

Monthly Performance Report

August 2020

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract DE-AC06-08RL14788

CH2MHILL
Plateau Remediation Company

P.O. Box 1600
Richland, Washington 99352

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CH2MHILL
Plateau Remediation Company
a Jacobs company



L. Ty Blackford
President and
Chief Executive Officer

Monthly Performance Report

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August 2020
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CONTENTS

EXECUTIVE SUMMARY 2

TARGET ZERO PERFORMANCE 5

KEY ACCOMPLISHMENTS 6

MAJOR ISSUES 6

EARNED VALUE MANAGEMENT 8

FUNDING ANALYSIS 9

BASELINE CHANGE REQUESTS 10

SELF-PERFORMED WORK 12

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I) 13

DOE ACTIONS/DECISIONS 13

PROJECT BASELINE SUMMARY SECTIONS

Section A – Nuclear Materials Stabilization and Disposition of PFP (RL-0011) A

Section C – Solid Waste Stabilization and Disposition (RL-0013) C

Section D – Soil and Groundwater Remediation Project (RL-0030) D

Section E – Nuclear Facility D&D, Remainder of Hanford (RL-0040) E

Section F – Nuclear Facility D&D, River Corridor (RL-0041) F

Section G – FFTF Closure (RL-0042) G

APPENDICES

- Appendix A – Contract Performance Reports
- Appendix B – Project Services and Support (WBS 000)
- Appendix C – Capital Asset Projects

EXECUTIVE SUMMARY

CH2M HILL Plateau Remediation Company (CHPRC) advanced cleanup throughout the Hanford Site during August. On March 24, 2020, the U.S. Department of Energy (DOE), Richland Operations Office (RL) issued CHPRC a partial stop work order (PSWO) due to the coronavirus (COVID-19). A safe and orderly ramp down of all operation activities was implemented that ensured the continuation of non-portable essential mission-critical activities and maximized the use of teleworking for portable work. Following completion of the ramp down, operations, surveillance and maintenance activities necessary to maintain safety and environmental compliance continued. CHPRC implemented plans to mitigate work delays and disruption and address impacts to programmatic work. In compliance with state and federal government COVID-19 guidance, and as required by the RL-directed PSWO, CHPRC has taken and continues to take reasonable actions to protect and provide support to the workforce. With RL approval, during August, CHPRC continued the implementation of Phase 1, a partial phased return to normal work locations for low-risk non-portable operation activities, which had been halted in response to the RL-directed PSWO.

Major accomplishments included the following:

- Plutonium Finishing Plant (PFP) Closure Project:**

The PFP Closure Project continued to maintain essential mission-critical operations in compliance with the RL partial stop work order by performing a survey of PFP radiological boundaries, re-applying soil fixative to the PFP demolition site and performing equipment maintenance. Seven containers of final-phase demolition debris were shipped to the Environmental Restoration Disposal Facility (ERDF) for permanent disposal, including six Contaminated Equipment – Special Package Authorization shipments of containers of Plutonium Recovery Facility debris. The project supported a combined Independent Cost Review/External Independent Review by a DOE-Headquarters (HQ) team of the RL-0011.C2, PFP Demolition Project Baseline Change Proposal (BCP) to establish a revised cost and schedule baseline to complete the project. This review was a prerequisite for DOE-HQ's approval of the BCP to resolve the RL-0011C.2 project's inability to be completed within the current approved baseline caused by COVID-19 and the associated RL-directed PSWO.



Workers removed asbestos at the 224-B Plutonium Concentration Facility in preparation for eventual demolition. The deteriorating insulation must be removed for electricians to safely isolate the building.

- Waste and Fuels Management Project (W&FMP):** The W&FMP continued to perform essential mission-critical operations in compliance with the RL-directed PSWO. The W-135 Management of Cesium and Strontium Capsule (MCSC) Project, *Waste and Encapsulation Storage Facility (WESF) Modifications*, Line Item project completed work on its DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, Critical Decisions (CD) CD-2, *Approve Performance Baseline*, and CD-3, *Approve Start of Construction*, deliverables and transmitted them to RL for approval. The Capsule Storage Area Project continued construction of the capsule storage pad. Structural backfill of the operational pad was completed. Fabrication of the Cask Storage System transfer and ancillary equipment for future installation in the mockup facility and WESF continued. WESF G Cell and canyon window refurbishment was completed. At the Central Waste Complex, nondestructive assay of waste packages in Outdoor Storage Area A was completed. At T Plant, fieldwork was initiated to change the 291-T high-efficiency particulate air filters.

- **Soil and Groundwater Remediation Project (S&GRP):** The S&GRP team continued essential mission-critical operations and a partial, phased resumption of work for high priority, low-risk activities in compliance with the RL-directed PSWO. Pump and Treat (P&T) Operations surpassed the goal of treating 2.2 billion gallons of groundwater in fiscal year (FY) 2020. The Hanford Site Annual Groundwater Monitoring Report for calendar year 2019 was completed and issued.
- **K Basins Operations (KBO):** At KBO, essential mission-critical operations were continued in compliance with the RL-directed PSWO. The 100K Soil Remediation group continued to excavate the 100-K-60 waste site, removing over 10,000 m³ of overburden material in August. Remediation at 166KE recommenced and began shipping debris to ERDF.
- **River Risk Management Project:** The project continued essential mission-critical operations in compliance with the RL-directed PSWO. Planning continued for the performance of radiological testing of the acrylamide grouting that will be used for soil stabilization during B Cell excavation activities. Modifications to the mockup facility were completed to simulate Room 18 and support team training for that particular contamination area (CA)/high contamination area (HCA). Equipment procurement continued for the cell dams, universal cutting tool, waste boxes, modified airlock rail system and the B Cell 10-ton crane. Integrated Disposal Facility infrastructure upgrades continued as water and sewer system installation nears completion and mobile offices are installed and ready for utilities. Electrical and communication installation is ramping up while steady progress is being made on earthwork and fencing.
- **Central Plateau Risk Management (CPRM) Project:** The project continued essential mission-critical operations in compliance with the RL-directed PSWO. The Aging Structures team procured a spider boom to support stabilization of the 216-Z-2 Crib and the 241-Z-361 Tank and installed and configured the support trailers required for stabilization operations. Additionally, the team completed proficiency dry runs for personal protective equipment dress and undress. At the Reduction-Oxidation (REDOX) Facility, crews continued work package development, set up of the dress out and step-off pad trailer, completed ground scans in areas 27 and 28 to support cold and dark efforts, and the REDOX fans were returned to service. At the 224B Facility, both communication line and electrical isolations completed to support cold and dark efforts. At Plutonium Uranium Extraction Plant North, crews removed previously deactivated communication lines to help clear the footprint for future fieldwork activities.
- **West Area Remediation Project (WARP):** The WARP team completed radiological characterization and sampling as well as the radiological characterization report for 216-ZP-1 200 West Area P&T and the 234-5Z-BA and 234-5Z-BE Boiler Annexes. Crews also completed beryllium sampling for the south trailer village, as well as 216-ZP-1, 234-5Z-BA and 234-5Z-BE, and started hazardous waste removal. Completed down posting of the majority of the south trailer village from HCA to a CA.

