



U.S. Department of Energy

Hanford Field Office
P.O. Box 550
Richland, Washington 99352

May 5, 2025

25-TWO-0061
REISSUE

Ms. Stephanie Schleif
Program Manager
Nuclear Waste Program
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Dear Ms. Schleif:

REISSUE - MAY 2025 QUARTERLY REPORT FOR THE STATE OF WASHINGTON VS. U.S. DEPARTMENT OF ENERGY, HANFORD FIELD OFFICE, CASE NO. 08-5085-RMP, FOR WASTE TREATMENT AND IMMOBILIZATION PLANT CONSTRUCTION AND STARTUP ACTIVITIES AND TANK RETRIEVAL ACTIVITIES – JANUARY 1, 2025, THROUGH MARCH 31, 2025

This letter is being reissued to add signatures to its attachment.

This letter transmits the U.S. Department of Energy, Hanford Field Office May 2025 Quarterly Report, under section IV.C.1 of the subject consent decree, for the period of January 1, 2025, through March 31, 2025. Pursuant to the consent decree, this report provides the status and progress made during the reporting period.

If you have any questions, please contact Ricky Bang, Acting Assistant Manager Tank Waste Operations at (509) 376-4151.

**RICKY
BANG**

Digitally signed by RICKY
BANG
Date: 2025.05.06
14:48:13 -07'00'

Ricky Bang, Acting Assistant Manager
Tank Waste Operations

**ROBERT
IRWIN**

Digitally signed by
ROBERT IRWIN
Date: 2025.05.06
14:34:10 -07'00'

Robert M. Irwin, Assistant Manager
Waste Treatment and Immobilization Plant

TWO:RB

Attachment

cc: See page 2

Ms. Stephanie Schleif
25-TWO-0061
REISSUE

-2-

May 5, 2025

cc w/attach:

C. Buck, Wanapum

L. Contreras, YN

D. R. Einan, EPA

K. G. Ellis, EM-4

S. Forzley, Oregon DOJ

E. J. Holbrook, Ecology

J. R. Loa, Ecology

R. A. Lobos, EM-4.13

M. R. Mullin, EPA

M. Murphy, CTUIR

E. A. Rochette, Ecology

P. G. Rowe, Oregon DOJ

A. Smith, NPT

J. H. Temple, Ecology

M. J. Turner, HMIS

M. Woods, ODOE

Administrative Record (D-16C-03AJ)

Environmental Portal

HAB Facilitation (HAB@slind.net)

HMIS Correspondence

Attachment
25-TWO-0061
REISSUE

U.S. Department of Energy, Hanford Field Office
May 2025 Quarterly Report under Section IV-C-1 of the Subject
Consent Decree for the period of January 1, 2025, through March 31, 2025

(40 pages including cover sheet)

Hanford Field Office Consent Decree Quarterly Report

Quarterly Reporting Period January 1–March 31, 2025¹

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)

Fourth Amended Consent Decree, *State of Washington v. Dept. of Energy*,
No: 2:08-CV-5085-RMP (December 10, 2020)

Fifth Amended Consent Decree, *State of Washington v. Dept. of Energy*,
No: 2:08-CV-5085-RMP (July 18, 2022)

Sixth Amended Consent Decree, *State of Washington v. Dept. of Energy*,
No: 2:08-CV-5085-RMP (January 8, 2025)²



**2440 Stevens Center Place
Richland, Washington 99352**

ROBERT IRWIN Digitally signed by ROBERT IRWIN
Date: 2025.05.06 14:32:41 -07'00'

Robert M. Irwin, Assistant Manager
Waste Treatment and Immobilization Plant

_____ Date

RICKY BANG Digitally signed by RICKY BANG
Date: 2025.05.06 14:48:46 -07'00'

Ricky Bang, Acting Assistant Manager
Tank Waste Operations

_____ Date

¹ Except where otherwise expressly stated, the narrative descriptions of progress in this report cover the period from January 1, 2025, through March 31, 2025. Earned Value Management System and Estimate at Completion data and descriptions cover the period ending February 28, 2025.

² The consent decrees listed above are between the State of Washington and U.S. Department of Energy. For the first three of these decrees, there are similar separate decrees with the State of Oregon.

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Acronyms and Abbreviations

AoA	analysis of alternatives
BNI	Bechtel National, Inc.
BOF	Balance of Facilities
CD	Consent Decree
COVID-19	coronavirus disease 2019
CV	cost variance
DFLAW	direct-feed low-activity waste
DOE	U.S. Department of Energy
DST	double-shell tank
EAC	Estimate at Completion
ETC	Estimate to Completion
Ecology	Washington State Department of Ecology
ERSS	Extended-Reach Sluicer System
EVMS	Earned Value Management System
FY	fiscal year
GFR	Glass Former Regent
HLW	High-Level Waste
HFO	U.S. Department of Energy, Hanford Field Office
LAB	Analytical Laboratory
LAW	low-activity waste
LBL	Low-Activity Waste Facility, Balance of Facilities, and Analytical Laboratory
PT	Pretreatment (Facility)
SV	schedule variance
TWRWP	tank waste retrieval work plan
WTP	Waste Treatment and Immobilization Plant

Introduction

The U.S. Department of Energy’s (DOE), Hanford Field Office submits the information in this report to satisfy its obligation to provide “a written report documenting the WTP [Waste Treatment and Immobilization Plant] construction and startup activities and tank retrieval activities that occurred during the period covered by the report,” as required by Section IV.C.1 of the Second Amended Consent Decree (CD) 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 January 1, 2025, through March 31, 2025. Earned Value Management System (EVMS) and Estimate at Completion (EAC) data and descriptions cover the period ending February 28, 2025; this includes the facility completion percentage estimates within various locations in the WTP sections below.

As the Washington State Department of Ecology (Ecology) has requested, written directives that were not previously submitted for the period addressed by this report for work required by the CD, as amended, are included with this report.

Tank Waste Operations Actions and Milestones

Number	Title	Due Date	Status
Actions			
D-16E-01	Purchase a Spare A-E-1 Reboiler 242-A Evaporator.	12/31/2016	Complete
D-16E-02	Have Available a Spare A-E-1 Reboiler for 242-A Evaporator.	12/31/2018	Complete
Milestones			
D-16B-03	Of the 12 SSTs Referred to in B-1 and B-2, Complete Retrieval of Tank Waste in at Least 5.	1/30/2023 ^a	Complete
D-16B-01	Complete Retrieval of Tank Waste from 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 A-101, A-102, A-106, AX-101, AX-102, AX-103, AX-104 ^b	05/01/2028 ^a	On Schedule
D-16B-04 ^c	Complete Retrieval of Tank Wastes from SSTs A-104 and A-105 or complete retrieval of up to two substitute tanks as provided in Section IV.B.2. ^b	12/31/2040	On Schedule

^a 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 coronavirus disease 2019 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 coronavirus disease 2019. On July 18, 2022, the Court issued an order extending the aforementioned milestones by 579 days, consistent with the formula set forth in the previous order.

