarantining when exposures were assessed as possible by contact tracing affected the execution of fieldwork. The temporary loss of crewmembers being quarantined out of an abundance of caution, made some work crews short staffed. If no qualified individuals were available, the work was delayed until qualified personnel became available. Remaining crewmembers were reassigned when possible to other available work tasks. The unpredictable nature of losing (single or multiple) personnel due to quarantining made it difficult to plan and to fully assess the impacts to the project schedule and cost.
- COVID-19 impacts continued to be evaluated and schedule adjustments occurred based on state/federal recommendations and inefficiencies associated with COVID-19 social distancing controls that significantly impact pre-job briefings, donning/doffing durations, and in-farm work area ingress/egress access.
- Upon entering Phase 2, it was necessary to place the field crews on a revised 8-hour day / swing shift work schedule to achieve COVID-19 social distancing protocols. The revised shift structure was less efficient than the standard 10-hour shift the site employed prior to COVID-19. On the day/swing shifts, the pre- and post-job briefings required multiple meetings to ensure appropriate social distancing. Since the job does not start until all the field crewmembers have been briefed and are in the farm, work delays occurred, resulting in less time in the tank farm. In addition, working evening shifts during the fall/winter reduced productivity because of the need for artificial lighting. In order to return to the standard work schedule, additional trailer and tent space to accommodate social distancing protocols is being installed.

The 8-hour day/swing shift schedule ended November 20, 2020, and the standard 10-hour day shift resumed on November 23, 2020. This mitigated the inefficiencies associated with the 8-hour day/swing shift schedule. However, COVID-19 controls to ensure social

distancing have necessarily affected the efficiency of pre-job briefings, donning/doffing durations, and in-farm work area ingress/egress access. Work continues on the additional trailers and tents being installed to mitigate inefficiencies while continuing to ensure social distancing requirements are met.

- Multiple work areas throughout the tank farms were evacuated, sanitized, and reevaluated for occupancy allowance following the COVID-19 facility cleaning/decontamination protocols. This process varies by month within a range of 62 to 101 occasions per month during this reporting period.

Accomplishments in the Reporting Period

Completed Accomplishments:

- Completed Tank AX-104 mechanical and electrical system installation
- Completed Tank AX-104 construction acceptance testing and operational acceptance testing
- Completed Tank AX-104 readiness activities
- Started Tank AX-104 waste retrieval operations
- Completed Tank AX-103 on-dome electrical system installation
- Installed Tank AX-103 03B pit sluicer
- Completed the residual volume measurement (laser-based system) of Tank AX-102
- Completed Tank AX-102 camera / Computer Aided Design modeling system videos
- Completed Tank AX-102 post retrieval residual waste sampling
- Issued the chemical dissolution (acid) study for 241-AX-102 samples: RPP-RPT-62647, *AX and A Farm Third Retrieval Technology Chemical Dissolution Options Evaluation*
- Completed Tank A-101 riser 12 thermocouple removal
- Completed Tank AP-102 jumper removal and removal of remaining two sections (inside of AP Tank Farm) of the AY to AP hose-in-hose transfer line in support of future A Tank Farm hose-in-hose transfer line installation.

Ongoing Activities:

- Work continued on the development of a Tank AX-102 third retrieval technology practicability evaluation. The alternative mechanical retrieval options study was completed, which in addition to the completed chemical analysis of the Tank AX-102 post retrieval samples, will support the request to forgo a third retrieval technology in Tank AX-102.
- Continue AX-104 waste retrieval operations.
- Continue work on the Tank AX-101 on-dome electrical system installation.

- Continue Tank AX-103 waste retrieval system installation, sluicers, pump, hose-in-hose transfer lines.
- Continue Tank A-101 equipment (A-01H pump) removal activities.
- Continue new trailer and tent installation to mitigate COVID-19 social distancing impacts.

Accomplishments Expected in the Next Reporting Period

- Install the AX-103 03D pit sluicer.

Issues Encountered in the Reporting Period

- There is an ongoing risk that waste retrieval operations at Tank AX-104 will be impacted if members of a crew are found either positive for COVID-19 or quarantined as a precaution due to potential close contact with someone that has tested positive. Mitigation actions to protect the workers have been put in place, including rigorous adherence to COVID-19 protocols, to protect the workforce while also ensuring operational continuity.
- Work restrictions and inefficiencies related to the COVID-19 pandemic occurred. See the Quarterly Statement above for specific examples.
- DOE is engaged in ongoing analysis of retrieval challenges and condition issues associated with tanks A-104 and A-105 (i.e., two of the nine tanks currently specified for retrieval under the B-2 Milestone)⁴. These issues are under analysis and could require issuance of a “serious risk” notice or another request for amendment of the Consent Decree (including the B-2 Milestone).
- The as-found condition of existing abandoned equipment in AX and A tank farms has affected DOE’s ability to remove the equipment efficiently and is affecting the cost and schedule.
 - Removal of Tank A-103 riser 2 thermocouple required a duration of 209 days (planned 83 days) to complete. The lower section of the thermocouple was damaged and could not be removed. Unique tooling was required to lower the remaining section to the tank bottom.
 - Removal of Tank A-101 riser 2 thermocouple required the top sections to be removed in two sections and the remaining third section to be lowered to the tank bottom. This activity was originally planned for 83 days, but the actual durations was 235 days.

⁴ The U.S. Department of Energy met with the Washington State Department of Ecology and attorneys from the Washington State Office of the Attorney General on August 30, 2018, to discuss the retrieval challenges and issues with the condition of Tanks A-104 and A-105. The U.S. Department of Energy has had several discussions with Ecology on this topic since August 2018.

- Removal of Tank A-106 riser 2 thermocouple was removed in sections, with the lower section left in the tank. Removal of the thermocouple was planned for 113 days, but required 246 days.
- A stuck shield plug in Tank A-101 01C Pit required an alternative method (core drilling) to tie in the ventilation system. Removal of the shield plug was expected to require 12 days, but was completed in 31 days.
- A stuck shield plug in Tank AX-102 02B Pit prevented the installation of the planned third extended reach sluicer. Eighty days were expended (planned 12 days) on the attempts to remove the plug, until it was decided the plug could not be removed and to retrieve Tank AX-102 with two extended reach sluicer systems.
- On January 28, 2019, the Office of River Protection received Washington River Protection Solutions LLC letter WRPS-1900243, “Contract Number DE-AC27-08RV14800 – Washington River Protection Solutions LLC Anticipated Consent Decree Milestone Impacts due to Lack of State of Washington, Department of Ecology Approval Order,” outlining potential impacts to tank retrievals at A and AX tank farms, due to a lack of Ecology regulatory approval associated with exhausters in the 241-A and 241-AX tank farms.
- On March 4, 2019, DOE transmitted WRPS-1900243 to ensure Ecology was aware of potential impacts to A and AX tank farm retrievals, and possibly associated Consent Decree milestones, if Ecology did not approve a pending notice of construction application in the near future. DOE is continuing to evaluate the information in the letter, as well as whether amendment of the Consent Decree (including potential invocation of force majeure provisions) or other actions may be necessary. Retrieval of Tank AX-102 began on August 31, 2019, with the exhausters running at 1,000 scfm. DOE was able to complete retrieval of Tank AX-102 to the limits of two technologies; however, due to the limited airflow, the original plan to retrieve two tanks at a time is not possible. The intention of the two-tank retrieval is to allow retrieval of a second tank, if the retrieval of the first tank were impacted due to equipment failure. DOE will continue to assess retrieval performance at the allowed airflow rate, but there remains the potential for fogging at various stages of the retrieval process that may affect the schedule.
- On April 18, 2019, Ecology provided a notice of incompleteness determination for the A and AX tank farms (19-NWP-063). DOE provided a response on May 14, 2019 (19-ECD-0038), which set forth how the original application met the regulations and asked Ecology to continue processing the application. DOE submitted a revised application on October 31, 2019 (19-ECD-0080), to provide supplemental information to address Ecology’s comments. DOE has resumed work on this application now that the ambient air boundary issue is resolved.

Issues Expected in the Next Reporting Period

- Work restrictions and inefficiencies related to the COVID-19 pandemic are expected to continue into the next reporting period.

- DOE expects the retrieval challenges and tank condition issues associated with tanks A-104 and A-105 to continue.
- The as-found condition of existing abandoned equipment in the A and AX tank farms is expected to affect the efficient removal of the equipment negatively and is expected to continue to impact cost and schedule.

Actions Initiated or Taken to Address Potential Schedule Slippage

- Starting the month of January 2020, on-dome electrical installation for Tank AX-103 workers began using air purifying respirators rather than self-contained breathing air. This transition increased the efficiency of the work and resulted in a significant cost savings over using self-contained breathing air.
- DOE expects to continue analysis of, and discussions with, Ecology about the retrieval challenges and tank conditions associated with tanks A-104 and A-105.
- COVID-19 controls to ensure social distancing have necessarily affected the efficiency of pre-job briefings, donning/doffing durations, and in-farm work area ingress/egress access. Installation of additional trailers and tents are underway to mitigate inefficiencies while continuing to ensure social distancing requirements are met.

Tank Waste Retrieval Work Plan Status

Tank	TWRWP	Expected Revisions	First	Second	Third
AX-101	RPP-RPT-58932, Rev. 1	Complete	Sluicing with ERSS	High-Pressure Water deployed with ERSS	–
AX-102	RPP-RPT-58933, Rev. 1	Complete	Sluicing with ERSS	High-Pressure Water deployed with ERSS	–
AX-103	RPP-RPT-58934, Rev. 1	Complete	Sluicing with ERSS	High-Pressure Water deployed with ERSS	–
AX-104	RPP-RPT-58935, Rev. 1	Complete	Sluicing with ERSS	High-Pressure Water deployed with ERSS	–

ERSS = extended reach sluicer system.

TWRWP = tank waste retrieval work plan.

Accomplishments in the Reporting Period

- None.