The President's Zero Accident Council (PZAC) meeting for August was hosted virtually by W&FMP. The three main ideas were:

- What's your approach?
- Swallow your ego – play the right tees.
- Diversity and compassion.

Five *Thinking Target Zero* (TTZ) bulletins were published to convey important occupational, safety, health and environmental messages:

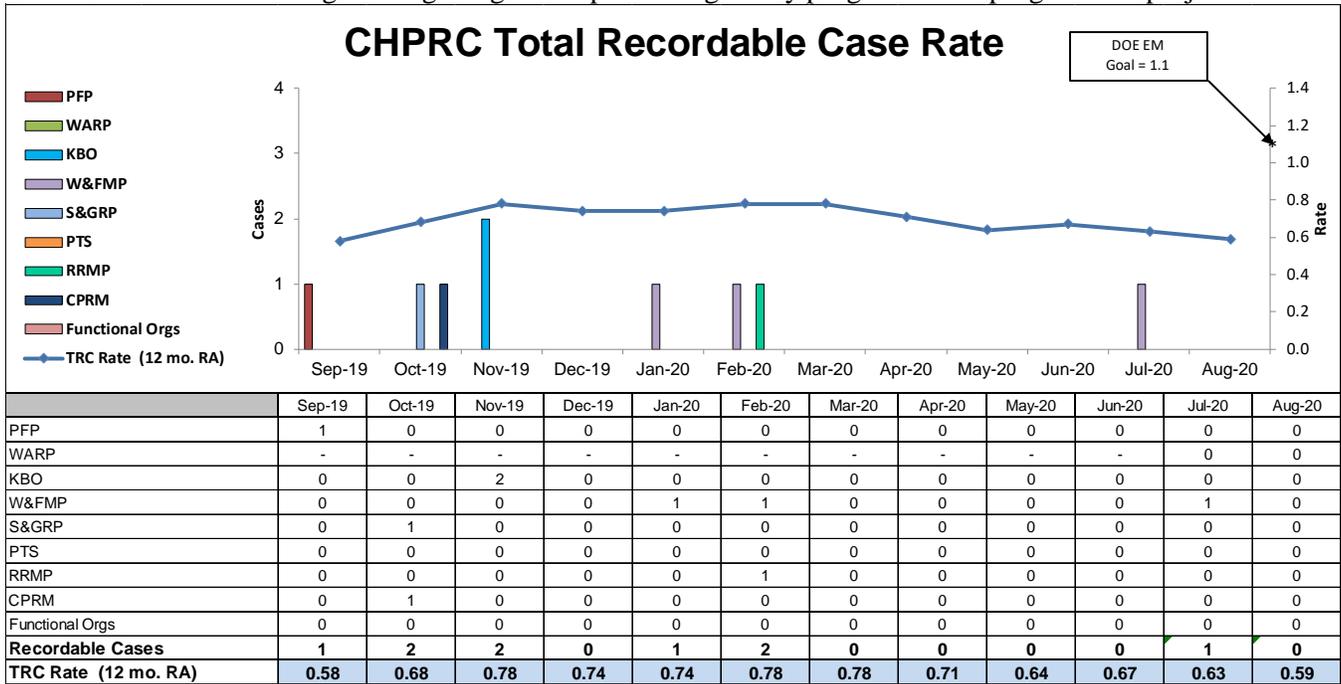
- Prevent heat stress.
- Wildfire smoke.
- EMS audits 2020.
- Back-to-school.
- VPPPA scholarships.

Weekly Safety Tailgate briefing packages communicated relevant topics and safety information to the workforce:

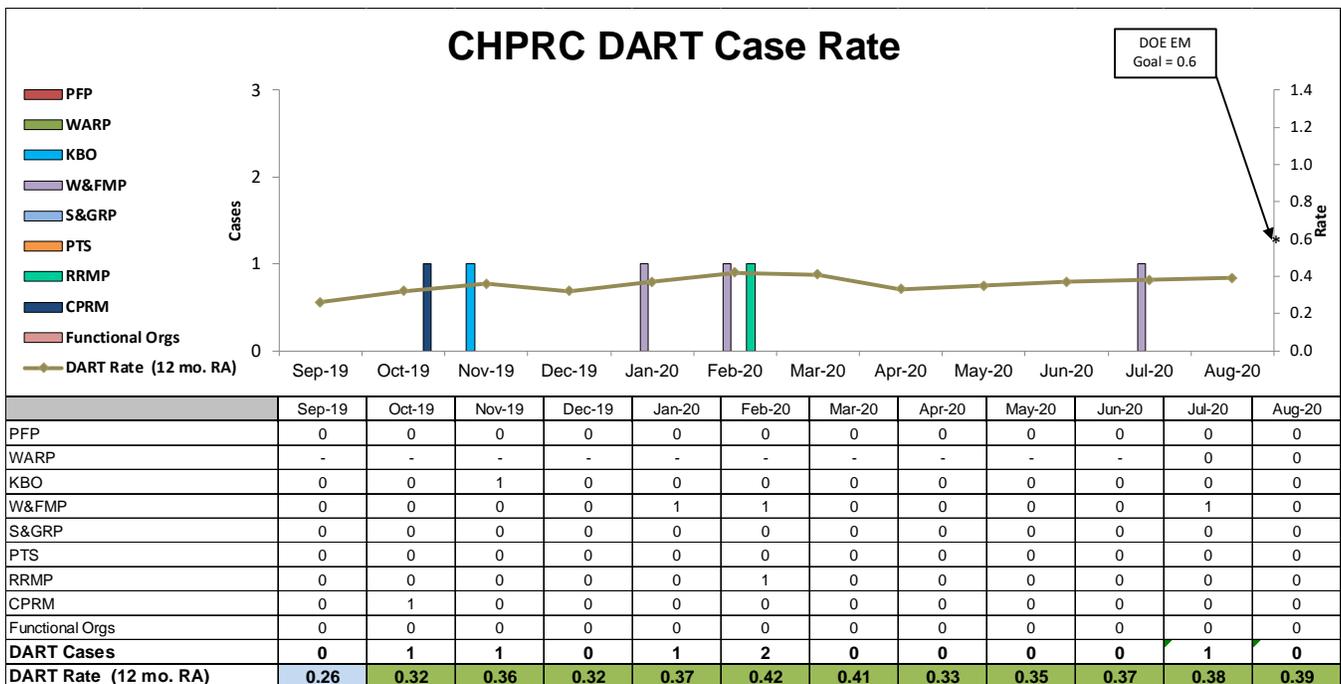
- Five Lessons Learned:
 - OPEXShare: INL-2020-0021 Improper Disposal of Ventilation Test Chemicals Results in Fire Response.
 - OPEXShare: 8-04-2020-PNNL-34845 When Communications Break Down and Assumptions are Made.
 - OPEXShare: 2020-NV-NNSS-734 Inadvertent Movement Could Have Resulted in Technical Safety Requirement Violation.
 - OPEXShare: 34867-PNNL-8-14-2020 Mold and Misunderstandings. What Does it all Mean?
 - OPEXShare: 2020-CPRM-0003 Importance of Implementing COVID-19 Controls and Management Follow-up.
- Injuries.
- Weekly ethics moments.
- Vehicle events.
- Outdoor pest reminder.
- Fire safety reminder.
- Summer safety 2020.
- Heat stress reminder.
- HPMC health resources.
- General hazard analysis.
- Hanford traffic safety.
- Call 811 before you dig.
- A commitment to focus.
- Adhering to COVID controls.
- Vehicle safety policy.
- Watch for wildlife.
- Pre-holiday safety focus.

TARGET ZERO PERFORMANCE

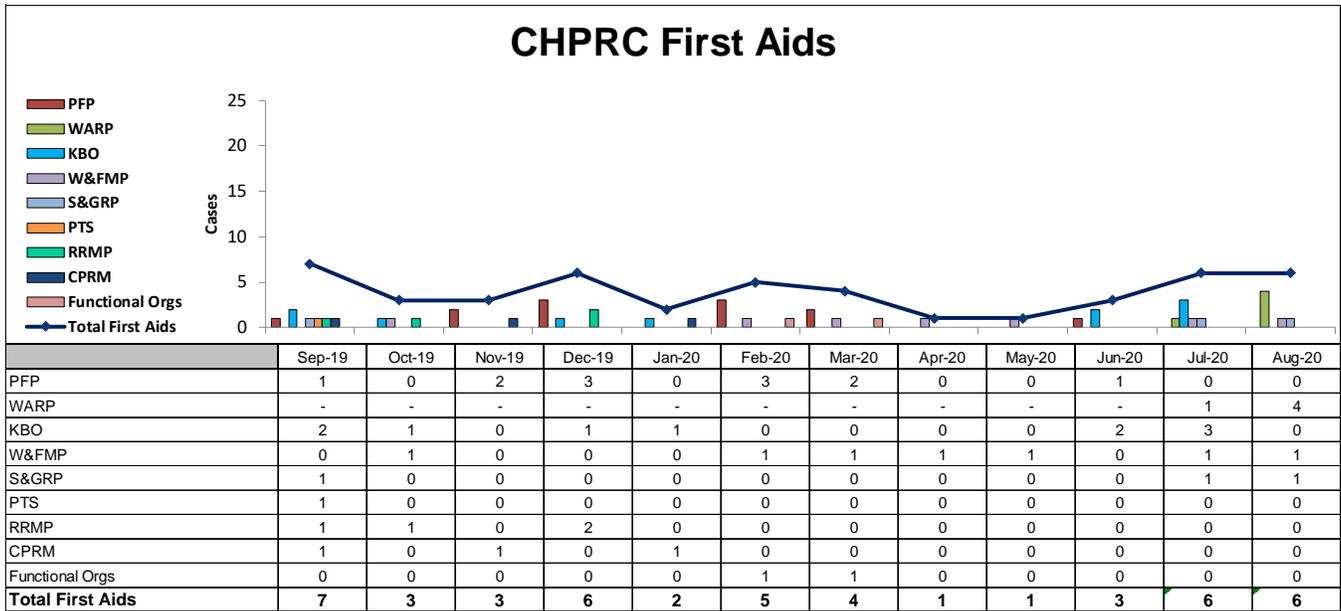
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.59 is based on nine Recordable injuries. August had no reported OSHA Recordable cases.



Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.39 is based on six Days Away cases. August had no reported DART cases. The DART rate has increased due to a decrease in working hours during mission critical operations.



First Aid Case Summary: CHPRC reported six first aid cases in August. The contributors were three abrasions/bruises/c contusions, one cut/laceration/puncture, one foreign body/irritation in the eye and one miscellaneous (e.g., burn, rash, repetitive motion, etc.) injury.

KEY ACCOMPLISHMENTS

Projects

- Refer to Sections A through G and Appendix C of this report for project-specific accomplishments.

Project Services and Support

- Refer to Appendix B of this report for overhead support (reported quarterly). For specific project support, refer to Sections A through G and Appendix C of this report.

MAJOR ISSUES

Projects

- Refer to Sections A through G and Appendix C of this report for the project-specific major issues.