^b As discussed in the joint motion to amend the Consent Decree filed on October 1, 2018, the U.S. Department of Energy 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., specified for retrieval under the B-2 Milestone). The U.S. Department of Energy met with 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. Since August 2018, the U.S. Department of Energy has had several discussions with the Washington State Department of Ecology on this topic. On January 8, 2025, an *Order Amending Consent Decree Between U.S. Department of Energy and State of Washington* (reference AR-33281) was issued, which moved Tanks A-104 and A-105 from Milestone D-16B-02 to the newly established Milestone D-16B-04 due December 31, 2040.

^c Milestone created by the Order Amending Consent Decree on January 8, 2025 (reference AR-33281).

COVID-19 = coronavirus disease 2019.

WMA-C = C Tank Farm waste management area.

SST = single-shell tank.

Single-Shell Tank Retrieval Program

Acting Tank Waste Operations Assistant Manager: Ricky Bang

Technical Lead: Jim Greene

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

To address the project impacts experienced as a result of the coronavirus disease 2019 (COVID-19) pandemic, DOE and the State of Washington filed a joint motion to amend the CD on December 9, 2020. On December 10, 2020, the United States District Court, Eastern District of Washington issued an order modifying the Amended CD 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. On July 18, 2022, the United States District Court, Eastern District of Washington, issued an order granting DOE's unopposed motion to enter CD milestone extensions. Milestones B-2, B-3, A-7, A-8, and A-9 were extended by 579 days.

On January 8, 2025, the United States District Court, Eastern District of Washington issued *State of Washington Department of Ecology v. U.S. Department of Energy*, No. 2:08-CV-5085-RMP, *Order Amending Consent Decree Between U.S. Department of Energy and State of Washington*, which included changes to Milestone B-2 and the addition of Milestone B-4.

The U.S. Department of Energy, Hanford Field Office (HFO) and its contractors continue to evaluate COVID-19 ongoing risks and potential impacts (e.g. supply chain) to planned work, project costs and schedules, and commitments in parallel with implementing actions intended to mitigate or eliminate further impacts.

Accomplishments in the Reporting Period

Completed Accomplishments:

- Completed Tank A-102 Construction Acceptance Testing.
- Completed Tank A-102 Operations Acceptance Testing.
- Completed Tank A-102 readiness and initiated retrieval operations.
- Completed Tank A-106 pump installation.

Ongoing Activities:

- Continued Tank A-101 new retrieval operations. The total waste volume retrieved as of March 2025 was approximately 56 percent.
- Continued Tank A-102 new retrieval operations. The total waste volume retrieved as of March 2025 was approximately 8.5 percent.
- Continued Tank A-106 new retrieval equipment installation.
- Continued Tank AX-102 and Tank AX-104 post retrieval operations safe configuration and stabilization (e.g., long-term tank pit enclosure installation).

Accomplishments Expected in the Next Reporting Period

- Complete Tank A-106 pump jumper cover plate and hydraulic power unit installation.

Issues Encountered in the Reporting Period

- Tank A-101 retrieval operations were paused in November 2024 due to limited space availability. Tank A-101 retrieval operations are forecasted to resume after completion of 242-A Evaporator campaigns and the subsequent double-shell tank to double-shell tank (DST to DST) waste transfer.
- Approximately 60,000 gallons of Tank AP-101 DST capacity has been allocated to initiate Tank A-102 retrieval operations. The resumption and completion of Tank A-102 retrieval operations is forecasted to occur after Tank A-101 retrieval operations are completed.
- The Tank A-102 Extended Reach-Sluicer System (ERSS) fabricator damaged one of the two sluicers during factory testing. The contractor dispatched personnel to the fabricator's facility and are working with the fabricator to evaluate the ERSS, identify corrective actions, and establish a path forward. Tank A-102 retrieval operations were initiated to begin using a single sluicer until the damaged sluicer is repaired. After repair and delivery of the damaged sluicer, an evaluation will be conducted to determine the best time for installation in relation to ongoing Tank A-101 retrieval operation, Tank A-102 retrieval operations, and Tank A-106 retrieval equipment installation activities. Ecology was briefed on starting operations with one sluicer and concurred.
- The slurry line from A-102 to AP-101 was not successfully flushed after a transfer, indicating a potential blockage within the slurry line. An alternate transfer route has been identified and may be used for A-102 retrievals.

Issues Expected in the Next Reporting Period

- Tank A-101 retrieval operations were paused in November 2024 due to limited DST space availability. Tank A-101 retrieval operations are forecasted to resume after completion of 242-A Evaporator campaigns and the subsequent DST to DST waste transfer forecasted to occur in June 2025.
- DOE expects the retrieval challenges and tank condition issues associated with Tanks A-104 and A-105 to continue.

Actions Initiated or Taken to Address Potential Schedule Slippage

- Allocated Tank AP-101 DST tank capacity to allow Tank A-102 retrieval operations to be initiated in Fiscal Year (FY) 2025 Quarter 2.
- An additional DST to DST transfer is scheduled for May 2025 that should allow for the completion of A-101 retrieval operations and the resumption of A-102 retrieval operations.
- 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.
- Tank A-102 retrieval operations were initiated with one sluicer. After repair and delivery of the damaged sluicer, an evaluation will be conducted to determine the best time for installation in relation to ongoing Tank A-101 retrieval operation, Tank A-102 retrieval operations, and Tank A-106 retrieval equipment installation activities. Ecology was briefed on starting operations with one sluicer and concurred.

- Initiated Tanks AP-101 and A-102 grab sampling efforts to prevent potential future transfer line blockages.

Tank Waste Retrieval Work Plan Status

Acting Tank Waste Operations Assistant Manager: Ricky Bang

Federal Program Manager: Jim Greene

Tank	TWRWP	Status	Retrieval Technology		
			First	Second	Third
A-101	RPP-PLAN-64889, Rev. 1	Complete	ERSS Sluicing with supernate and water	High-pressure water deployed with ERSS	–
A-102	RPP-PLAN-64954, Rev. 2	Complete	ERSS Sluicing with supernate and water	High-pressure water deployed with ERSS	–
A-103	RPP-PLAN-65683	In Review	ERSS Sluicing with supernate and water	High-pressure water deployed with ERSS	–
A-104	TBD	Not Started	TBD	TBD	–
A-105	TBD	Not Started	TBD	TBD	–
A-106	RPP-PLAN-65594	Complete	ERSS Sluicing with supernate and water	High-pressure water deployed with ERSS	–
AX-101	RPP-RPT-58932, Rev. 1	Complete	Sluicing with ERSS	High-pressure water deployed with ERSS	–

ERSS = Extended Reach-Sluicer System.

TWRWP = tank waste retrieval work plan.

TBD = to be determined.

Accomplishments in the Reporting Period

- The Tank A-106 waste retrieval work plan was approved by Ecology.

Accomplishments Expected in the Next Reporting Period

- None.

Issues Encountered in the Reporting Period

- None.

Issues Expected in the Next Reporting Period

- None.