Accomplishments Expected in the Next Reporting Period

- None.

Issues Encountered in the Reporting Period

- None.

Issues Expected in the Next Reporting Period

- None.

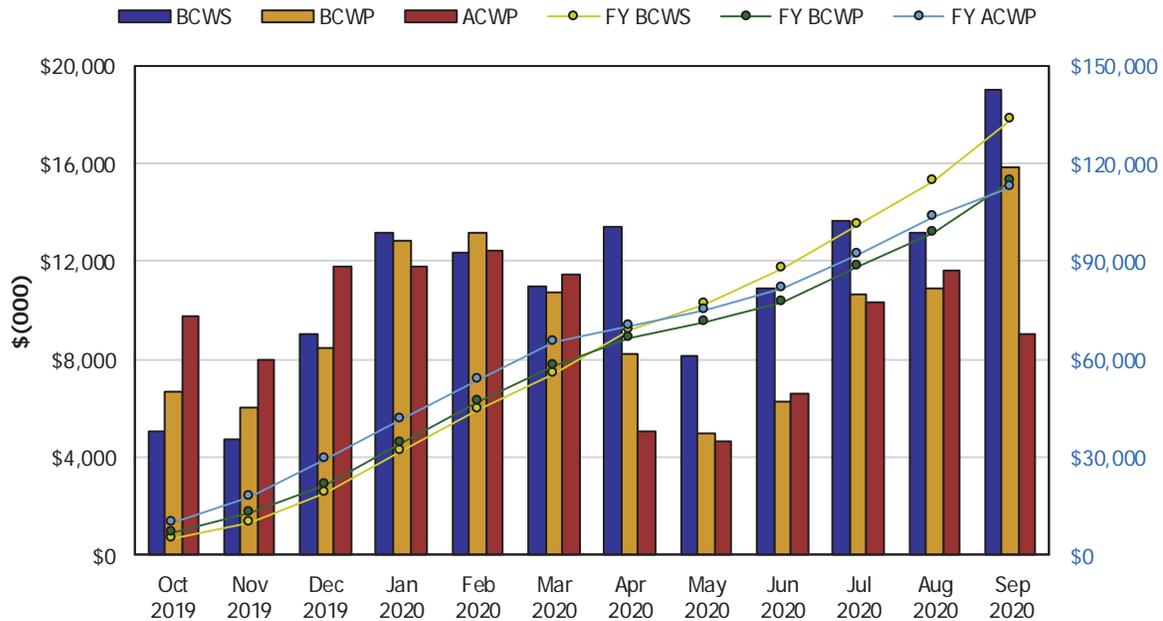
Tank Farm Earned Value Management System Quarterly Analysis

Earned Value Data: Fiscal Year 2020

September-2020

Tank Farms ORP-0014
WBS 5.2 - Retrieve and Close SSTs

EVMS Monthly and Fiscal Year Values



Earned Value Month

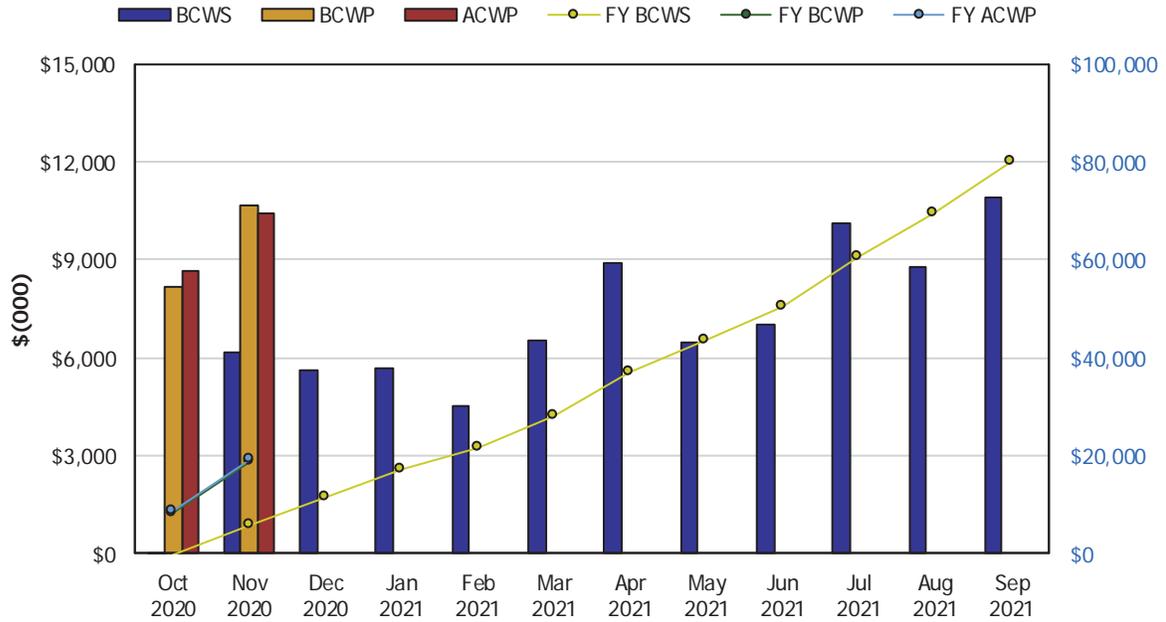
Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2019	\$5,039	\$6,662	\$9,772	1.32	0.68	\$5,039	\$6,662	\$9,772	1.32	0.68
Nov 2019	\$4,722	\$6,050	\$7,940	1.28	0.76	\$9,761	\$12,712	\$17,711	1.30	0.72
Dec 2019	\$9,040	\$8,482	\$11,822	0.94	0.72	\$18,801	\$21,193	\$29,534	1.13	0.72
Jan 2020	\$13,201	\$12,877	\$11,828	0.98	1.09	\$32,003	\$34,070	\$41,362	1.06	0.82
Feb 2020	\$12,323	\$13,174	\$12,473	1.07	1.06	\$44,326	\$47,245	\$53,834	1.07	0.88
Mar 2020	\$10,984	\$10,744	\$11,497	0.98	0.93	\$55,310	\$57,989	\$65,331	1.05	0.89
Apr 2020	\$13,412	\$8,230	\$5,011	0.61	1.64	\$68,722	\$66,218	\$70,343	0.96	0.94
May 2020	\$8,123	\$4,957	\$4,623	0.61	1.07	\$76,845	\$71,175	\$74,966	0.93	0.95
Jun 2020	\$10,857	\$6,262	\$6,619	0.58	0.95	\$87,702	\$77,437	\$81,585	0.88	0.95
Jul 2020	\$13,648	\$10,678	\$10,292	0.78	1.04	\$101,350	\$88,115	\$91,877	0.87	0.96
Aug 2020	\$13,193	\$10,903	\$11,608	0.83	0.94	\$114,543	\$99,019	\$103,484	0.86	0.96
Sep 2020	\$19,005	\$15,847	\$8,994	0.83	1.76	\$133,549	\$114,865	\$112,479	0.86	1.02
CTD	\$1,217,810	\$1,176,207	\$1,231,262	0.97	0.96					

Earned Value Data: Fiscal Year 2021

November-2020

Tank Farms ORP-0014
WBS 5.2 - Retrieve and Close SSTs

EVMS Monthly and Fiscal Year Values



Earned Value Month

Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2020	(\$362)	\$8,176	\$8,653	-22.56	0.94	(\$362)	\$8,176	\$8,653	-22.56	0.94
Nov 2020	\$6,177	\$10,692	\$10,435	1.73	1.02	\$5,815	\$18,867	\$19,088	3.24	0.99
Dec 2020	\$5,605					\$11,419				
Jan 2021	\$5,647					\$17,066				
Feb 2021	\$4,498					\$21,564				
Mar 2021	\$6,531					\$28,095				
Apr 2021	\$8,881					\$36,976				
May 2021	\$6,493					\$43,469				
Jun 2021	\$6,994					\$50,463				
Jul 2021	\$10,115					\$60,578				
Aug 2021	\$8,757					\$69,335				
Sep 2021	\$10,891					\$80,226				
CTD	\$1,223,625	\$1,195,074	\$1,250,350	0.98	0.96					

- | | | | | | |
|------|---|----------------------------------|------|---|---------------------------------|
| ACWP | = | actual cost of work performed. | CTD | = | contract to date. |
| BCWP | = | budgeted cost of work performed. | EVMS | = | earned value management system. |
| BCWS | = | budgeted cost of work scheduled. | FY | = | fiscal year. |
| CPI | = | cost performance index. | SPI | = | schedule performance index. |

Earned Value Management System Quarterly Analysis

Retrieve and Close Single-Shell Tanks (5.02)⁵

Project EVMS reflects data for September 2020, October 2020, and November 2020.

Schedule Variance Summary:

Work completed ahead of the planned schedule is reported as a favorable schedule variance (SV) for the month in which it is completed, but results in an unfavorable SV in the month the work was planned.

The September unfavorable SV of (\$3,158,500) was primarily due to the following:

- Installation of Tank AX-103 in-tank retrieval system components was delayed due to higher priority work on the installation of the Tank AX-104 retrieval system.
- COVID-19 protocols for social distancing impacted tank farm ingress/egress. Social distancing requirements for those donning personal protective equipment for tank farm work introduced inefficiencies, especially for work activities requiring larger crew sizes. The protocols resulted in reduced “in-field” work time each day, resulting in longer durations to complete tasks.

The October favorable SV of \$8,538,000 was primarily due to the following:

- A current month point adjustment was made to transfer fiscal year scope, which was planned but not worked, from the Performance Measurement Baseline to Undistributed Budget. This adjustment resulted in a negative budgeted cost of work scheduled for the month. The scope included:
 - Removal of the saltwell pump and screen from Tank AX-101 riser 05A.
 - Maintenance activities associated with the C Tank Farm waste management area performance assessment.
 - Activities associated with inspections of C Tank Farm diversion boxes.
- Schedule performance recovery for completion of Tank AX-104 extended reach sluicer system connections inside C and D pits.
- Schedule performance recovery for the removal of the saltwell screen in Tank AX-101 riser 01B.