Project Services and Support

Issue

Due to COVID-19, a national emergency was declared on March 13, 2020. On March 17, 2020, CHPRC senior management issued a companywide stop work on all fieldwork not associated with technical safety requirements, environmental compliance or emergency response. On March 18, 2020, CHPRC submitted letter CHPRC-2001123 to RL identifying that COVID-19 may impact CHPRC’s ability to meet contractual requirements. On March 24, 2020, RL issued letter 20-PRO-0139, a PSWO for non-portable work. On July 22, 2020, CHPRC received Contract Modification 747, extending the PSWO through September 30, 2020, unless the contracting officer directs an earlier date. The PSWO noted that CHPRC would have 30 days following termination of the PSWO to assert its rights for an equitable adjustment. On May 22, 2020, the RL contracting

officer approved CHPRC's request for submission of the Request for Equitable Adjustment (REA) 90 days after the end of the PSWO. CHPRC anticipates that in addition to schedule impacts, the PSWO will result in FY2020 and FY2021 cost impacts under the following clauses:

- Plateau Remediation Contract (PRC) Section Contract Clause I.115 Federal Acquisition Regulation (FAR) 52.249-14, "Excusable Delays" (April 1984).
- PRC Section F "Deliveries or Performance", F.3 FAR 52.242-15, Stop Work Order (August 1989) – Alternative (April 1984).

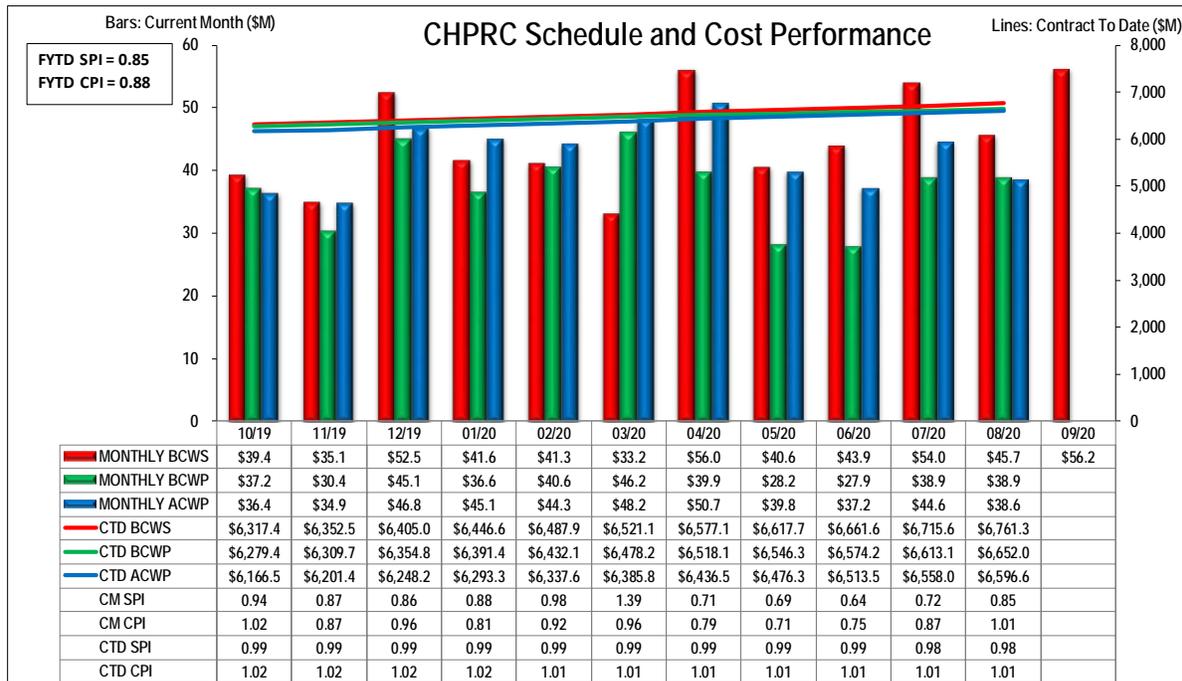
Corrective Action

CHPRC will notify the RL contracting officer in a timely manner of events, incidents or circumstances causing grounds to submit an REA. Following receipt of RL's PSWO direction, a PSWO implementation plan and restart plan were developed. To support workforce stability as directed by RL, CHPRC employees were provided attendance code "COV" to be used for charging hours not worked but in a paid status for time not spent on portable work or for those where performance of meaningful productive work is not practical. CHPRC provided similar guidance to our subcontractors that we believe will be critical to ramp up and execute to full performance capacity at the conclusion of the partial stop work period. This guidance also notified our subcontractors that justifiable absence time could be reimbursable by CHPRC.

Status

The situation at the Hanford Site continues to evolve. CHPRC has continued implementation of actions to mitigate work delays and disruption and cost-effectively address unanticipated impacts to programmatic work. CHPRC is continuing to collect costs associated with COVID-19 impacts in separate financial account(s). CHPRC remains in constant contact with RL to ensure related information requests and deliverables meet RL needs and CHPRC stays abreast of potential changes in the essential mission-critical operations posture so the information requests and deliverables can be anticipated and addressed in a timely manner should they occur. Social distancing and staffing re-mobilization plans, CHPRC policies and procedures to address COVID-19, and new training for returning workers, continue to be updated to reflect Lessons Learned and changing conditions. Deliverables in response to COVID-19 and the PSWO continue to be coordinated with other Hanford contractors to ensure a collaborative, consistent approach for both work ramp down and resumption activities planned and proposed to RL. CHPRC continues to communicate to RL that the ramp down and resumption activities will have both cost and schedule impacts on the work planned for FY2020 and FY2021. During August, CHPRC worked with RL on adjustments to the staffing remobilization plan and implementation toward achieving the goal of returning all workers performing non-portable tasks back to work on or before September 30, 2020, should the America CARES Act not be extended beyond the current September 30, 2020, end date. On July 29, 2020, CHPRC received concurrence from RL via email CHPRC-2001556A R5 on the technical scope and approach to the Resumption to Work Plan Table, Revision 3B. In compliance with state and federal government COVID-19 guidance, and as required by or in consequence of the PSWO, CHPRC has taken and continues to take reasonable actions to protect and provide support to the workforce.