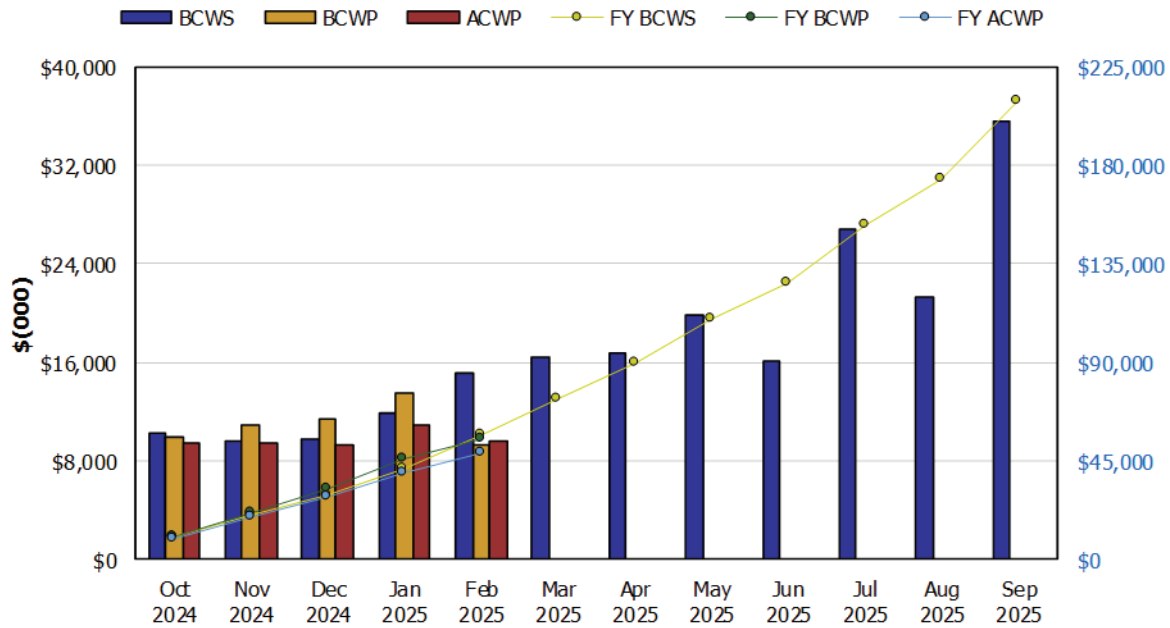
Tank Farm Earned Value Management System Quarterly Analysis

Earned Value Data: Fiscal Year 2025

February-2025

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 2024	\$10,237	\$9,987	\$9,509	0.98	1.05	\$10,237	\$9,987	\$9,509	0.98	1.05
Nov 2024	\$9,657	\$10,957	\$9,460	1.13	1.16	\$19,894	\$20,944	\$18,969	1.05	1.10
Dec 2024	\$9,809	\$11,433	\$9,208	1.17	1.24	\$29,703	\$32,377	\$28,177	1.09	1.15
Jan 2025	\$11,912	\$13,505	\$10,902	1.13	1.24	\$41,614	\$45,882	\$39,080	1.10	1.17
Feb 2025	\$15,191	\$9,348	\$9,527	0.62	0.98	\$56,805	\$55,230	\$48,607	0.97	1.14
Mar 2025	\$16,418					\$73,223				
Apr 2025	\$16,799					\$90,023				
May 2025	\$19,904					\$109,927				
Jun 2025	\$16,085					\$126,012				
Jul 2025	\$26,801					\$152,813				
Aug 2025	\$21,308					\$174,121				
Sep 2025	\$35,600					\$209,722				

CTD	\$1,759,234	\$1,751,762	\$1,761,054	1.00	0.99
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- ACWP = actual cost of work performed. EVMS = Earned Value Management System.
- BCWP = budgeted cost of work performed. FY = fiscal year.
- BCWS = budgeted cost of work scheduled. SPI = schedule performance index.
- CPI = cost performance index. SST = single-shell tank.
- CTD = contract to date.

Earned Value Management System Quarterly Analysis

Retrieve and Close Single-Shell Tanks (5.02)³

Project EVMS reflects data for December 2024, January 2025, and February 2025.

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 December favorable SV of approximately \$1.6 million was primarily due to the following:

- Schedule acceleration in procurements for the A Tank Farm: Received the ERSS cover plates and shield structures for Tanks A-103 and A-106 ahead of schedule.
- Schedule acceleration in Tank A-102 retrieval equipment installation primarily attributed to the completion of the B Pit electrical installation work scope ahead of schedule.
- Schedule acceleration in equipment removal for the S Tank Farm: Starting ventilation work scope ahead of schedule.
- Favorable SV offset by procurements completed for the A Tank Farm in a month earlier than planned.

The January favorable SV of approximately \$1.6 million was primarily due to the following:

- Schedule acceleration in direct push of the S Tank Farm fieldwork activities performed ahead of schedule.
- Schedule acceleration in the A Tank Farm procurement of Tank A-103 ERSS cover plates and Tank A-106 slurry pump box assembly.
- Schedule recovery in the S Tank Farm retrieval system design.
- Schedule recovery in the S Tank Farm utility installation design and fieldwork.
- Schedule acceleration of the Tank A-102 operational readiness activities.
- Favorable SV is offset by schedule delays in the S Tank Farm ingress/egress fieldwork activities.

The February unfavorable SV of approximately (\$5.8 million) was primarily due to the following:

- Schedule delays in the A Tank Farm procurement with Tank A-103 ERSSs.
- Schedule delays in the S Tank Farm ingress/egress with procurement and installation activities.
- Tank A-102 operational readiness activities were planned in February. However, the activities were performed in a prior month.

³ “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.”

- Unfavorable SV was offset by schedule acceleration in direct push of S Tank Farm fieldwork activities performed ahead of schedule.
- Unfavorable SV was offset by schedule recovery in the S Tank Farm retrieval system design.

Cost Variance Summary:

The December favorable cost variance (CV) of approximately \$2.2 million was primarily due to the following:

- Less than planned subcontract costs for procurements in the A Tank Farm primarily attributed to Tanks A-103 and A-106 ERSS cover plates.
- Less than planned labor usage and subcontract cost to support Tank A-102 retrieval equipment installation work scope.
- Less than planned labor usage required to support Tank A-101 retrieval operations.
- Less than planned labor costs for Common Upgrades Support project within the A Tank Farm.
- Less than planned subcontract costs for S Tank Farm utility installation fieldwork activities.

The January favorable CV of approximately \$2.6 million was primarily due to the following:

- Less than planned material cost in A Tank Farm procurement for Tank A-103 ERSS cover plates and shielding structures.
- Less than planned labor usage required to support Tank A-101 retrieval operations.
- Less than planned labor usage within the A Tank Farm.
- Less than planned subcontract costs for S Tank Farm equipment removal and utility installation fieldwork activities.

The February unfavorable CV of (\$179,385) was below the reportable threshold.

Retrieval Labor Hours on Self-Contained Breathing Apparatus

Acting Tank Waste Operations Assistant Manager: Ricky Bang

Federal Program Manager: Jim Greene

Labor Hours Expended on Single-Shell Tank Retrieval Self-Contained Breathing Apparatus January 1, 2025, through March 31, 2025

	SCBA Direct Labor Hours	SCBA Subcontractor Hours ^a	Total SST Operation Hours	Total Hours ^b	Total Percent on SCBA	Detrimental Impacts Days ^c
C Tank Farm	0	0	0	0	0	56
A/AX Tank Farms	376	120	496	95,853	0.5%	71
Total	376	120	496	95,853	0.5%	

^a Subcontractor’s hours include labor hours from subcontractors, including North Point Electrical Contracting, Inc.; Geophysical Survey, Inc.; Fowler General Construction; American Electric; Battelle-Northwest Laboratories Technical Services; and Intermech Inc. Improvements were made in the process for collecting subcontractor hours, resulting in more accurate accounting.