The November favorable SV of \$4,514,300 was primarily due to the following:

- Schedule performance recovery for completion of the TX Tank Farm evapotranspiration basin storm water drainage collection system.

⁵ “Closure” activities are expressly excluded from the Consent Decree. See 2010 Consent Decree, Appendix C, first paragraph: “Processes not covered by a TWRWP (e.g., tank closure) are not established under this Consent Decree.”

- Schedule performance recovery for completing installation and testing of the Tank AX-104 waste retrieval system. Both construction acceptance testing and operations acceptance testing were completed in November.
- Progress on the cleanout of Tank A-101 H-Pit is ahead of schedule, due to resources transitioning from other work.

Cost Variance Summary:

The September favorable cost variance (CV) of \$6,852,300 was primarily due to the following:

- Favorable fiscal year 2020 year-end indirect pool liquidation pass backs experienced in the current reporting period. The favorable pass backs were a result of the actual fiscal year-end indirect rates being less than the provisional indirect rates utilized to allocate indirect costs to the projects over the course of the fiscal year. This was a one-time credit incurred at the end of the fiscal year to liquidate the indirect pools.
- COVID-19 costs incurred by the Retrieval and Closure cost account were transferred to the Washington River Protection Solutions LLC corporate-level COVID-19 cost account.

The October unfavorable CV of (\$477,800) was primarily due to the following:

- Increased cost associated with COVID-19 cleaning protocols and new change trailers to ensure social distancing requirements
- Training costs for additional personnel to support exhauster operations.

The November favorable CV of \$256,900 was primarily due to the following:

- Costs associated with COVID-19 cleaning protocols in support of work setting up new change trailers were transferred to a separate account specifically for the collection of COVID-19 cost impacts.

Retrieval Labor Hours on Self-Contained Breathing Apparatus

Tank Farms Assistant Manager: Delmar Noyes

Federal Program Manager: Jeff Rambo

Labor Hours Expended on Single-Shell Tank Retrieval Self-Contained Breathing Apparatus
 October 1, 2020, through December 31, 2020.

	SCBA Direct Labor Hours	SCBA Subcontractor Hours¹	Total SST Operation Hours	Total Hours²	Total Percent on SCBA	Detrimental Impacts Days³
C Tank Farm	0	0	0	0	0	56
A/AX Tank Farms	1,801	2,360	4,161	165,627	3%	69
Total	1,801	2,360	4,161	165,627	3%	

¹ Subcontractor hours include labor hours from subcontractors including North Point Electrical Contracting, Inc.; Geophysical Survey, Inc.; Fowler General Construction; American Electric; BNL Technical Services; and Intermech Inc. Improvements were made in the process for collecting subcontractor hours, resulting in more accurate accounting.

² Includes all labor hours supporting SST farms in retrieval including support outside farm fence (Engineering, Project Management, and other support accounts).

³ Detrimental impacts are presented as the total number of days in which a stop work related to SCBA use prevented field operations from continuing. It is limited to SCBA stop works only and excludes vapor impacts (i.e., AOP-15 events).

SCBA = self-contained breathing apparatus.

SST = single-shell tank.

Written Directives for Tank Farms Project

DOE issued one written directives to the Tank Operations Contractor from October 1, 2020, through December 31, 2020, for work required by the consent decrees.

- 20-CPM-0185, “Contract No. DE-AC27-08RV14800 – Request for Advance Agreement for Special Coronavirus Leave after Expiration of the Coronavirus Aid, Relief, and Economic Security Act on December 11, 2020,” dated December 10, 2020.

Waste Treatment and Immobilization Plant Milestones

Milestone	Title	Due Date	Status
Waste Treatment and Immobilization Plant (WTP) Project			
D-00A-06	Complete Methods Validations	06/30/2032	On Schedule
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2033	At Risk ¹
D-00A-01	Achieve Initial Plant Operations for WTP	12/31/2036	At Risk ¹
Pretreatment (PT) Facility			
D-00A-18	Complete Structural Steel Erections Below Elevation 56' in PT Facility	12/31/2009	Complete
D-00A-19	Complete Elevation 98' Concrete Floor Slab Placements in PT Facility	12/31/2031	At Risk ¹
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels FEP-SEP-O0001A/1B	12/31/2031	At Risk ¹
D-00A-14	PT Facility Construction Substantially Complete	12/31/2031	At Risk ¹
D-00A-15	Start PT Facility Cold Commissioning	12/31/2032	At Risk ¹
D-00A-16	PT Facility Hot Commissioning Complete	12/31/2033	At Risk ¹
High-Level Waste (HLW) Facility			
D-00A-20	Complete Construction of Structural Steel to Elevation 14' in HLW Facility	12/31/2010	Complete
D-00A-21	Complete Construction of Structural Steel to Elevation 37' in HLW Facility	12/31/2012	Complete
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2030	At Risk ¹
D-00A-03	Start HLW Facility Cold Commissioning	06/30/2032	At Risk ¹
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2033	At Risk ¹
Low-Activity Waste (LAW) Facility			
D-00A-07	LAW Facility Construction Substantially Complete	TBD ²	On Schedule
D-00A-08	Start LAW Facility Cold Commissioning	TBD ²	On Schedule
D-00A-09	LAW Facility Hot Commissioning Complete	TBD ²	On Schedule
Balance of Facilities			
D-00A-12	Steam Plant Construction Complete	12/31/2012	Complete

Milestone	Title	Due Date	Status
Analytical Laboratory (LAB)			
D-00A-05	LAB Construction Substantially Complete	12/31/2012	Complete

¹ 19-ORP-0007, 2019, “Discussion of Amended Consent Decree – State of Washington v. Perry (E.D. Wash. No. 2:08-CV-5085).”

² On December 10, 2020, the United States District Court, Eastern District of Washington issued an order modifying the Amended Consent Decree in *State of Washington v. Brouillete, et al.*, No. 2:08-cv-05085-RMP on the basis that COVID-19 constitutes a force majeure event. The order established a method for calculating an extension of the B-2, B-3, A-7, A-8, and A-9 milestones in order to offset work interruptions due to COVID-19.

COVID-19 = coronavirus disease 2019.

TBD = to be determined.

Waste Treatment and Immobilization Plant Project

Federal Project Director: Tom Fletcher

Deputy Federal Project Director: Mat Irwin

Quarterly Statement: The WTP Project has complied with applicable milestones already come due as of the date of this report. There are no missed milestones that may affect compliance with other milestones.

The WTP Project continues to focus on completion of the Low-Activity Waste (LAW) Facility, Balance of Facilities (BOF), and Analytical Laboratory (LAB) (collectively known as LBL, including direct-feed low-activity waste [DFLAW] and LBL facility services).

As of November 2020, DFLAW modifications for the WTP Project were 96 percent complete, engineering design was 99 percent complete, procurement was 100 percent complete, and construction was 94 percent complete. As of November 2020, total LBL facilities were 89 percent complete, engineering design was 99 percent complete, procurement was 99 percent complete, construction was 98 percent complete, and startup and commissioning was 66 percent complete.

In 2018, at DOE’s request, the U.S. Army Corps of Engineers conducted a parametric analysis of options and funding scenarios to evaluate the likelihood of achieving certain milestones established by the Amended Consent Decree for the High-Level Waste (HLW) and Pretreatment (PT) facilities. The analysis indicated a low probability that DOE could meet construction and commissioning milestones for these facilities as established by the Amended Consent Decree under the current funding profile. The DOE Office of Project Management subsequently conducted an independent assessment of the U.S. Army Corps of Engineers’ report.

Based on the review, on September 4, 2019, DOE notified Ecology that there was a serious risk DOE may be unable to meet milestones for the HLW and PT facilities in the Amended Consent Decree.⁶ The notification stated:

... it is appropriate, out of an abundance of caution, to provide this notice of serious risk as described in the Amended Consent Decree ... Specifically, the Department is providing notice of a “serious risk ... that DOE may be unable to meet” Milestones A-1 and A-17 (Waste Treatment Plant), Milestones A-2 to A-4 (HLW Facility), and A-13 to A-16 and A-19 (PT Facility) of that Decree. With respect to the “preliminary recovery plan” required by the Amended Consent Decree, completion of the AoA is the first and most critical aspect of that plan. The steps that follow the completion of the AoA will be

⁶ 19-ORP-0007, 2019, “Discussion of Amended Consent Decree – State of Washington v. Perry (E.D. Wash. No. 2:08-CV-5085).”

determined based on the final report's conclusions and the Department's consultations with Ecology.⁷

Pursuant to Section IV-C-3(b) of the Amended Consent Decree⁸, as requested by Ecology in a letter dated September 25, 2019, DOE staff met with Ecology on October 16, 2019, to answer questions Ecology had concerning the serious risk as well as to discuss mitigation options, cooperative solutions, and problem-solving opportunities.

DOE set up the WTP HLW Treatment Analysis of Alternatives (AoA) contractor team in June 2019. The purpose of the AoA is to identify and evaluate a broad set of alternatives to meet the mission need; analyze the life-cycle cost, schedule, and risks associated with each alternative; and present the evaluation results to DOE leadership, pursuant to the requirements of DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. DOE and Ecology staff have been participating in the AoA team plans, discussions, and review of reports. DOE approved the *Waste Treatment and Immobilization Plant High-Level Waste Treatment Analysis of Alternatives Study Plan* (Rev. 3). The study plan was updated to incorporate comments from the Steering Committee members to include the method, approach, and schedule to be used in conducting an independent AoA for the identified mission need.