EARNED VALUE MANAGEMENT



	\$M					\$M					\$M			
	Current Period					Contract to Date					Contract Period			
	Budgeted Cost	Actual Cost	Variance			Budgeted Cost	Actual Cost	Variance			BAC	EAC	Variance	
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost				
RL-0011 - Nuclear Materials Stab & Disp PFP	-	-	0.8	-	(0.8)	1,143.6	1,129.9	1,243.2	(13.7)	(113.3)	1,143.6	1,254.0	(110.4)	
RL-0012 - SNF Stabilization & Disposition	-	-	-	-	-	759.6	759.6	729.8	(0.0)	29.8	759.6	729.8	29.8	
RL-0013 - Solid Waste Stab & Disposition	16.4	15.0	13.6	(1.4)	1.4	1,655.9	1,633.0	1,548.2	(22.9)	84.8	1,676.0	1,596.1	79.9	
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	9.2	8.7	7.0	(0.5)	1.7	1,744.4	1,720.7	1,670.2	(23.7)	50.5	1,755.1	1,700.8	54.4	
RL-0040 - Nuc Fac D&D - Remainder	10.7	7.4	8.5	(3.3)	(1.1)	630.1	607.5	607.0	(22.5)	0.6	642.6	652.5	(9.9)	
RL-0041 - Nuc Fac D&D - RC Closure Project	9.0	7.5	8.5	(1.5)	(1.0)	795.9	769.7	771.6	(26.2)	(1.8)	808.2	812.4	(4.2)	
RL-0042 - Nuc Fac D&D - FFTF Project		0.3	0.3	0.2	(0.1)	0.0	31.8	31.5	26.6	(0.3)	4.9	32.3	27.3	5.0
(Values are rounded to the nearest \$0.1M)	Total	45.7	38.9	38.6	(6.8)	0.3	6,761.3	6,652.0	6,596.6	(109.3)	55.4	6,817.5	6,772.9	44.6

Performance Summary

CHPRC continues to track completion of the contract within budget. Currently, a variance at completion of \$44.6 million is projected, with an additional \$44.5 million of management reserve (MR) for a total positive variance of \$89.1 million. For August, the project was 14.9 percent behind schedule and 0.8 percent under planned cost. Contract to date, the project was 1.6 percent behind schedule and 0.8 percent under planned cost.

The primary driver for the current month (CM) negative schedule variance was the PSWO issued to CHPRC by RL on March 24, 2020. The PSWO covered non-portable work activities not associated with continuation of minimum safe operations that could not be performed in a safe and compliant manner consistent with COVID-19 pandemic the Centers for Disease Control guidelines and Washington State phased re-openings by county. Non-portable work activities are work that cannot be performed in a remote manner (e.g., telework from home). Discrete scope across the projects was demobilized and placed in safe configuration in late March. CHPRC and subcontractor labor assigned to work that could not be performed in a remote manner charged to segregated accounts for unproductive time caused by the PSWO. The cost for the standby of subcontractor equipment

remaining on site during this period was also segregated. As the method of earning performance for discrete scope is based on physical progress in the field, no performance was taken on many accounts, causing the negative schedule variance.

FUNDING ANALYSIS

FY2020 Funds vs. Fiscal Year Spend Forecast (\$M)

PBS	Project	FY2020		Variance
		Projected Funding	Spending Forecast	
RL-0011	Nuclear Materials Stabilization and Disposition	43.6	39.0	4.6
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	0.1	(0.1)	0.1
RL-0013	Waste and Fuels Management Project	197.8	176.7	21.1
RL-0013	Management of Cesium and Strontium Capsules	2.3	1.2	1.1
RL-0030	Soil, Groundwater and Vadose Zone Remediation	112.2	98.3	13.9
RL-0040	Nuclear Facility D&D, Remainder of Hanford	91.1	84.2	6.9
RL-0041	Nuclear Facility D&D, River Corridor	148.5	143.4	5.1
RL-0042	Fast Flux Test Facility Closure	4.8	3.2	1.5
Total Fiscal Year Spending Forecast		600.3	546.0	54.3

Funds/Variance Analysis

FY2020 overall projected funding reduced from \$626.4 million to \$600.3 million from last month. The reduction of \$26.1 million includes \$14.1 million for Mission Support Alliance, LLC usage base services impacts due to COVID-19, and \$12 million from the RL-0013 line item project to be held by RL until FY2021. The spending forecast of \$546 million reflects an overall reduction of \$22.6 million from last month, primarily driven by slower-than-planned resumption of work during the PSWO associated with COVID-19, pushing work scope into FY2021.

BASELINE CHANGE REQUESTS

In August, CHPRC approved and implemented five baseline change requests (BCR) into the performance measurement baseline (PMB). Three of the five BCRs impacted the PMB budget. The change requests are identified in the following table:

Change Request#	Title	PBS	Summary of Change
BCR-013-20-024R0	<i>W-135 MCSC Project MR Draw</i>	RL-0013	This BCR drew down MR and revised the PMB to address realized risks for previously unrecognized tasks that are consistent with the general scope of work of the contract and unexpected growth within the currently authorized work scope as associated with Firm Fixed Price Contracts whose values are greater than planned in the baseline. This BCR increased the PMB by \$767.3K.
BCR-040-20-013R0	<i>MR Draw for REDOX Ventilation System Modification Changes</i>	RL-0040	This BCR drew down MR and revised the PMB schedule to address in-scope, unplanned work in FY2020 related to unanticipated changes associated with the design, fabrication and delivery of a temporary exhaust system at the REDOX. This BCR increased the PMB by \$2,926.9K.
BCR-040-20-014R0	<i>Trailers and Miscellaneous Equipment Supporting CPRM Project Response to COVID-19</i>	RL-0040	This BCR incorporated authorized unpriced work into the PMB for trailer and miscellaneous equipment procurement associated with the CPRM Project response to the COVID-19 pandemic. This BCR increased the PMB by \$1,610.1K.
BCR-030-20-016R0	<i>Re-Plan KE Soil Flushing Final Design</i>	RL-0030	This BCR re-planned the 100-K-East Soil Flushing Final Design activity from an expense work breakdown structure (WBS) element into a General Plant Project WBS element in accordance with the CHPRC capital determination received in August 2020. This BCR did not change the PMB.
BCRA-PRC-20-022R0	<i>HPIC Updates August FY2020</i>	RL-0011 RL-0013 RL-0030 RL-0040 RL-0041 RL-0042	This BCR incorporated August FY2020 Hanford Programs Integrated Control Module (HPIC) updates. This BCR did not change the PMB value.