^b Includes all labor hours supporting single-shell tank farms in retrieval including support outside farm fence (e.g., Engineering, Project Management, and other support accounts).

^c Detrimental impacts are presented as the total number of days, cumulative from the beginning of self-contained breathing apparatus reporting in the Consent Decree quarterly, in which a stop work related to self-contained breathing apparatus use prevented field operations from continuing. It is limited to self-contained breathing apparatus 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 Waste Operations

DOE issued no written directives to the Tank Waste Operations Contractor from January 1, 2025, through March 31, 2025, for work required by the CDs.

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 ^b
D-00A-01	Achieve Initial Plant Operations for the WTP	12/31/2036	At Risk ^b
Pretreatment (PT) Facility			
D-00A-18	Complete Structural Steel Erection Below Elevation 56' in Pretreatment (PT) Facility	12/31/2009	Complete
D-00A-26 ^a	Select Additional Pretreatment Capability for Implementation After Direct Feed HLW Hot Commissioning	12/31/2029	On Schedule
D-00A-19	Complete Elevation 98' Concrete Floor Slab Placements in PT Facility	12/31/2031	At Risk ^b
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels FEP-SEP-O0001A/1B	12/31/2031	At Risk ^b
D-00A-14	Pretreatment (PT) Facility Construction Substantially Complete	12/31/2031	At Risk ^b
D-00A-15	Start Pretreatment (PT) Facility Cold Commissioning	12/31/2032	At Risk ^b
D-00A-16	Pretreatment (PT) Facility Hot Commissioning Complete	12/31/2033	At Risk ^b
D-00A-27 ^a	Provide Critical Path Schedule for Additional Pretreatment Capabilities	06/30/2034	On Schedule
D-00A-28 ^a	Complete Negotiations for PT and WTP Operations Milestones and for Construction/Commissioning of Pretreatment Capabilities Milestones	06/30/2035	On Schedule
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-23 ^a	Provide Critical Path Schedule for the HLW Facility	12/31/2028	On Schedule
D-00A-24 ^a	Complete Negotiations for HLW Facility Milestones	06/30/2029	On Schedule
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2030	At Risk ^b
D-00A-03	Start HLW Facility Cold Commissioning	06/30/2032	At Risk ^b

Milestone	Title	Due Date	Status
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2033	At Risk ^b
D-00A-25 ^a	Complete Negotiations for Construction and Commissioning of a Waste Transfer Vault and HLW EMS	TBD ^c	On Schedule
Low-Activity Waste (LAW) Facility			
D-00A-07	LAW Facility Construction Substantially Complete	08/02/2022 ^d	Complete
D-00A-08	Start LAW Facility Cold Commissioning	11/29/2024 ^{de}	Complete ^e
D-00A-09	LAW Facility Hot Commissioning Complete	08/01/2025 ^d	On Schedule
D-00A-22 ^a	Achieve Initial Plant Operations for Low-Activity Waste Glass Production	TBD ^f	On Schedule
Balance of Facilities			
D-00A-12	Steam Plant Construction Complete	12/31/2012	Complete
Analytical Laboratory (LAB)			
D-00A-05	LAB Construction Substantially Complete	12/31/2012	Complete

- ^a Milestone created by the Order Amending Consent Decree on January 8, 2025 (reference AR-33281).
- ^b 19-ORP-0007, 2019, "Discussion of Amended Consent Decree – State of Washington v. Perry (E.D. Wash. No. 2:08-CV-5085)," (external letter to M.D. Bellon, Washington State Department of Ecology), from B.T. Vance, U.S. Department of Energy Office of River Protection, Richland, Washington, September 4. On January 8, 2025, an *Order Amending Consent Decree Between U.S. Department of Energy and State of Washington* (reference AR-33281) was issued, which added an asterisk (*) to the due date, which states: "as Parties anticipate that modifications to these at-risk milestones and potentially other aspects of the Decree will be necessary based on information developed or decisions made related to ongoing evaluations of the program of record for treatment of high-level waste at Hanford, including those reflected in interim milestones A-23 through A-28; provided, that milestone A-1 (as it relates to the HLW facility) shall continue to guide DOE's project planning and budgeting unless modified."
- ^c Milestone due date is "within 6 months of milestone for Critical Path Schedule established in A-2424 (D-00A-24) Negotiations."
- ^d 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 coronavirus disease 2019 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 coronavirus disease 2019. On July 18, 2022, the Court issued an order extending the aforementioned milestones by 579-days consistent with the formula set forth in the previous order
- ^e On July 30, 2024, the United States District Court, Eastern District of Washington issued *Order Granting Joint Motion to Enter Consent Decree Milestone Extension and Modifying Amended Consent Decree Between U.S. Department of Energy and State of Washington in State of Washington v. Granholm*, No. 2:08-CV-05085-RMP. The Order provided a 4-month extension of the due date from August 1, 2024, to November 29, 2024, for Consent Decree Milestone A-8 (D-00A-08). Milestone was completed on November 6, 2024.
- ^f Milestone due date is "within 3 years of successful hot commissioning of LAW Facility." (reference AR-33281, A-22).

HLW = high-level waste.	PT = pretreatment.
LAB = Analytical Laboratory.	WTP = Waste Treatment and Immobilization Plant.
LAW = low-activity waste.	TBD = to be determined

Waste Treatment and Immobilization Plant Project

Federal Project Director: Mat Irwin

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

The WTP Project continues to focus on the commissioning and operation 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). Modifications to support operation of WTP in a DFLAW configuration have been completed.

As of February 2025, total facilities within LBL were 99 percent complete. Engineering design, procurement, and construction were 100 percent complete. Startup and commissioning was 96 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 CD 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 CD 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 CD.⁴ 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 determined based on the final report's conclusions and the Department's consultations with Ecology.⁵

Pursuant to Section IV.C.3(b) of the Amended CD,⁶ 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 was 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

⁴ 19-ORP-0007, 2019, "Discussion of Amended Consent Decree – State of Washington v. Perry (E.D. Wash. No. 2:08-CV-5085)," (external letter to M.D. Bellon, Washington State Department of Ecology), from B.T. Vance, U.S. Department of Energy, Office of River Protection, Richland, Washington, September 4.

⁵ Footnotes 3 and 4 were omitted from this quote.

⁶ *State of Washington v. Dept. of Energy*, No: 2:08-CV-5085-RMP (March 11, 2016).

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 reviews 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 DE-NA0002895, *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. Ecology communicated some “significant” broader concerns via letter (20-NWP-107, dated June 11, 2020) to the WTP Federal Project Director. On August 3, 2020, DOE sent a letter to Ecology (20-ORP-0015, “Ecology Review of Draft Waste Treatment and Immobilization Plant High Level Waste Treatment Analysis of Alternatives Final Report”) 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. The AoA report was issued in January 2023, seeking public feedback. On April 13, 2023, the Deputy Secretary of Energy authorized DOE to initiate contract action(s) for planning and design activities required to implement a direct-feed HLW (DFHLW) Program.