The AoA team drafted report *The Waste Treatment and Immobilization Plant High-Level Waste Treatment Analysis of Alternatives Final Report*, and submitted it to Ecology for review and comment. Ecology was provided 10 days to review the report. Rather than provide detailed comments, Ecology communicated some “significant” broader concerns via a letter (20-NWP-107, dated June 11, 2020) to Tom Fletcher. On August 3, 2020, DOE sent a letter to Ecology (20-ORP-0015) providing additional time to provide comments, but Ecology deferred to comment. In October 2020, the AoA Steering Committee directed that an additional alternative be analyzed during the AoA process. In November 2020, DOE briefed Ecology on the status of the AoA. In December 2020, the AoA team began working on the new alternative.

On March 24, 2020, the Hanford Site moved to an essential mission-critical operations posture in recognition of increasing COVID-19 concerns. During this time, the majority of the Hanford Site workforce transitioned to telework and a limited number of workers reported to the site to perform activities necessary to maintain the site in a safe condition, protective of the community, region, and the environment.

On May 20, 2020, DOE authorized the Hanford Site to move to Phase 1. Hanford Site operations began Phase 1 on May 26, 2020. During Phase 1, essential mission-critical operations continued and targeted mobilization and low-risk workscope, such as implementation of COVID-19 protocols to infrastructure and facilities, required training, medical evaluations, and limited construction activities were added.

⁷ Footnotes 3 and 4 were omitted from this quote.

⁸ *State of Washington v. Dept. of Energy*, No: 2:08-CV-5085-RMP (March 11, 2016).

On May 21, 2020, the Department of Justice, on behalf of DOE, sent a letter to the Washington State Office of the Attorney General with a proposal to amend the Consent Decree in *State of Washington v. Brouillete, et al.*, No. 2:08-cv-5085-RMP (E.D. Wash.). The proposal included schedule extensions due to force majeure events associated with the COVID-19 pandemic.⁹

The Hanford Site transitioned to Phase 2 beginning August 31, 2020, which remobilized Building Trades back into the field with the majority of nonmanual workers continuing to telework to the degree workscope allowed.

On December 9, 2020, DOE and the state of Washington filed a Joint Motion to Amend the Consent Decree, and on December 10, 2020, the United States District Court, Eastern District of Washington issued an order modifying the Amended Consent Decree in *State of Washington v. Brouillete, et al.* on the basis that COVID-19 constitutes a force majeure event. The order established a method for calculating an extension of the B-2, B-3, A-7, A-8, and A-9 milestones to offset work interruptions due to COVID-19. DOE and its contractors are engaged in ongoing analysis of work schedule impacts. DOE is continuing to evaluate the information and COVID-19 potential impacts to the Consent Decree and if other actions may be necessary.

Since March 24, 2020, when the site moved to the essential mission-critical operations posture due to COVID-19 concerns, the site has experienced numerous impacts related to restrictions or requirements based on COVID-19. The following highlights some examples of impacts that occurred October 2020, through December 2020:

- Social distancing requirements reduced the number of workers allowed in a given area at the same time and decreased the number of tasks that could be performed in parallel. These actions to employ COVID-19 protocols in relatively compact areas impacted the efficiency of work in the Effluent Management Facility (EMF) and other similarly compact areas.
- Engineering and management personnel were primarily working remotely. Communications through remote means, such as the use of meeting software and electronic devices, are not as efficient as traditional face-to-face communications and slowed the resolution of issues that arose.
- COVID-19 facility cleaning/decontamination protocols were in place and implemented when a potential facility exposure was identified. These activities required the temporary evacuation and isolation of work areas for cleaning.
- In October, the LAW Facility control room was evacuated due to a positive COVID-19 test result. This resulted in a delay for planned testing of LAW Facility cranes, which are operated from the control room.
- In October, a COVID-19 exposure resulted in the temporary shutdown of a commissioning training course while personnel were tested and the training area was

⁹ ENV_DEFENSE-#919846, 2020, “Proposal to Amend Consent Decree in *State of Washington v. Brouillete, et al.*, No. 2:08-cv-5085-RMP (E.D. Wash.), Due to *Force Majeure* Event,” external letter to A.A. Fitz, Office of the Attorney General, Ecology Division from A.D. Saylor, C.H. Kolman, and S. Shea, United States Department of Justice, Environmental Defense Section, Washington, D.C., May 21.

sanitized. The training platform had to be revised to accommodate remote content delivery until the quarantine period was completed.

- In November and December, cleaning of the LAW Facility control room was performed on a daily basis to minimize the potential spread of COVID-19.
- Multiple work areas throughout the WTP site were evacuated, sanitized, and reevaluated for occupancy allowance following the COVID-19 facility cleaning/decontamination protocols. This process occurred on over 140 occasions during this reporting period.

Accomplishments During the Reporting Period:

- Significant accomplishments during the reporting period are noted in project reports for the PT Facility, HLW Facility, LAW Facility, BOF, and LAB.

Accomplishments Expected Next Reporting Period:

- Significant planned activities in the reporting period are noted in project reports for the PT Facility, HLW Facility, LAW Facility, BOF, and LAB.

Issues Encountered During the Reporting Period:

- Work restrictions and inefficiencies related to the measures to protect the workforce from COVID-19 occurred. See the Quarterly Statement section above for specific examples.
- Other significant issues encountered during the reporting period are noted in project reports for the PT Facility, HLW Facility, LAW Facility, BOF, and LAB.

Issues Expected in the Next Reporting Period:

- Work restrictions and inefficiencies related to the COVID-19 pandemic are expected to continue into the next reporting period.
- Other significant issues expected in the next reporting period are noted in project reports for the PT Facility, HLW Facility, LAW Facility, BOF, and LAB.

Waste Treatment and Immobilization Plant Earned Value Management System Quarterly Analysis

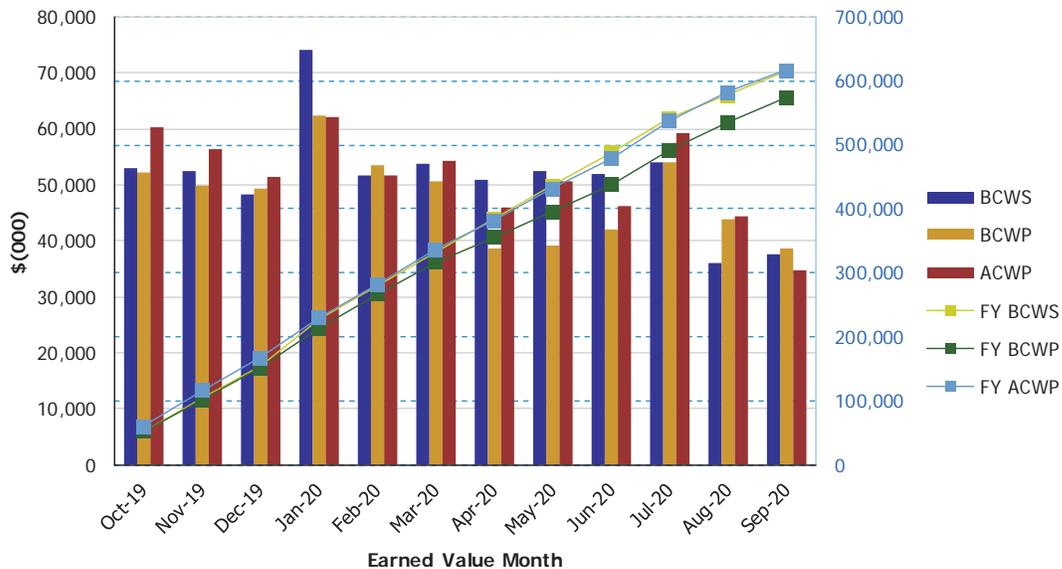
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2020 Earned Value Data

Data as of: September 2020

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2019	\$52,863	\$52,079	\$60,216	0.99	0.86	\$52,863	\$52,079	\$60,216	0.99	0.86
Nov 2019	\$52,457	\$49,780	\$56,387	0.95	0.88	\$105,320	\$101,859	\$116,603	0.97	0.87
Dec 2019	\$48,219	\$49,369	\$51,429	1.02	0.96	\$153,538	\$151,228	\$168,032	0.98	0.90
Jan 2020	\$74,007	\$62,261	\$62,070	0.84	1.00	\$227,545	\$213,489	\$230,102	0.94	0.93
Feb 2020	\$51,722	\$53,420	\$51,766	1.03	1.03	\$279,267	\$266,908	\$281,867	0.96	0.95
Mar 2020	\$53,763	\$50,732	\$54,238	0.94	0.94	\$333,030	\$317,640	\$336,106	0.95	0.95
Apr 2020	\$50,878	\$38,578	\$45,969	0.76	0.84	\$383,908	\$356,218	\$382,075	0.93	0.93
May 2020	\$52,452	\$39,269	\$50,645	0.75	0.78	\$436,360	\$395,487	\$432,720	0.91	0.91
Jun 2020	\$52,019	\$42,059	\$46,219	0.81	0.91	\$488,379	\$437,546	\$478,940	0.90	0.91
Jul 2020	\$53,942	\$54,031	\$59,260	1.00	0.91	\$542,321	\$491,577	\$538,199	0.91	0.91
Aug 2020	\$36,029	\$43,828	\$44,306	1.22	0.99	\$578,350	\$535,405	\$582,505	0.93	0.92
Sep 2020	\$37,691	\$38,688	\$34,785	1.03	1.11	\$616,041	\$574,092	\$617,290	0.93	0.93
PTD	\$12,494,269	\$12,352,153	\$12,367,021	0.99	1.00					