The allocated (distributed) budget increased \$5,304.3K.

Undistributed Budget (UB) Activity

BCR Number	Title	PBS	Fiscal Year	UB
N/A	N/A	N/A	2020	N/A

There was no change to UB in August.

Management Reserve (MR) Activity

BCR Number	Title	PBS	Fiscal Year	MR
BCR-013-20-024R0	<i>W-135 MCSC Project MR Draw</i>	RL-0013	2020	-\$767.3K
BCR-040-20-013R0	<i>MR Draw for REDOX Ventilation System Modification Changes</i>	RL-0040	2020	-\$2,926.9K

The MR decreased \$3,694.2K in August.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2020	N/A

There was no change to the Fee in August.

The PMB values of change requests are summarized by FY in the following tables. For a list of change requests that have impacted the PMB budget by FY, see the Format 3 Report in Appendix A.

August 2020 Summary of Changes (\$M)

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	FY2019	FY2020	Total
July 2020 MR Totals										
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	5.5
RL-0012	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	5.4
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	8.4
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	11.3
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	13.6
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.2	48.2
August 2020 MR Changes/Utilization										
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.8
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.9	-2.9
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.7	-3.7
August 2020 MR Totals										
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	5.5
RL-0012	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	5.4
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	7.6
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	8.4
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	13.6
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.5	44.5

Changes to/Utilization of Management Reserve in August 2020 (\$M)

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	FY2019	FY2020	Contract Period Total	Total PMB
July 2020 Estimate											
PMB	3,391.5	391.7	471.3	504.8	485.0	470.6	2,323.5	563.1	534.2	6,812.2	6,812.2
MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.2	48.2	48.2
Fee	155.5	14.3	14.5	27.8	10.6	18.9	86.1	36.5	20.1	298.2	298.2
Total	3,547.0	406.0	485.8	532.6	495.6	489.5	2,409.6	599.5	602.5	7,158.6	7,158.6
August 2020 Change											
PMB											
Change to PMB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	5.3
MR											
Change to MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.7	-3.7	-3.7
Fee											
Change to Fee	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
August 2020 Estimate											
PMB	3,391.5	391.7	471.3	504.8	485.0	470.6	2,323.5	563.1	539.5	6,817.5	6,817.5
MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.5	44.5	44.5
Fee	155.5	14.3	14.5	27.8	10.6	18.9	86.1	36.5	20.1	298.2	298.2
Total	3,547.0	406.0	485.8	532.6	495.6	489.5	2,409.6	599.5	604.1	7,160.2	7,160.2

SELF-PERFORMED WORK

Business structure information documents ongoing compliance with the requirements of the contract Section H.20 clause “Self-Performed Work.”

Contract-to-Date Actual Awards & Mods (\$M) 10/1/2008 - 8/31/2020					
Reporting Category					
	\$ Value	%	Goal %		
SB	\$1,768.61	57.05%	49.3%	PRC clause H.20b small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
SDB	\$341.29	11.01%	8.2%		
SWOB	\$311.19	10.04%	7.5%	CHPRC Contract Value:	\$7,150.78
HUB	\$105.04	3.39%	2.2%	SB actual:	\$1,768.61
VOSB	\$271.94	8.77%	3.5%	SB Performed %:	24.73%
SDVO	\$178.08	5.74%	1.3%	PRC clause H.20a max self performed requirement ≤ 65% of Contract Price Self Performed	
NAB	\$117.95	3.80%	N/A		
Large	\$828.76	26.73%	N/A	CHPRC Contract Value:	\$7,150.78
GOVT	\$5.94	0.19%	N/A	CHPRC Self Performed:	\$4,443.41
GOVT CONT	\$483.23	15.59%	N/A	CHPRC Self Performed %:	62.14%
EDUCATION	\$0.17	0.01%	N/A		
NONPROFIT_	\$4.49	0.14%	N/A		
FOREIGN	\$8.91	0.29%	N/A		
Total	\$3,100.10	100.00%	N/A		

Notes:

1. Since the contract award in October 2008, CHPRC has subcontracted more than \$3.1 billion in goods and services, with more than 57 percent going to small businesses. All subcontracting goals have been exceeded.
2. Approximately 90 percent of the total dollars arise from service and staffing contracts and contract amendments, with 6.9 percent of the remaining expenditures arising from PCard purchases and 3.9 percent from the balance in purchase orders for materials and equipment.
3. Data are summarized by business category (e.g., women-owned minority business enterprise codes) in accordance with socioeconomic reporting requirements. Small business categories overlap and should not be added together.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
J.12/C.2.2, C.2.3	PBS-11, <i>Plutonium Finishing Plant Closure Project</i> PBS-13, <i>Solid and Liquid Waste Treatment and Disposal</i>	Offsite Transportation of Radioactive Material: RL provides equipment and government drivers to transport transuranic (TRU) materials outbound/inbound between the Hanford Site and Perma-Fix Northwest locations. RL is the authorized shipper and acts as signatory on the shipping papers and ensures compliance with DOE Manual 460.2-1, <i>Radioactive Material Transportation Practices Manual for Use with DOE O 460.2A</i> . RL arranges for Commercial Motor Vehicle Safety Alliance Level VI Vehicle Inspections and verifies that the government drivers meet the applicable U.S. Department of Transportation (DOT) Federal Motor Carrier Safety Regulations (49 CFR 382 and 383). RL also inspects the load securement to ensure compliance with DOT regulations and/or Transportation Safety Document requirements.	Ongoing.
J.12/C.2.3.6	PBS-13, <i>Transuranic Waste Certification</i>	Waste Isolation Pilot Plan (WIPP) in Carlsbad, New Mexico: Provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable, and the number of shipments is controlled by DOE-HQ on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the Carlsbad Field Office.	No WIPP shipments are planned within the remaining contract period of performance.

DOE ACTIONS/DECISIONS

Refer to Sections A through G and Appendix C of this report for the project-specific DOE actions/decisions.