To address the project impacts experienced as a result of the COVID-19 pandemic, DOE and the State of Washington filed a joint motion to amend the CD on December 9, 2020. On December 10, 2020, the United States District Court, Eastern District of Washington issued an order modifying the Amended CD 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. On July 18, 2022, the United States District Court, Eastern District of Washington issued an order granting DOE’s unopposed motion to enter CD milestone extensions. Milestones B-2, B-3, A-7, A-8, and A-9 were extended by 579 days.

HFO and its contractors have not contractually closed all COVID-19 risks and potential impacts (e.g. supply chain) to planned work, project costs and schedules, and commitments in parallel with implementing actions intended to mitigate or eliminate further impacts.

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:

- 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:

- 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

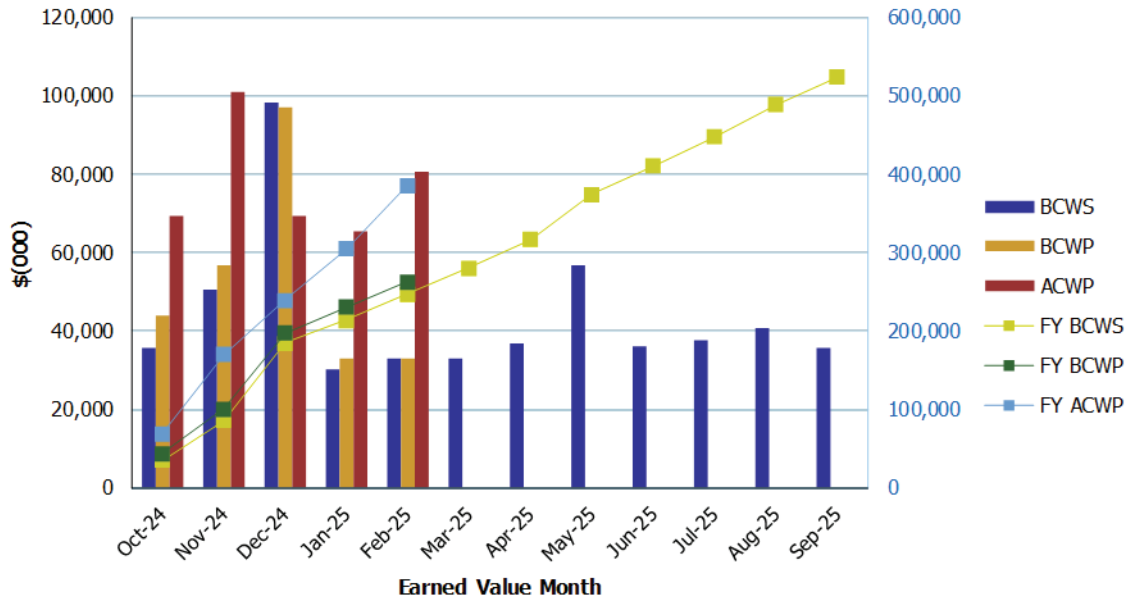
EXC-01a: Fiscal Year Cost and Schedule Report

Data Set: FY 2025 Earned Value Data

Data as of: February 2025

**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 2024	\$35,613	\$43,768	\$69,496	1.23	0.63	\$35,613	\$43,768	\$69,496	1.23	0.63
Nov 2024	\$50,608	\$56,748	\$100,835	1.12	0.56	\$86,221	\$100,516	\$170,331	1.17	0.59
Dec 2024	\$98,146	\$96,927	\$69,472	0.99	1.40	\$184,367	\$197,443	\$239,803	1.07	0.82
Jan 2025	\$30,090	\$32,895	\$65,508	1.09	0.50	\$214,457	\$230,337	\$305,311	1.07	0.75
Feb 2025	\$32,986	\$33,040	\$80,545	1.00	0.41	\$247,443	\$263,378	\$385,856	1.06	0.68
Mar 2025	\$32,928					\$280,372				
Apr 2025	\$36,802					\$317,173				
May 2025	\$56,818					\$373,991				
Jun 2025	\$36,164					\$410,155				
Jul 2025	\$37,576					\$447,731				
Aug 2025	\$40,713					\$488,444				
Sep 2025	\$35,764					\$524,208				

PTD	\$14,470,615	\$14,360,980	\$15,131,358	0.99	0.95
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- | | |
|---|--|
| ACWP = actual cost of work performed. | EVMS = Earned Value Management System. |
| BCWP = budgeted cost of work performed. | FY = fiscal year. |
| BCWS = budgeted cost of work scheduled. | PTD = project to date. |
| CPI = cost performance index. | SPI = schedule performance index. |

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

HLW/PT/Project Services Performance Tracking	SV	CV
Cumulative (through February 2025)	(\$15,634)	\$51,222
Fiscal Year 2025 to-date	(\$4,236)	(\$10,813)
December 2024	(\$1,522)	(\$2,767)
January 2025	(\$631)	(\$2,619)
February 2025	\$132	(\$4,547)

CV = cost variance.

HLW = high-level waste.

PT = pretreatment.

SV = schedule variance.

For the December 2024 reporting period, a net unfavorable SV of approximately (\$1.5 million) was reported, primarily due to the following:

- Current month schedule performance was 6 percent behind schedule and was primarily driven by complexity of concrete walls requiring more commodity adjustments than planned and a redirection of staff to fabricate and install temporary steel winterization panels to support critical building enclosure activities.

For the January 2025 reporting period, a net unfavorable SV of approximately (\$631,000) was reported, primarily due to the following:

- Current month schedule performance was 3 percent behind schedule and was primarily driven by delays associated with the Glass Former Regent (GFR) support facility design, as value engineering alternatives are being evaluated. Additionally, demand for support facility engineering training, supervision, and review of other discipline drawings was less than originally planned.

For the February 2025 reporting period, a net favorable SV of approximately \$132,000 was reported, primarily due to the following:

- Current month schedule performance was on schedule (schedule performance index of 1.00). Schedule performance was 5 percent ahead of schedule on HLW Facility system design, primarily related to mechanical system design efficiencies and demand for support facility engineering training, supervision, and review of other discipline drawings being less than originally planned. A 3 percent behind schedule condition offset the favorable HLW Facility system design variance. The schedule condition was primarily driven by delays associated with the GFR support facility design, as value engineering alternatives were being evaluated.

For the December 2024 reporting period, a net unfavorable CV of approximately (\$2.8 million) was reported, primarily due to the following:

- Current month cost performance on the HLW Facility was a favorable \$1.2 million (cost performance index of 1.04). The favorable CV was primarily due to implementation of contract modification 578 for settlement of COVID-19 impacts incurred between October 2020 through December 2021, offset by inefficiencies associated with complexity of concrete wall placements in the current period.

- The current month CV for Project Services was an unfavorable (\$4.0 million) due to other direct costs higher than planned for Information Systems and Technology, Business and Support Services, and Waste Treatment Completion Company controller. Additionally, unfavorable cost for Project Services was due to an ongoing forecasted project completion later than the DFLAW baseline and the time-dependent costs being incurred later than baseline completion.