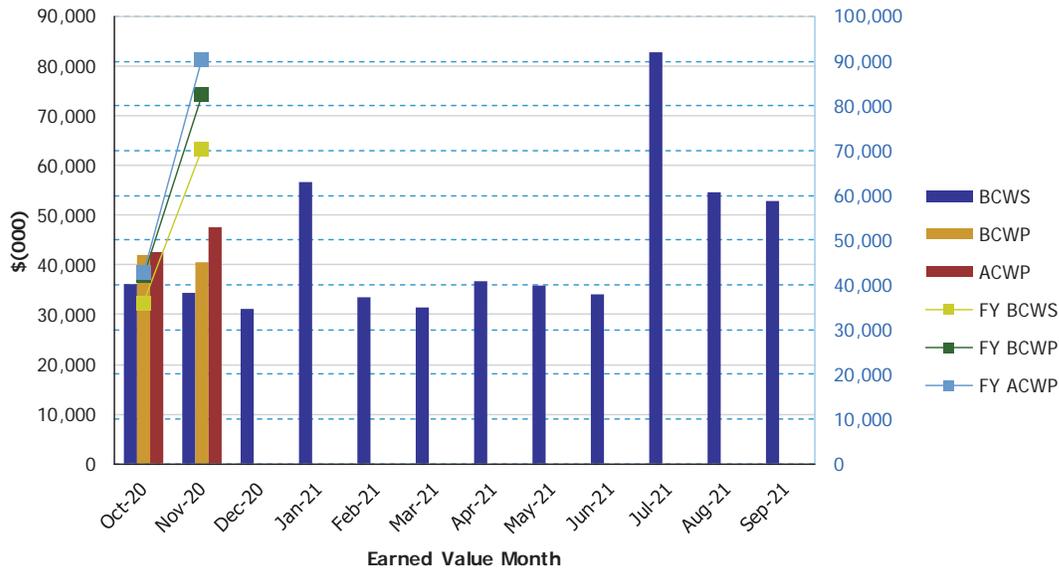
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2021 Earned Value Data

Data as of: November 2020

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

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2020	\$36,025	\$41,999	\$42,736	1.17	0.98	\$36,025	\$41,999	\$42,736	1.17	0.98
Nov 2020	\$34,416	\$40,510	\$47,648	1.18	0.85	\$70,441	\$82,509	\$90,385	1.17	0.91
Dec 2020	\$31,106									
Jan 2021	\$56,771									
Feb 2021	\$33,541									
Mar 2021	\$31,567									
Apr 2021	\$36,672									
May 2021	\$35,773									
Jun 2021	\$34,161									
Jul 2021	\$82,764									
Aug 2021	\$54,705									
Sep 2021	\$52,899									

PTD	\$12,564,710	\$12,434,663	\$12,457,406	0.99	1.00
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- ACWP = actual cost of work performed.
- BCWP = budgeted cost of work performed.
- BCWS = budgeted cost of work scheduled.
- CPI = cost performance index.
- EVMS = earned value management system.
- FY = fiscal year.
- PTD = project to date.
- SPI = schedule performance index.

Project Schedule and Cost Variance Performance **(\$x1,000)**

Performance Tracking	Schedule Variance	Cost Variance
Cumulative (through November 2020)	(\$130,047)	(\$22,743)
Fiscal Year 2021 to-date	\$12,068	(\$7,875)
September 2020	\$997	\$3,902
October 2020	\$5,974	(\$737)
November 2020	\$6,094	(\$7,138)

For the September 2020 EVMS reporting period, a net favorable SV of approximately \$1.0 million was reported, primarily due to the following:

- DFLAW reported a favorable SV due to completion of construction activities for electrical, piping, site work, and subcontracted work associated with heat trace, insulation, and ultrasonic testing scope, which were previously behind schedule.
- LAW Facility reported a favorable SV due to completion of startup system and component testing activities that were previously behind schedule.
- BOF Startup reported a favorable SV due to earnings on system testing activities that were scheduled in previous months

For the October 2020 EVMS reporting period, a net favorable SV of approximately \$6.0 million was reported, primarily due to the following:

- DFLAW reported a favorable SV due to completion of construction activities for electrical, piping, heat tracing, etc. scheduled in prior periods.
- BOF reported a favorable SV due to completion of Phase 2 site paving scheduled in prior periods. Additionally, some of the procurements were delivered ahead of schedule.
- LAW Facility reported a favorable SV due to completion of Construction and Startup organization testing activities scheduled in prior periods.

The favorable SV was offset by:

- HLW Facility reported an unfavorable SV due to structural analysis of the melter taking longer than planned. Additionally, civil-related software training, computational fluid dynamics analysis, and ventilation system calculations are behind schedule.

For the November 2020 EVMS reporting period, a net favorable SV of approximately \$6.1 million was reported, primarily due to the following:

- LAW Facility reported a favorable SV due to completion of Plant Management and Startup organization training, punch list items, spare melter procurement correction, work package reviews, and testing activities scheduled in prior periods.

- BOF reported a favorable SV due to completion of Phase II site paving and system/component testing activities scheduled in prior periods.
- DFLAW reported a favorable SV due to completion of construction activities for electrical, piping, concrete, architectural, and subcontracted work associated with insulation and pen-seals work scheduled in prior periods.

The favorable SV was offset by:

- HLW Facility continued to report an unfavorable SV due to structural analysis of the melter taking longer than planned. Additionally, civil-related software validation and ventilation system calculations were behind schedule.

For the September 2020 EVMS reporting period, a net favorable CV of approximately \$3.9 million was reported, primarily due to the following:

- Project Services control account (1.15 ZPSA) completed the annual transfer of allocation to individual Facility Project Services accounts. It reported favorable CV due to actual costs being less than the estimated budget.
- LBL Facility Services reported a favorable CV due to need for lesser number of spare parts and the lower purchase cost than the baseline. Additionally, planned purchase of an operations building was cancelled due to change of strategy, resulting in favorable CV.

The favorable CV was offset by:

- DFLAW reported an unfavorable CV due to the need to continue construction support for activities behind schedule and additional heat trace and insulation work, partially due to COVID-19 impacts.
- BOF continued to report an unfavorable CV due to higher demands for work planning and fieldwork activities associated with preventive maintenance and corrective maintenance, and due to incorrectly charged costs of LAW Facility related training to BOF. Cost corrections have been submitted and charging guidance has been updated.

For the October 2020 EVMS reporting period, a net unfavorable CV of approximately (\$0.7 million) was reported, primarily due to the following:

- DFLAW reported an unfavorable CV due to additional efforts to complete EMF construction activities that were behind schedule.
- BOF reported an unfavorable CV due to higher demands for Plant Management activities associated with preventative and corrective maintenance and operations support.

The unfavorable CV was offset by the incorporation of overall rate rebill credit and the following activities:

- HLW Facility reported a favorable CV due to favorable wage rates for Engineering and less labor usage for support services.
- LBL Facility Services reported a favorable CV due to spare parts purchased at a lower price than forecasted.

For the November 2020 EVMS reporting period, a net unfavorable CV of approximately (\$7.1 million) was reported, primarily due to the following:

- DFLAW reported an unfavorable CV due to additional efforts to complete EMF construction activities that were behind schedule.
- BOF reported an unfavorable CV due to higher demands for Plant Management activities associated with preventative and corrective maintenance, operations support, and aging and obsolete equipment purchases.
- LBL Facility Services reported an unfavorable CV due to civil and electrical bulk procurements being higher than planned.
- Project Services reported an unfavorable CV due to numerous cost corrections and COVID-19 impacts, including deep cleaning and other labor and materials required for safety and social distancing measures.

WTP Project Cumulative through November 2020

The WTP Project is behind the planned work scheduled by approximately (\$130.0 million) through November 2020, it has cost approximately (\$22.7 million) more to perform the work than originally estimated. The cumulative-to-date SVs and CVs are reported against the DFLAW/LBL Performance Measurement Baseline.

Note: Because the baselines for HLW Facility, PT Facility, and Project Services have not been updated since 2012, the variances for the PT Facility and Project Services are reported against interim 2-year Bechtel National, Inc. (BNI) work plans, while the HLW Facility is reported against a 5-year work plan (also referred to as the Internal Forecast).

Pretreatment Facility

Federal Project Director: Tom Fletcher

Facility Federal Project Director: Wahed Abdul

The PT Facility is intended to separate radioactive tank waste into high-level waste and low-activity waste fractions then transfer each waste type to the respective facility for immobilization. As of September 2012, the PT Facility was 56 percent complete overall, engineering design was 85 percent complete, procurement was 56 percent complete, construction was 43 percent complete, and startup and commissioning was 3 percent complete. The physical percent complete analysis for the PT Facility was frozen in September 2012, pending development of a revised baseline to address technical and design issues.

DOE and BNI completed resolution of all technical issues identified in the Third Order Regarding Motions to Modify Consent Decrees¹⁰. Additionally, resolution of technical issues (T6 in relation to design redundancy and in-service inspection, and T7 in relation to seismic ground motion criteria changes in 2005) not included in the Third Order Regarding Motions to Modify Consent Decrees have also been completed.

Design and construction of the PT Facility remain on hold. The results of the ongoing HLW Facility AoA will inform the path forward on the PT Facility. Key ongoing activities include maintenance of the facility and discussions with vendors regarding suspended procurements in order to reduce liabilities.

Quarterly Statement: There are no missed milestones that may affect compliance with other milestones.

Accomplishments during the Reporting Period:

- Completed vendor negotiations for termination of additional priority two purchase orders (for a total of 15 of 37) that have been in suspension, to reduce the procurement liabilities.
- Completed demobilization of the heating, ventilation, and air-conditioning contractor for the PT Facility and the WTP site, reducing procurement liability.

Ongoing Activities:

- Continue to manage suspended plant equipment purchase orders to reduce storage and suspension costs and evaluate ways to reduce procurement liability
- Continue to implement asset maintenance at the PT Facility to protect equipment and structures and to ensure design documents are maintained.

¹⁰ *State of Washington v. Dept. of Energy*, No: 2:08-CV-5085-RMP (March 11, 2016) (ECF-221).

Accomplishments Expected in the Next Reporting Period:

- None.

Issues Encountered during the Reporting Period:

- None.

Issues Expected in the Next Reporting Period:

- None.