Section A
Nuclear Materials Stabilization and
Disposition of PFP
(RL-0011)

CH2MHILL
Plateau Remediation Company
a Jacobs company



J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In August, the Plutonium Finishing Plant (PFP) Closure Project team continued essential mission-critical operations in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL) partial stop work order (PSWO) issued as a part of the Hanford Site response to the novel coronavirus (COVID-19). Essential mission-critical operations consisted of a survey of PFP radiological boundaries and performing equipment maintenance. Seven previously loaded radioactive waste containers filled with final-phase demolition debris were shipped to the Environmental Restoration Disposal Facility (ERDF) for permanent disposal, including six Contaminated Equipment – Special Package Authorization shipments of containers of Plutonium Reclamation Facility (PRF) debris.

Key Metrics

<i>Key Performance Indicators</i>	<i>Current Month</i>	<i>Contract to Date</i>
COMPLETE Glovebox/Hood Removed or Dispositioned in Place	0	232 gloveboxes/hoods
COMPLETE KPP Rooms/Areas Ready for Demo	0	72 rooms/areas
COMPLETE Asbestos/Asbestos Containing Material Removed	0	35,827
COMPLETE Process Vacuum Piping Dispositioned	0	7,231 feet
COMPLETE Process Transfer Line Dispositioned	0	1,525 feet
COMPLETE Pencil Tank Units Removed (Shipped)	0	196 pencil tank units
COMPLETE Buildings Ready for Demo	0	68 structures
Buildings Demolished or Removed	0	67 structures
Non-Radioactive Waste Shipped	0	89.8 m ³
Transuranic/Transuranic Mixed (TRU/TRU-M) Shipped	0 m ³	5,016 m ³
Low-level Waste (LLW)/Mixed (M)LLW Shipped	49 m ³	23,507 m ³

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status	Date Completed
20 EMS PFP OBJ1 P1	Complete Comprehensive Environmental Response, Compensation, and Liability Act of 1980 removal action at the PFP Complex.	Performs actions for final PFP turnover to surveillance and maintenance (S&M).	7/30/2020	25%	Cancelled in August

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	0	12	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments:

- Due to COVID-19, a national emergency was declared on March 13, 2020. On March 24, 2020, RL issued CH2M HILL Plateau Remediation Company (CHPRC) a PSWO as a part of the Hanford Site response to COVID-19. The PFP Complex was transitioned to essential mission-critical operations and has maintained that configuration. Essential mission-critical operations in August consisted of the completion of required S&M activities to protect government property and maintain safety and environmental compliance. These efforts included surveying PFP radiological boundaries and performing equipment maintenance.
- Seven containers of final-phase demolition debris were shipped to ERDF for permanent disposal of the debris, including six containers of PRF rubble debris.
- Crews continued work on the disposition of legacy waste.

MAJOR ISSUES

None to report.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

- Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.
- Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.
- Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

- ↑ Increased Confidence
- ↔ No Change
- ↓ Decreased Confidence

	Unmitigated Risk Impacts	Assessment			Comments															
		Month	Trend																	
RL-0011																				
Explanation of major changes to the project monthly stoplight chart: No major changes to the stoplight chart in August.																				
Realized Risks (Risks that are currently impacting project cost/schedule)																				
PFP-P5-007: Delay of PRF Debris Load Out	The loadout of PRF debris is delayed. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$0, 32 days	●	↔		Risk Event: The project has not executed debris loadout at the productivity rate that was planned. The project has experienced accumulation of water during PRF rubble loadout and more soil per loadout entry than expected. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 5px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 70%;">Risk Recovery Action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>Communicate PRF loadout options with RL.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Encourage additional worker involvement.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Recovery Action Assessment: No major changes in August. Crews are loading out more soil associated with debris collection than expected. Additional loadout may be needed that will push project completion. A change recommended by craft personnel in the demolition approach has shown early signs of improved performance.	Risk Recovery Action(s)	FC Date	%	Communicate PRF loadout options with RL.	Ongoing	N/A	Encourage additional worker involvement.	Ongoing	N/A						
Risk Recovery Action(s)	FC Date	%																		
Communicate PRF loadout options with RL.	Ongoing	N/A																		
Encourage additional worker involvement.	Ongoing	N/A																		
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																				
No critical risks identified in August.																				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																				
No high threat risks identified in August.																				
FY2020 Key Risks																				
PFP-P4-002: Weather Impacts During 236-Z Demolition	Inclement weather, including moderate winds, low or high temperatures, and above average snowfall or thunderstorms will result in in-scope unplanned work and schedule impacts to the project. Risk Handling Strategy: Control Probability: Low (10% to 25%) Worst Case Impacts: \$0, 20 days	●	↔		Risk Trigger: High winds and cold weather may impact the project in the winter and spring seasons. Average winds above 15 mph shut down demolition activities, and average winds above 30 mph require additional surveys. Cold weather prevents the foggers from operating and, therefore, shuts down fieldwork activities. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 5px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 70%;">Mitigation Action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in August. No weather events impacted the project in August.	Mitigation Action(s)	FC Date	%	None identified at this time.	N/A	N/A									
Mitigation Action(s)	FC Date	%																		
None identified at this time.	N/A	N/A																		
PFP-P-004: Stop Work From Concerned Workers	Concerned workers can implement a stop work to address off-normal or safety issues. The work cannot be restarted until the implementation of corrective actions is completed, resulting in schedule impacts to the project. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$0, 16 days	●	↔		Risk Trigger: During PFP demolition activities, an increase in stop works could result in delays. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 5px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 70%;">Mitigation Action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>Update communications as positions change.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Provide new maps with entry/exit instructions when boundaries are revised.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Encourage additional worker involvement.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Increase frequency of post-job reviews.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in August. Increased communication and worker involvement to avoid confusion and concern to minimize stop works have continued; stop works may impact the project schedule going forward.	Mitigation Action(s)	FC Date	%	Update communications as positions change.	Ongoing	N/A	Provide new maps with entry/exit instructions when boundaries are revised.	Ongoing	N/A	Encourage additional worker involvement.	Ongoing	N/A	Increase frequency of post-job reviews.	Ongoing	N/A
Mitigation Action(s)	FC Date	%																		
Update communications as positions change.	Ongoing	N/A																		
Provide new maps with entry/exit instructions when boundaries are revised.	Ongoing	N/A																		
Encourage additional worker involvement.	Ongoing	N/A																		
Increase frequency of post-job reviews.	Ongoing	N/A																		
Unassigned Risks (Pending ownership of identified threats/opportunities)																				
No unassigned risks identified in August.																				