For the January 2025 reporting period, a net unfavorable CV of approximately (\$2.6 million) was reported, primarily due to the following:

- Current month cost performance on the HLW Facility was a favorable \$1.7 million (cost performance index of 1.07). The favorable CV was primarily due to efficiencies related to rheology and testing activities, implementation of a more simplistic approach for controls & instrumentation, and less Design Authority staff support was required to update the HLW Facility Design Description.
- The current month CV for Project Services was an unfavorable (\$4.4 million) due to a larger than expected one-time software licensing cost and unfavorable cost for Project Services due to time-dependent costs for DFLAW being incurred later than baseline completion.

For the February 2025 reporting period, a net unfavorable CV of approximately (\$4.5 million) was reported, primarily due to the following:

- Current month cost performance on the HLW Facility was a favorable \$616,000 (cost performance index of 1.02). The majority of the favorable variance was associated with efficiencies related to rheology and testing activities, implementation of a more simplistic approach for controls and instrumentation, and facility design description design authority work requiring fewer resources due to less complex scope compared to planned activity.
- The current month CV for Project Services was an unfavorable (\$5.2 million) due to time-dependent costs for DFLAW being incurred later than baseline completion.

LBL/DFLAW EAC Performance

(\$x1,000)

EV Data \$K	EAC Performance				
	December EAC	January EAC	February EAC	November EAC	Delta
LAW	\$5,122,258	\$5,184,330	\$5,195,903	\$5,119,996	\$75,907
BOF	\$1,706,144	\$1,680,374	\$1,680,153	\$1,706,037	(\$25,884)
LAB	\$989,176	\$956,902	\$957,024	\$989,523	(\$32,499)
DFLAW	\$726,654	\$726,262	\$726,262	\$726,656	(\$394)
LBL FS	\$29,012	\$14,765	\$13,181	\$20,958	(\$7,777)
DFLAW OPS ^a	\$109,269	\$122,526	\$121,193	\$109,269	\$11,925
Total	\$8,682,512	\$8,685,158	\$8,693,716	\$8,672,439	\$21,277

^a Contract Mod 577 established work breakdown structure number WBS 1.20, “DFLAW Operations,” which directed Bechtel National, Inc. to separate capital and operation funds and costs. To achieve financial separation, Direct-Feed Low-Activity Waste Hot Commissioning (OPX control accounts) was moved from WBS 1.02, “Low-Activity Waste,” to WBS 1.20. No change in total Direct-Feed Low-Activity Waste Estimate at Completion resulted from this change.

BOF = Balance of Facilities.

DFLAW = direct-feed low-activity waste.

EAC = Estimate at Completion.

EV = earned value.

FS = Facility Services.

K = thousand.

LAW = low-activity waste.

LAB = Analytical Laboratory.

LBL = Low-Activity Waste Facility, Balance of Facilities, and Analytical Laboratory.

OPS = Operations.

The LBL portion of the WTP project is on schedule to meet CD milestone completion dates. Effective July 30, 2023, Bechtel National, Inc. (BNI) was no longer able to earn contracted schedule completion credit within the EVMS. The graphs previously provided in each facility section were removed as the information is no longer relevant. The LBL portion of the WTP project is being managed in an over-target baseline condition. Project activities continue as planned and project performance is being evaluated based on monthly changes to the WTP EAC value. These changes to project performance reporting only apply to LBL metrics.

For the December 2024 reporting period the LBL/DFLAW EAC increased by approximately \$10.1 million due to the following:

- \$6.4 million increase associated with alignment of estimated cost with the remaining cold commissioning duration and subcontracted support commitment values.
- \$4.8 million increase associated with incorporation of solid, dangerous, and radiological waste transportation services, scope changes to insulation and heat trace subcontracts, and modifications to the GFR slurry subcontract.
- \$1.1 million decrease associated with continued review and adjustment to existing subcontractor accruals based on better-than-expected cost performance.

For the January 2025 reporting period, the LBL/DFLAW EAC increased by approximately \$2.6 million due to the following:

- \$10.0 million increase associated with alignment of estimated cost with the remaining cold commissioning duration and subcontracted support commitment values.
- \$1.7 million increase associated with incorporation of change control recognized in the period for additional ultrasonic and radiographic testing; outage and specialty work associated with the Steam Plant and a \$1.4 million authorized adjustment for disposal of cold commissioning effluent.
- \$5.3 million decrease associated with project services update.
- \$5.1 million decrease associated with continued review and adjustment to existing subcontractor accruals based on better-than-expected cost performance.

For the February 2025 reporting period, the LBL/DFLAW EAC increased by approximately \$8.6 million due to the following:

- \$4.8 million increase of estimated cost associated with the remaining cold commissioning subcontract support commitment values.
- \$1.7 million overall increase associated with scope changes to support glass former slurry implementation and canister finishing proficiency.
- \$2.1 million increase associated with continued review and adjustment to existing subcontractor accruals based on higher-than-expected cost.

Pretreatment Facility

Federal Project Director: Mat Irwin

Facility Federal Project Director: Tom Teynor

The PT Facility is intended to separate radioactive tank waste into HLW and LAW fractions and 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. 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 completed resolution of all the technical issues identified in the Third Order Regarding Motions to Modify CDs.⁷

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

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

Accomplishments during the Reporting Period:

- None.

Ongoing Activities:

- Continued to implement asset maintenance at the PT 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.

⁷ *State of Washington v. Dept. of Energy*, No: 2:08-CV-5085-RMP (March 11, 2016) (Document-221).

High-Level Waste Facility

Federal Project Director: Mat Irwin

Facility Federal Project Director: Tom Teynor

Based on the original WTP plan, the HLW Facility is currently intended to receive the separated HLW 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. However, as mentioned in the WTP project section of this report, on April 13, 2023, the Deputy Secretary authorized DOE to initiate contract action(s) for planning and design activities required to implement a DFHLW Program.

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. HFO plans to update the project performance baseline for completing the HLW Facility in two phases, reflecting a transition away from a concurrent “design-build” approach to a “design and then build” approach:

- Design completion period (approximately 2023 through 2027). The primary objective of this period is to complete the design and safety analysis/safety basis for the HLW Facility and associated support facilities. Work scope for the design completion period will also include low-risk procurement and construction scope and other “de-risking” activities that will facilitate development of a high-confidence baseline for completing the construction and commissioning of the HLW Facility and support facilities within cost and schedule estimates.
- Construction and commissioning period (approximately 2028 through 2035). The objective of this period is to complete the construction and commissioning of the HLW Facility and support facilities within established scope, cost, and schedule objectives. A key tenet of this period is reliance on the completed and validated HLW Facility design and safety basis to minimize design changes and associated impact on construction, startup testing, and commissioning.

Since 2019, HLW Facility design activities have been ramping up as the engineering staff have been transitioning from LBL/DFLAW activities based on the availability of funds. System designs for completing preliminary design (60 percent) and detailed design (90 percent) reviews, and updating the hazard analyses and safety basis based on the updated design, are the key ongoing activities.

The DOE contractor has been actively pursuing staffing increases since early 2022 to advance design, issue equipment procurement, and perform construction to support the HLW Facility enclosure.