High-Level Waste Facility

Federal Project Director: Tom Fletcher

Facility Federal Project Director: Wahed Abdul

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

As of September 2012, the HLW Facility was 62 percent complete overall, engineering design was 89 percent complete, procurement was 81 percent complete, construction was 43 percent complete, and startup and commissioning was 4 percent complete. The physical percent complete analysis for the HLW Facility was frozen in September 2012, pending development of a revised baseline to address technical and design issues.

Work on the HLW Facility is being performed in accordance with the fiscal year 2017 through fiscal year 2021 Interim Work Plan, which was initially for work primarily associated with asset maintenance and key ongoing procurement activities.

Since 2019, HLW Facility design activities have been ramping up as the engineering staff have been transitioning from DFLAW/LBL activities based on the availability of funds. System designs for completing preliminary design (60 percent) and detailed design (90 percent) reviews, and updating the hazards analysis and safety basis based on the updated design are the key ongoing activities. Additionally, because of the revision of the natural phenomena hazards that increased the ashfall criteria significantly, strategy and planning activities for developing the path forward for the updated ashfall criteria are being conducted to minimize the potential impact to the project.

In March 2019, DOE awarded the AoA contract for the high-level waste treatment mission. The purpose of the AoA is to identify all viable options to meet mission needs and reduce risk, while providing decision-quality analysis and results to inform the acquisition authority and other stakeholders of all the alternatives to meet both Headquarters and DOE Office of Environmental Management policy requirements. Additional information regarding the AoA process is included in the WTP section at the beginning of this report.

Quarterly Statement: There are no missed milestones that may affect compliance with other milestones.

Accomplishments during the Reporting Period:

- Issued the 60 percent design review report for the melter offgas treatment system
- Completed the feasibility assessments for the emergency operational management approach to support the increased ashfall criteria to reduce the potential cost impact to the project significantly.

Ongoing Activities:

- Continue to advance system designs and hazard analysis for key mechanical and process systems
- Continue activities to formalize the path forward for the updated (increased) ashfall criteria
- Continue to manage suspended plant equipment purchase orders to reduce storage and suspension costs and to evaluate ways to reduce procurement liability
- Continue to implement asset maintenance at the HLW Facility to protect equipment and structures and to ensure design documents are maintained.

Accomplishments Expected in the Next Reporting Period:

- None.

Issues Encountered during the Reporting Period:

- None.

Issues Expected in the Next Reporting Period:

- None.

Low-Activity Waste Facility¹¹

Federal Project Director: Tom Fletcher

Facility Federal Project Director: Jason Young

The LAW Facility will process concentrated low-activity waste, which will be mixed with silica and other glass-forming materials. The mixture will be fed into the LAW Facility's two melters at a design capacity of 30 metric tons per day, heated to 2,100°F, and vitrified into glass. The 300-ton melters are approximately 20 feet by 30 feet and 16 feet high. The glass mixture will then be poured into stainless steel containers, which are 4 feet in diameter, 7 feet tall, and weigh more than 7 tons. These containers are anticipated to be disposed of on the Hanford Site in the Integrated Disposal Facility.

As of November 2020, the LAW Facility was 87 percent complete overall, with engineering design 99 percent complete, procurement 100 percent complete, construction 100 percent complete, and startup and commissioning 53 percent complete. Construction has been completed and startup testing initiated for all LAW Facility systems. Startup testing has been completed for 40 percent of LAW Facility systems, and custody of these systems has been transferred to the Plant Management organization for operations.

Quarterly Statement: There are no missed milestones that may affect compliance with other milestones.

Accomplishments During the Reporting Period:

- Completed construction turnover of the LAW Facility process control system (PCJ-L-05) to the Startup organization for testing
- Completed construction turnover of the LAW Facility environmental monitoring system (EMJ-L-02) to the Startup organization for testing
- Completed construction turnover of the LAW Facility passive gas analysis system (LVP-L-02) to the Startup organization for testing
- Completed construction turnover of the LAW Facility active gas analysis system (LVP-L-04) to the Startup organization for testing
- Completed construction turnover of the LAW Facility stack discharge monitoring system (SDJ-L-01) to the Startup organization for testing
- Completed construction turnover of the LAW Facility lighting electrical system (LTE-L-01) to the Startup organization for testing
- Received authorization for the WTP simulator to operate from the DOE cybersecurity organization.

¹¹ Information about the related Low-Activity Waste Pretreatment System and tank-side cesium removal is included in the monthly reports submitted under the *Hanford Federal Facility Agreement and Consent Order* (also known as the Tri-Party Agreement or TPA).

Ongoing Activities:

- The Startup organization will continue punch list resolution and system testing for the LAW Facility.

Accomplishments Expected in the Next Reporting Period:

- None.

Issues Encountered during the Reporting Period:

- WTP simulator usage was delayed pending review of the simulator software and issuance of an authorization to operate by the DOE cybersecurity organization. Additionally, delays in the development of simulator software and procedures associated with loss-of-power testing continue to present a risk to the operator training schedule.
 - *Actions expected to be initiated or taken to address potential project schedule slippage:* The DOE cybersecurity organization issued an authorization to operate for the WTP simulator.

Issues Expected in the Next Reporting Period:

- None.

Balance of Facilities

Federal Project Director: Tom Fletcher

Facility Federal Project Director: Jason Young

BOF will provide services and utilities to support operation of the main production facilities: PT, HLW, LAW, and LAB. As of November 2020, BOF was 93 percent complete overall, engineering design was 99 percent complete, procurement was 100 percent complete, construction was 97 percent complete, and startup and commissioning was 84 percent complete. Design of the EMF was 100 percent complete.

BOF has completed construction and startup testing for all systems, and custody of these systems has been transferred to the Plant Management organization for operations. System operation and maintenance, operator training, and procedure refinement continues as BNI prepares for increased BOF demands to support LAB operation and LAW Facility system testing.

Quarterly Statement: There are no missed milestones that may affect compliance with other milestones.

Accomplishments During the Reporting Period:

- Maintenance organization completed pressure safety valve replacement and modification activities for the plant service air compressors.
- Maintenance organization completed replacement of the pressurization bladder in the chilled water system expansion tank.
- Maintenance organization completed repairs to the diesel fuel oil system booster pumps located in the Steam Plant.
- Plant Management completed modifications to the Steam Plant boiler nozzles to improve operational performance over a wider range of steam demand.
- Plant Management returned the chilled water system to operation following expansion tank and chiller repairs.
- Startup organization completed handover of the glass former storage system (GFR-B-01) to the Plant Management organization for operations.
- Construction completed handover of the remaining EMF systems to the Startup organization for testing.

Ongoing Activities:

- Startup will continue system testing in EMF.
- Engineering will continue to support EMF system startup testing.
- Plant Management will continue to troubleshoot and repair ongoing issues with air and water systems in the Chiller Compressor Plant.

- Plant Management will continue operations, testing, and tuning of the Steam Plant.
- Construction will continue onsite road preparation and paving.

Accomplishments Expected in the Next Reporting Period:

- None

Issues Encountered during the Reporting Period:

- Operation of the BOF Steam Plant has been inconsistent due to issues with the diesel fuel oil system and challenges with boiler operation and tuning.
 - *Impact:* When the Steam Plant is out of service, comfort steam, which is used to heat the building is not available to the LAB, and analytical methods development activities cannot be performed. Additionally, LAB ventilation for the administrative areas must be secured to reduce the cold weather impacts.
 - *Actions initiated or taken to address potential project schedule slippage:*
 - Plant Management has identified the issue and completed repairs for the diesel fuel oil system.
 - Plant Management continues to adjust the boiler jetting to reduce carbon buildup and support sustained operations.

Issues Expected in the Next Reporting Period:

- None.

Analytical Laboratory

Federal Project Director: Tom Fletcher

Facility Federal Project Director: Jason Young

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of November 2020, the LAB was 92 percent complete overall, engineering design was 99 percent complete, procurement was 100 percent complete, construction was 100 percent complete, and startup and commissioning was 74 percent complete.

The LAB has completed construction and startup testing for all LAB systems, and custody of these systems has been transferred to the Plant Management organization for operations. BNI has completed an operational readiness assessment and is working to increase staffing and improve workflow to support facility operations.

Quarterly Statement: There are no missed milestones that may affect compliance with other milestones.

Accomplishments during the Reporting Period:

- Completed a joint DOE/BNI walkdown of the LAB in preparation for the BNI management LAB readiness assessment.
- Plant Management completed retest activities for the LAB radioactive liquid waste disposal system transfer pumps.
- Plant Engineering completed review of LAB method validation reports.
- Plant Management completed the recertification process for LAB fume hoods.
- BNI and the Office of River Protection completed a joint effort to implement safety, health, and operations programs in support of LAB operations.
- BNI management performed a management readiness assessment in support of declaring completion of the LAB ready to operate contract milestone.
- DOE approved completion of contract milestone B-5, “LAB Readiness to Operate.”

Ongoing Activities:

- BNI will continue revising the layout and positioning of analytical equipment in the fume hood to improve sample analysis workflow and incorporate lessons learned during the method development process.
- BNI will continue the process for recruiting and hiring additional LAB technicians.

Accomplishments Expected in the Next Reporting Period:

- None.

Issues Encountered during the Reporting Period:

- None.

Issues Expected in the Next Reporting Period:

- None.

Written Directives for Waste Treatment and Immobilization Plant Project

Written directives given by DOE to the WTP contractor from October 1, 2020, through December 31, 2020, for work required by the consent decrees.