DOE has been working with BNI to evaluate the lessons learned from the DFLAW design, construction, and operations testing, to ensure that the HLW Facility implements these lessons to reduce the risk of rework and to improve project performance. A joint workshop between DOE and BNI was completed on September 12, 2022, to align expectations on the HLW Facility path forward, including the direct-feed concept. Joint HFO and Contractor actions are ongoing with the goal of setting conditions to safely and efficiently deliver the updated HLW facility through design, construction, and commissioning. Follow-on actions are being implemented into the HLW Facility design and development of the baseline for the design completion period. DOE issued a Request for Proposal to BNI in June 2023. BNI submitted their response for the design

completion period scope, schedule, and cost on November 16, 2023. Contract negotiations are underway.

The Facility Nuclear Safety strategy has been updated to incorporate DOE-STD-1189, *Integration of Safety into the Design Process*, and updated DOE-STD-3009, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*.

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

Accomplishments during the Reporting Period:

- HFO participated in the HLW Grounding and Lightning Protection Electrical system detailed (90 percent) system design completion review.
- HFO completed review of the HLW Canister Receipt Handling System detailed (90 percent) system design report.
- HFO participated in the HLW Lighting Electrical system detailed (90-percent) system design completion review.
- BNI issued the Construction, Testing, Operations, and Maintenance report for the HLW Environmental Monitoring System.
- BNI issued the Construction, Testing, Operations, and Maintenance report for the Autosampling System.
- HFO participated in the HLW process and mechanical handling closed-circuit television system detailed (90 percent) design review.
- HFO participated in the HLW emergency power and building conceptual (30 percent) system design review.
- BNI completed installation of over-the-top horizontal door HEH-DOOR-0002 in the canister storage crane maintenance area.
- BNI completed installation of over-the-top crane decontamination area shield door HSH-DOOR-0005.
- BNI completed installation of over-the-top crane maintenance area shield door HSH-DOOR-0007.
- HFO participated in the HLW non-safety instrument service air system (ISA) detailed (90 percent) design review.
- BNI issued the construction, testing, operations, and maintenance report for the HLW Heat Trace Electrical System.
- HFO issued a revised request for proposal for HLW Facility Phase 1A of the design completion period via Contract Modification 581 on February 6, 2025.
- HFO completed the updated independent government cost estimate for the DFHLW design completion period.
- BNI issued the construction, testing, operations, and maintenance report for the HLW medium voltage electrical system.

- BNI completed concrete slab placement 4003 on March 14, 2025.
- BNI issued the construction, testing, operations, and maintenance report for the HLW process control, autosampling control, and mechanical handling control systems.
- HFO completed reviews of the DFHLW preliminary documented safety analysis (PDSA) Rev. 0 and its supporting documents. BNI is now preparing to transmit the PDSA package to HFO for approval.
- HFO completed reviews of the DFLAW and DFHLW GFR system value engineering workshop report, which is now routing through BNI for approval.

Ongoing Activities:

- Continue contract negotiations with BNI associated with the HLW Facility design completion period proposal. A contract change order and request for proposal for Phase 1A design activities through March 2026 was issued to BNI on February 6, 2025.
- HLW Facility 90 percent system design reviews remain a top priority. Eleven detailed (90 percent) design reviews for the HLW Facility are planned in calendar year 2025.
- Concrete placement continues to support building enclosure. Twenty-nine over-the-top equipment items and twelve concrete placements are planned for calendar year 2025.
- Continued to advance HLW Facility design and hazard analyses for key mechanical and process systems.
- Continued to perform nuclear safety hazard analysis work for the balance of HLW Facility process and utility systems.
- Implementing DFLAW lessons learned and incorporating improvements to key design and project management processes.
- Establishing improved project control strategy for the HLW Facility design completion period.
- Continued to evaluate flowsheet and waste feed vector requirements associated with DFHLW feed alternatives.
- Continued to review procured and stored material to determine fit for use due to potential obsolescence, aging, and alignment with HLW Facility design.
- Continued installation of formwork, rebar, and steel framing for concrete slab placements to support building enclosure.
- Continue to support system specific commissioning, testing, operations, and maintenance reviews to support design progression.

Accomplishments Expected in the Next Reporting Period:

- Initiate 90 percent system design review for the HLW Instrument Service Air System.
- BNI submit HLW Facility design completion period proposal for Phase 1A.
- BNI submit the HLW Facility criticality safety evaluation report for HFO approval.
- Issue DOE Technology Readiness Assessment report.

Issues Encountered during the Reporting Period:

- None.

Issues Expected in the Next Reporting Period:

- None.

Low-Activity Waste Facility⁸

Federal Project Director: Mat Irwin
Facility Federal Project Director: TBD⁹

The LAW Facility will receive preconditioned tank 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 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 will be disposed of at the Hanford Site in the Integrated Disposal Facility.

As of February 2025, the LAW Facility was 99 percent complete overall. Engineering design, procurement, and construction were 100 percent complete. Startup and commissioning was 94 percent complete. Startup testing has been completed for all LAW Facility systems. The Plant Management organization is conducting integrated system tuning and testing to support commissioning and operation of LAW Facility.

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

Accomplishments During the Reporting Period:

- Initiated and continued radiological proficiency activities at the LAW Facility; completed corresponding tabletop emergency preparedness drills.
- Performed single and dual melter operations, including infrared level camera grooming.
- Removed GFR system mixer 1 from the building to support upgrades.
- Completed Review of Abnormal Operating Procedures and Emergency Operating Procedures in support of radiological proficiency.
- Continued dual melter operations and off-gas tuning.
- Received Mass Flow Bin and Transition Hopper in support of GFR facility upgrades.
- Received anhydrous ammonia.
- Completed Bubbler installation in Melter 2.
- Completed Sodium Hydroxide Tuning and Caustic Scrubber Conditioning.
- Completed validation of affirmations to support LAW Safety Basis Implementation Verification Review.

Ongoing Activities:

- Maintain both LAW Melters at operating temperature and glass pool level.

⁸ 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).

⁹ TBD denotes to be determined.

- Continue activities (e.g. equipment removal/installation) to support the phased upgrade of the LAW glass former system.

Accomplishments Expected in the Next Reporting Period:

- Initiate LAW Facility Safety Basis implementation verification review.
- Initiate management self-assessment.
- Continue activities to support the phased upgrade of the LAW glass former system.
- Complete Bubbler installation in Melter 1.
- Introduce nitrate feed.

Issues Encountered during the Reporting Period

- WTP personnel continued to address replacement of the LAW facility glass former system. BNI removed problematic equipment and components and began installation of new steel supports and components.

Issues Expected in the Next Reporting Period:

- BNI will continue to address identified glass former system issues via a phased upgrade of the of the LAW glass former system.

Actions Initiated or Taken to Address Potential Schedule Slippage:

- To address the inability to feed the feed vessels using the glass former system, the existing mixers were removed and a newly designed system is being installed.
- BNI has realigned to-go scope through the cold commissioning phase based on system availability to mitigate schedule challenges.

Balance of Facilities

Federal Project Director: Mat Irwin

Facility Federal Project Director: TBD

BOF will provide services and utilities to support operation of the main production facilities: PT, HLW, LAW, and LAB. As of February 2025, BOF was 100 percent complete overall. Engineering design, procurement and construction were 100 percent complete. Startup and commissioning was 100 percent complete.