Seven letters of direction were issued to BNI during the reporting period in reference to Contract No. DE-AC27-01RV14136, *Design, Construction, and Commissioning of the Hanford Tank Waste Treatment and Immobilization Plant*. The letters are listed below¹² and copies are attached:

- 20-WTP-0089, “Contract No. DE-AC27-01RV14136 – Direct-Feed Low-Activity Waste Performance Measurement Baseline Rebaselining Effort (Training Related Activities),” dated October 7, 2020
- 20-WTP-0094, “Contract No. DE-AC27-01RV14136 – Response to Contract Deliverable 5.1, DFLAW Commissioning Plan, for U.S. Department of Energy, Office of River Protection Approval,” dated October 27, 2020
- 20-WTP-0088, “Contract No. DE-AC27-01RV14136 – Approval of 24590-LAW-PL-OP-18-0001, Low-Activity Waste Facility Contractor Operational Readiness Review Plan of Action, Rev. 2,” dated November 1, 2020
- 20-WTP-0096, “Contract No. DE-AC27-01RV14136 – Transmittal of 24590-WTP-PL-MGT-20-0005, “WTP Transition Plan,” Rev. 1,” dated November 23, 2020
- 20-WTP-0100, “Contract No. DE-AC27-01RV14136 – Approval of Contract Deliverable 1.2, 24590-WTP-PL-TE-01-012, “Project Execution Plan,” Rev. 10,” dated December 8, 2020
- 20-WTP-0102, “Contract No. DE-AC27-01RV14136 – Approval of 24590-WTP-RPT-RECA-20-003, “WTP Startup Notification Report, Semi-Annual Fiscal Year 2021 One-Year Projection: December 1, 2020 to November 30, 2021,” Rev. 0 for U.S. Department of Energy Startup Authorization Authority Approval,” dated December 21, 2020
- 20-WTP-0106, “Contract No. DE-AC27-01RV14136 – Acceptance of Completion of Interim Activity Milestone B-5, “LAB Readiness to Operate,”” dated December 22, 2020.

¹² Written directives are listed in chronological order in accordance with the stamp date on each letter.

Enclosure
21-ECD-000548

Written Directives from October 1, 2020, through December 31, 2020



U.S. Department of Energy Hanford Site

December 10, 2020

20-CPM-0185

Mr. Robert E. Gregory, Chief Operating Officer
Washington River Protection Solutions LLC
Post Office Box 850
Richland, Washington 99352

Dear Mr. Gregory:

CONTRACT NUMBER DE-AC27-08RV14800 - REQUEST FOR ADVANCE AGREEMENT FOR SPECIAL CORONAVIRUS LEAVE AFTER EXPIRATION OF THE CORONAVIRUS AID, RELIEF, AND ECONOMIC SECURITY ACT ON DECEMBER 11, 2020

- References:
1. WRPS letter from R. E. Gregory to M. T. McCusker, ORP, "Advance Agreement for Post Cares Act Work and Benefits Management," WRPS-2004604, dated December 7, 2020.
 2. ORP letter from M. T. McCusker to R. E. Gregory, WRPS, "Request For Advance Agreement for Special Coronavirus Leave after Expiration of the Coronavirus Aid, Relief, and Economic Security Act," 20-CPM-0118, dated September 30, 2020.
 3. WRPS letter from R. E. Gregory to M. T. McCusker, ORP, "Advance Agreement for Post CARES Act Work and Benefits Management," WRPS-2003122, dated September 1, 2020.

This letter provides a further response to the Washington River Protection Solution (WRPS) letters, References (1) and (3), requesting Department of Energy (DOE) advance agreement on charging and allowability of novel coronavirus (COVID-19) related costs after the expiration of Coronavirus Aid, Relief, and Economic Security (CARES) Act Section 3610. If Section 3610 of the CARES Act is extended beyond December 11, 2020, by the legislative process, DOE will modify the Tank Operations Contract and WRPS may continue to follow its company policies and procedures related to implementation of the Act. If Section 3610 is not extended, then WRPS shall proceed as if no COVID-19 relief will be provided and follow its company leave policies and COVID-19 remobilization plan. DOE provisions granting authority to charge weather and safety leave due to COVID-19 related circumstances under DOE Order 350.1 will not be extended at Hanford after December 11, 2020.

Mr. Robert E. Gregory
20-CPM-0185

-2-

December 10, 2020

If you have any questions, please contact me on (509) 376-5207 or at Nicole_Schuller@orp.doe.gov.

Sincerely,

 Shelby N. Schuller
2020.12.10 14:01:29
-08'00'

Shelby Nicole Schuller
Contracting Officer
Office of River Protection

CPM:MTM

cc: K. A. Downing, WRPS
L. A. Mills, WRPS
WRPS Correspondence



**U.S. Department of Energy
Hanford Site**

October 7, 2020

20-WTP-0089

Valerie McCain, Project Director
Bechtel National, Inc.
450 Hills Street
Richland, Washington 99354

Dear Mrs. McCain:

**CONTRACT NO. DE-AC27-01RV14136 – DIRECT-FEED LOW-ACTIVITY WASTE
PERFORMANCE MEASUREMENT BASELINE REBASELINING EFFORT (TRAINING
RELATED ACTIVITIES)**

In preparing the upcoming rebaseline, it is imperative that key training activities and milestones required to be completed before hot commissioning, be planned as discrete activities and the work breakdown depicted down to level 4 in the project schedule. Level-of-effort activities should be assigned as appropriate to the scope and relative float of the activity so as not to challenge meeting schedule dates. This effort is to include any remaining development, delivery, and qualification. Efforts requiring simulator testing, scenario development, training, and modification of software or hardware need to be planned as discrete work and appropriately tied to the necessary operations activities they support.

Please work with Jeff Daniels, Acting Director, Waste Treatment and Immobilization Plant Project Controls Division and team to ensure this priority planning condition is satisfied. Jeff can be reached on (509) 430-1260.

Sincerely,

 Digitally signed by
Thomas W. Fletcher
Date: 2020.10.07
13:17:18 -07'00'

Thomas W. Fletcher
Assistant Manager, Federal Project Director
Waste Treatment and Immobilization Plant
Office of River Protection

WTP:JAR

cc: BNI Correspondence



U.S. Department of Energy Hanford Site

October 27, 2020

20-WTP-0094

Valerie McCain, Project Director
Bechtel National, Inc.
450 Hills Street
Richland, Washington 99354

Dear Mrs. McCain:

CONTRACT NO. DE-AC27-01RV14136 – RESPONSE TO CONTRACT DELIVERABLE 5.1, DFLAW COMMISSIONING PLAN, FOR U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION APPROVAL

- References:
1. BNI letter from V. McCain to T. W. Fletcher, ORP, “Contract Deliverable 5.1, DFLAW Commissioning Plan, For ORP Approval,” CCN: 321443, dated September 30, 2020.
 2. ORP letter from T. W. Fletcher to V. McCain, BNI, “Response to Contract Deliverable 5.1 – 24590-WTP-PL-RACT-CG-0001, Rev 2, DFLAW Commissioning Plan, and Transmittal of Review Comment Record,” 20-WTP-0052, dated May 12, 2020.

This letter responds to your September 30, 2020, letter requesting the U.S. Department of Energy, Office of River Protection’s (ORP) approval of the 24590-WTP-PL-RACT-CG-0001, *DFLAW Commissioning Plan*, Rev. 3 (Reference 1).

ORP reviewed Bechtel National, Inc. plan 24590-WTP-PL-RACT-CG-0001. In reviewing the submitted document and transmittal letter, ORP notes that no discussion was included that either speaks to the applicability of standard ISA-84.00.01-2004 for the commissioning phase nor the fulfillment of those requirements. This point was specifically requested in ORP’s previous conditional approval (Reference 2).

Contract Deliverable 5.1, “Commissioning Plan,” 24590-WTP-PL-RACT-CG-0001, Rev. 3 is conditionally approved provided that ISA-84.00.01-2004 is adequately implemented in lower tiered project documentation. Attached are comments from ORP’s review of the document and should be resolved in a future revision, if required.

Valerie McCain
20-WTP-0094

-2-

The action taken herein is considered to be within the scope of work of the existing contract and does not authorize the Contractor to incur any additional costs (either direct or indirect) or delay delivery to the Government. If the Contractor considers that carrying out this action will increase contract/project costs or delay of delivery, the Contractor shall promptly notify the Contracting Officer orally, confirming and explaining the notification in writing within ten (10) calendar days, and otherwise comply with the requirements of the Contract Clause I.84 FAR 52.243-7, – “Notification of Changes (APR 1984).” Following submission of the written notice of impacts, the Contractor shall await further direction from the Contracting Officer.

If you have any questions, please contact me, or you may contact Ron Frink, Director, Commissioning, Maintenance, and Operations Division, on (509) 591-1889.

Sincerely,



Digitally signed by
Thomas W. Fletcher
Date: 2020.10.27
15:22:28 -07'00'

Thomas W. Fletcher
Assistant Manager, Federal Project Director
Waste Treatment and Immobilization Plant
Office of River Protection

WTP:AMR

Attachment

cc w/attach:
BNI Correspondence



U.S. Department of Energy Hanford Site

November 1, 2020

20-WTP-0088

Valerie McCain, Project Director
Bechtel National, Inc.
450 Hills Street
Richland, Washington 99354

Dear Mrs. McCain:

CONTRACT NO. DE-AC27-01RV14136 – APPROVAL OF 24590-LAW-PL-OP-18-0001,
LOW-ACTIVITY WASTE FACILITY CONTRACTOR OPERATIONAL READINESS
REVIEW PLAN OF ACTION, REV. 2

The U.S. Department of Energy, Office of River Protection (ORP), in accordance with DOE O 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*, Chg. 1, approves Bechtel National, Inc.'s 24590-LAW-PL-OP-18-0001, *Plan of Action for the Low-Activity Waste Facility Contractor Operational Readiness Review*, Rev. 2, submitted September 28, 2020, via CCN: 321440, "Contract No. DE-AC27-01RV14136 – Submittal of 24590-LAW-PL-OP-18-0001, Rev. 2, *Plan of Action for the Low-Activity Waste Facility Contractor Operational Readiness Review*, for Startup Authorization Authority Approval."

The action taken here is considered to be within the scope of work of the existing contract and does not authorize the Contractor to incur any additional costs (either direct or indirect) or delay delivery to the Government. If the Contractor considers that carrying out this action will increase contract/project costs or delay of delivery, the Contractor shall promptly notify the Contracting Officer orally, confirming and explaining the notification in writing within ten (10) calendar days, and otherwise comply with the requirements of the Contract Clause I.84 FAR 52.243-7, --"Notification of Changes (APR 1984)." Following submission of the written notice of impacts, the Contractor shall await further direction from the Contracting Officer.

Valerie McCain
20-WTP-0088

-2-

November 1, 2020

If you have any questions, please contact me, or your staff may contact Gary Olsen, Commissioning Maintenance and Operations Division, ORP, on (509) 376-0670.

Sincerely,

BENTON
HARP



Digitally signed by
BENTON HARP
Date: 2020.11.02
15:44:07 -08'00'

Ben J. Harp
Deputy Manager
Office of River Protection

WTP:GBO

cc: BNI Correspondence



U.S. Department of Energy Hanford Site

November 23, 2020

20-WTP-0096

Valerie McCain, Project Director
Bechtel National, Inc.
450 Hills Street
Richland, Washington 99354

Dear Mrs. McCain:

CONTRACT NO. DE-AC27-01RV14136 – TRANSMITTAL OF 24590-WTP-PL-MGT-20-0005, “WTP TRANSITION PLAN,” REV. 1

Bechtel National, Inc. submitted 24590-WTP-PL-MGT-20-0005, *WTP Transition Plan*, via CCN: 321446, “Deliverable 5.19 – Transmittal of 24590-WTP-PL-MGT-20-0005, Rev 1, *WTP Transition Plan*, for ORP Approval,” for the U.S. Department of Energy, Office of River Protection Contracting Officer Representative’s approval.

The Office of River Protection approves 24590-WTP-PL-MGT-20-0005, Rev. 1 and will continue to work with Bechtel National, Inc. through the executive committee to maintain configuration control of the assumptions in the transition plan as the project moves toward completion and ultimately transition.

The action taken herein is considered to be within the scope of work of the existing contract and does not authorize the Contractor to incur any additional costs (either direct or indirect) or delay delivery to the Government. If the Contractor considers that carrying out this action will increase contract/project costs or delay of delivery, the Contractor shall promptly notify the Contracting Officer orally, confirming and explaining the notification in writing within ten (10) calendar days, and otherwise comply with the requirements of the Contract Clause I.84 FAR 52.243-7, --“Notification of Changes (APR 1984).” Following submission of the written notice of impacts, the Contractor shall await further direction from the Contracting Officer.

November 23, 2020

Valerie McCain
20-WTP-0096

-2-

If you have questions, please contact me, or your staff may contact Joseph Renevitz, Startup Engineer, Office of River Protection on (509) 376-2368.

Sincerely,



Digitally signed by
Thomas W. Fletcher
Date: 2020.11.23
12:40:46 -08'00'

Thomas W. Fletcher
Assistant Manager, Federal Project Director
Waste Treatment and Immobilization Plant Project
Office of River Protection

WTP:JAR

cc: BNI Correspondence



**U.S. Department of Energy
Hanford Site**

December 8, 2020

20-WTP-0100

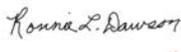
Mr. B. D. Ponte, Prime Contract Manager
Bechtel National, Inc.
450 Hills Street
Richland, Washington 99354

Dear Mr. Ponte:

CONTRACT NO. DE-AC27-01RV14136 – APPROVAL OF CONTRACT
DELIVERABLE 1.2, 24590-WTP-PL-TE-01-012, “PROJECT EXECUTION PLAN,” REV. 10

The U.S. Department of Energy, Office of River Protection has reviewed Bechtel National, Inc.’s November 6, 2020, submittal sent via CCN: 321448, “Contract No. DE-AC27-01RV14136 – Contract Deliverable 1.2 – 24590-WTP-PL-TE-01-012, Rev 10, *Project Execution Plan (PEP)*.” Based on the review, the Office of River Protection approves plan 24590-WTP-PL-TE-01-012.

If you have any questions, please contact Wahed Abdul, Federal Project Director for Engineering, Procurement, and Construction, Waste Treatment and Immobilization Plant, Office of River Protection on (509) 438-0455.


Digitally signed by Ronnie L. Dawson
DN: cn=us, o=u.s. government, ou=department
of energy, ou=Energy IT Services, ou=Hanford
Site, ou=People, cn=Ronnie L. Dawson
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Ronnie L. Dawson
Contracting Officer
Office of River Protection


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Thomas W. Fletcher
Date: 2020.12.09
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Thomas W. Fletcher
Assistant Manager, Federal Project Director
Waste Treatment and Immobilization Plant
Office of River Protection

WTP:WA

cc: BNI Correspondence



U.S. Department of Energy Hanford Site

December 21, 2020

20-WTP-0102

Valerie McCain, Project Director
Bechtel National, Inc.
450 Hills Street
Richland, Washington 99354

Dear Mrs. McCain:

CONTRACT NO. DE-AC27-01RV14136 – APPROVAL OF 24590-WTP-RPT-RECA-20-003, “WTP STARTUP NOTIFICATION REPORT, SEMI-ANNUAL FISCAL YEAR 2021 ONE-YEAR PROJECTION: DECEMBER 1, 2020 TO NOVEMBER 30, 2021,” REV. 0 FOR U.S. DEPARTMENT OF ENERGY STARTUP AUTHORIZATION AUTHORITY APPROVAL

The U.S. Department of Energy, Office of River Protection (ORP) approves notification report 24590-WTP-RPT-RECA-20-003, *WTP Startup Notification Report Semi-Annual Fiscal Year 2021 One-Year Projection, December 1, 2020 to November 30, 2021, Rev. 0*, submitted on November 24, 2020, via CCN: 322509, “Contract No. DE-AC27-01RV14136 – Transmittal of WTP Startup Notification Report, Semi-Annual Fiscal Year 2021 One-Year Projection, for ORP Approval,” as required by DOE O 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*, Attachment 1, “Contractor Requirements Document,” for facilities in regard to direct-feed low-activity waste configuration.

The action taken herein is considered to be within the scope of work of the existing contract and does not authorize the Contractor to incur any additional costs (either direct or indirect) or delay delivery to the Government. If the Contractor considers that carrying out this action will increase contract/project costs or delay of delivery, the Contractor shall promptly notify the Contracting Officer orally, confirming and explaining the notification in writing within ten (10) calendar days, and otherwise comply with the requirements of the Contract Clause I.84 FAR 52.243-7, – “Notification of Changes (APR 1984).” Following submission of the written notice of impacts, the Contractor shall await further direction from the Contracting Officer.

Valerie McCain
20-WTP-0102

-2-

December 21, 2020

If you have any questions, please contact me, or your staff may contact Mr. Gary Olsen, Commissioning, Maintenance, and Operations Division, ORP, on (509) 376-0670.

Sincerely,

**BENTON
HARP**

Digitally signed by
BENTON HARP
Date: 2020.12.21 12:40:07
-08'00'

Ben J. Harp
Deputy Manager
Office of River Protection

WTP:GBO

cc: BNI Correspondence



U.S. Department of Energy Hanford Site

December 22, 2020

20-WTP-0106

Valerie McCain, Project Director
Bechtel National, Inc.
450 Hills Street
Richland, Washington 99354

Dear Mrs. McCain:

CONTRACT NO. DE-AC27-01RV14136 – ACCEPTANCE OF COMPLETION OF INTERIM ACTIVITY MILESTONE B-5, “LAB READINESS TO OPERATE”

This letter responds to your December 04, 2020, letter CCN: 322510, in which Bechtel National, Inc. (BNI) notified the U.S. Department of Energy, Office of River Protection (ORP) that interim activity milestone B-5, “LAB Readiness to Operate” had been completed. ORP has reviewed the information provided and concurs that BNI has met the contract requirements for milestone B-5, “Lab Readiness to Operate”. ORP authorizes BNI to invoice for the milestone completion value of \$5,954,066, which is the total value of \$6,650,000 minus \$695,934 of provisional fee already paid. For tracking purposes, it is requested that a separate invoice be submitted for this milestone.

BNI states the following in CCN: 322510:

“Table B-2-F-1, *Commission LBL in the DFLAW Configuration Performance Based Incentive Fee*, indicates an interim milestone date of June 8, 2020. As of February 2020 month-end, BNI had projected that the milestone would be completed on May 29, 2020. By Reference 1, BNI notified the Contracting Officer that absent the impact of COVID-19 and the Partial Stop Work Order (PSWO) (Reference 2), the milestone date was projected to be achieved. However, due to the COVID-19 public health crisis and the PSWO the milestone was not completed until November 18, 2020. Recognizing that the request for equitable adjustment (REA) for the PSWO, which will adjust this interim milestone date, will be evaluated and settled later in 2021, BNI requests that the Contracting Officer’s determination of completion authorize BNI to invoice for payment of the applicable incentive fee.”

This determination of completion and authorization to invoice for payment is subject to the future evaluation and settlement of any schedule delay due to COVID-19.

December 22, 2020

Valerie McCain
20-WTP-0106

In the event that it is determined that BNI did not meet the contract schedule for completion of this milestone, as adjusted due to COVID-19, BNI shall return to the Government within thirty (30) days of written request by the Contracting Officer, any overpayment of fee, to include applicable interest, in accordance with contract clause I.65, "FAR 52.232-17 Interest (JUN 1996)".

If you have any questions, please contact me, or your staff may contact Jason Young, Operations Transition Manager, Waste Treatment and Immobilization Plant, ORP, on (509) 376-0375.

Sincerely,



Digitally signed by Ronnie L. Dawson
DN: c=us, o=u.s. government,
ou=Department of Energy, ou=Energy IT
Services, ou=Hanford Site, ou=People,
cn=Ronnie L. Dawson
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2017.011.30188

Ronnie L. Dawson
Contracting Officer
Office of River Protection

WTP:JDY

Attachment
Milestone B-5, "LAB Readiness to Operate"
Milestone Validation Report

cc w/attach:
BNI Correspondence