Construction and initial commissioning tests have been completed for all BOF systems. The Plant Management organization is focused on system operation and maintenance, operator training, and procedure refinement to support increasing BOF demands.

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

Accomplishments During the Reporting Period:

- Completed replacement of gaskets and valve rebuilds for ammonia storage tanks.
- Received sodium hydroxide.

Ongoing Activities:

- Continue deliveries of GFR to support melter activities.

Accomplishments Expected in the Next Reporting Period:

- Restart Effluent Management Facility.

Issues Encountered during the Reporting Period:

- Leaks were identified on the ammonia system that required replacement of gaskets and valves. All repairs have been completed and the system filled with ammonia.

Issues Expected in the Next Reporting Period:

- None.

Analytical Laboratory

Federal Project Director: Mat Irwin

Facility Federal Project Director: TBD

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. As of February 2025, the LAB was 100 percent complete overall. Engineering design, procurement, and construction were 100 percent complete. Startup and commissioning was 100 percent complete.

Construction and initial commissioning tests have been completed for all LAB systems. The Plant Management organization is focused on system tuning and workflow improvement to support facility operations.

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

Accomplishments during the Reporting Period:

- Completed startup and commissioning of LAB systems.

Ongoing Activities:

- Continued with methods validation for sample analysis.
- Continued proficiency activities and training to support LAB operations.

Accomplishments Expected in the Next Reporting Period:

- Continue with ongoing activities.

Issues Encountered during the Reporting Period:

- None.

Issues Expected in the Next Reporting Period:

- None.

Written Directives for Waste Treatment and Immobilization Plant Project

DOE issued one written directive to the WTP contractor from January 1, 2025, through March 31, 2025, for work required by the CDs. The letter is listed below, and a copy is attached:

- 25-WTP-0012, 2025, “Contract No. De-Ac27-01rv14136 – Limited Notice to Proceed and Not to Exceed to Support Procurement of Glass Forming Chemicals for Extended Hot Commissioning,” (external letter to B. A. Hartman, Bechtel National, Inc.) from K. Brazil, U.S. Department of Energy, Hanford Field Office, Richland, Washington, March 17.

Table 1 Administrative Record Metadata

Milestone Number or Facility Identification	Title
D-006-00E	Meet Approximately Every 3 Years to Review Requirements of CD
D-006-00E1	Provide State of Oregon Notice of Meetings
D-00A-01	Achieve Initial Plant Operations for the WTP
D-00A-02	HLW Facility Construction Substantially Complete
D-00A-03	Start HLW Facility Cold Commissioning
D-00A-04	HLW Facility Hot Commissioning Complete
D-00A-06	Complete Methods Validations
D-00A-09	LAW Facility Hot Commissioning Complete
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels FEP-SEP-OOOO1A/1B
D-00A-14	Pretreatment (PT) Facility Construction Substantially Complete
D-00A-15	Start Pretreatment (PT) Facility Cold Commissioning
D-00A-16	Pretreatment (PT) Facility Hot Commissioning Complete
D-00A-17	Hot Start of Waste Treatment Plant
D-00A-19	Complete Elevation 98 feet Concrete Floor Slab Placements in PT Facility
D-00A-22	Achieve Initial Plant Operations for Low-Activity Waste Glass Production
D-00A-23	Provide Critical Path Schedule for the HLW Facility
D-00A-24	Complete Negotiations for HLW Facility Milestones
D-00A-25	Complete Negotiations for Construction and Commissioning of a Waste Transfer Vault and HLW EMS
D-00A-26	Select Additional Pretreatment Capability for Implementation After Direct Feed HLW Hot Commissioning
D-00A-27	Provide Critical Path Schedule for Additional Pretreatment Capabilities
D-00A-28	Complete Negotiations for PT and WTP Operations Milestones and for Construction/Commissioning of Pretreatment Capabilities Milestones
D-00C-02FR	Submit to Ecology & State of Oregon Monthly Summary Report
D-16B-02	Complete Retrieval of Tank Wastes from A-101, A-102, A-106, AX-101, AX-102, AX-103, AX-104
D-16B-04	Complete Retrieval of Tank Wastes from SSTs A-104 and A-105 or complete retrieval of up to two substitute tanks as provided in Section IV.B.2
D-16C-03AJ	Submit Quarterly Report to Ecology and State of Oregon
H-0-8	Waste Treatment and Immobilization Plant (WTP)

Enclosure 25-WTP-0012

Written Directives from January 1, 2025, through March 31, 2025
(3 pages including cover sheet)



U.S. Department of Energy

Hanford Field Office
P.O. Box 550
Richland, Washington 99352

March 17, 2025

25-WTP-0012

Mr. Brian A. Hartman
Project Director
Bechtel National, Inc.
450 Hills Street
Richland, Washington 99354

Dear Mr. Hartman:

CONTRACT NO. DE-AC27-01RV14136 – LIMITED NOTICE TO PROCEED AND NOT TO EXCEED TO SUPPORT PROCUREMENT OF GLASS FORMING CHEMICALS FOR EXTENDED HOT COMMISSIONING

- References:
- (1) BNI letter from C. S. Crawford to W. E. Hader, HFO, "Request for Limited Notice to Proceed and Not to Exceed to Support Procurement of Glass Forming Chemicals for Extended Hot Commissioning," CCN: 341811, dated February 10, 2025.
 - (2) BNI letter from C. S. Crawford to W. E. Hader, HFO, "Supersedes CCN 340571 – Contract Modification Proposal 2021-002, Rev 1, 'Extended Hot Commissioning,'" CCN: 341800, dated December 16, 2024.

This letter is in response to Reference (1) requesting a limited notice to proceed and not-to-exceed funding to support the long-lead procurement of glass forming chemicals (GFC) required for Extended Hot Commissioning (EHC). The identified cost for the long-lead GFC procurement is approximately \$4.0 million, as included in the EHC proposal Reference (2).

The U.S. Department of Energy, Hanford Field Office has evaluated the request for long lead procurement in relation to other extended hot commissioning work performed by the Integrated Tank Disposition Contract (ITDC) contractor and requests that BNI work with the ITDC contractor to provide a recommendation on how the spare melter procurements, spare parts procurements, design authority responsibility, and procurement of glass formers are managed to support the extended hot commissioning period. The recommendation shall include an approach to accelerate the schedule for delivery of spare melter #3 and the timing for procurement of consumables for the extended hot commissioning period. It will also include the projected usage rate and duration of availability for Direct Feed Low-Activity Waste operations.

Mr. Brian A. Hartman
25-WTP-0012

-2-

March 17, 2025

If you have any questions, please contact me, at (509) 376-0174.

Sincerely,

KELLY
BRAZIL

Digitally signed by KELLY
BRAZIL
Date: 2025.03.17
09:09:32 -07'00'

WTP:JJD

Kelly Brazil
Contracting Officer

cc: M. E. Blankenship, BNI
C. S. Crawford, BNI
G. T. Lengenfelder, BNI
M. G. McCluskey, BNI
C. A. Musick, BNI
BNI Correspondence