PROJECT BASELINE PERFORMANCE

Current Month (CM)

(\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled (BCWS)	Budgeted Cost of Work Performed (BCWP)	Actual Cost of Work Performed (ACWP)	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	0.0	0.0	0.8	0.0	0.0%	(0.8)	0.0%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Variance: (+0.0M/+0.0%)

The CM schedule variance is within threshold.

CM Cost Variance: (-\$0.8M/+ 0.0%)

The CM negative cost variance is the result of the PSWO issued to CHPRC by RL on March 24, 2020. The PSWO covered non-portable work activities not associated with the continuation of essential mission-critical operations that could not be performed in a safe and compliant manner consistent with the U.S. Centers for Disease Control and Prevention (CDC) COVID-19 guidelines and the “Stay Home, Stay Healthy” order issued by the governor of Washington State. PFP scope has been further delayed due to limited personal protective equipment (PPE) availability. Continuing activities causing the negative cost variance are surveys of PFP radiological boundaries, performing equipment maintenance and shipments of previously loaded radioactive waste.

Contract to Date (CTD)

(\$M)

WBS 011/ RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	1,143.6	1,129.9	1,243.2	(13.7)	-1.2%	(113.3)	-10.0%	1,143.6	1,254.0	10.8	(110.4)

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Variance: (-\$13.7M/-1.2%)

The CTD schedule variance is within threshold.

CTD Cost Variance: (-\$113.3M/-10.0%)

The negative CTD cost variance is primarily a result of unplanned costs to support implementation of PFP schedule efficiency initiatives (i.e., foaming, Perma-Fix Northwest [PFNW] size reduction support, PremAire Breathing System); increased training costs of additional PFP radiation control technicians (RCTs) and deactivation and decommissioning (D&D) workers; additional resources to recover schedule from asbestos-removal activities and support the unplanned asbestos removal (about 10,000 feet); unplanned shipping materials (e.g., waste shipping containers TL-1800s, SLB2s, IP-1 bags, etc.) required for TRU waste disposition loadout activities; and unplanned work to reconfigure the high-density polyethylene (HDPE) water loop to support the new radiological boundaries.

Contributors to the negative cost variance include resumption actions associated with the December 2017 contamination event encompassing fixative applications, performing radiological surveys, revising radiological postings, implementing infrastructure modifications, and performing stabilization activities. Reassignment of CHPRC personnel to support the radiological control area (RCA) and programmatic assessments also contributed to the variance.

After resumption activities were completed, a deliberate and in-series approach resulted in slower progress on demolition, size reduction and waste loadout. Process improvements for planning and training activities to replenish D&D and RCT staffing support have additionally increased costs.

The PSWO issued to CHPRC by RL on March 24, 2020, covered non-portable work activities not associated with the continuation of essential mission-critical operations that could not be performed in a safe and compliant manner consistent with CDC COVID-19 guidelines and the “Stay Home, Stay Healthy” order issued by the governor of Washington State. The project was demobilized and placed in a safe configuration in late March 2020. CHPRC and subcontractor labor assigned to work that could not be performed in a remote manner were charged to control account 011.97.01.04 to collect and segregate unproductive time caused by the PSWO.

The negative cost variance was partially offset by the use of fewer breathing air suits (three per day versus five) and fewer hoses than originally planned for 242-Z Building entries. These reductions were the result of fewer fieldwork team members required to perform hands-on work in the 242-Z Building due to the confined space.

In addition, recognized efficiencies contributed to the negative variance offset, including crews completing process vacuum removal in the 291-Z Building with reduced effort; characterization results indicating lower levels of holdup, allowing for accelerated piping removal; isolations performed more efficiently by disconnecting the main electrical power from outside the 291-Z Building versus individual isolations from within; hazardous material removal, stabilization and decontamination was more resourceful than anticipated (i.e., powerful fans used with vertical fixative flow up the stack); and additional efficiencies associated with 242-Z, 291-Z and 234-5ZA Building demolition.

Variance at Completion (VAC): (-\$110.4M/-9.7%)

The unfavorable VAC reflects extended hotel load and field resource costs due to delays in demolition-ready and demolition activities, as well as resumption actions associated with the December 2017 contamination event encompassing fixative applications, performing radiological surveys and revising radiological postings, infrastructure modifications and stabilization activities. Reassignment of CHPRC personnel to support the RCA and programmatic assessments also contributed to the variance. Impacts attributable to COVID-19 concerns have pushed project completion, increasing the expected total project cost.

Overtime used to ready the 234-5Z Building for demolition by September 2017 and unplanned work on the HDPE water loop also contributed to the unfavorable variance, which was partially offset by recognized efficiencies due to characterization data in the 234-5Z Building, allowing piping and ducting to be left in place for demolition.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

RL-0011 Nuclear Matl Stab & Disp PFP	FY2020		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	43.6	39.0	4.6

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The fiscal year 2020 variance of \$4.6 million reflects projected funding of \$43.6 million and a spend forecast of \$39.0 million. The forecast was reduced \$700K from July primarily for MSA usage based services costs that will not be received due to impacts of COVID-19.

Critical Path Analysis

The PFP critical path schedule begins with the completion of PRF loadout, which is forecast to occur by December 8, 2020, meeting the requirements for the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-083-00A, "Plutonium Finishing Plant (PFP) Facility Transition and Selected Disposition Activities." Demolition completion will be followed by site stabilization and demobilization, turnover to S&M and project closeout activities, completing by March 10, 2021.

MILESTONE STATUS

The following table is a one-year look ahead to project breakdown structure RL-0011 Tri-Party Agreement-enforceable milestones, nonenforceable target due dates and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/Comment
M-083-00A	"Plutonium Finishing Plant (PFP) Facility Transition and Selected Disposition Activities"	9/30/2017		12/8/2020	Work resumption is planned in the revised DOE O 413.3B, <i>Program and Project Management for the Acquisition of Capital Assets</i> , Critical Decision (CD)-2 and CD-3 package pending DOE approval for early October based on a phased resumption approach and to conserve PPE in response to COVID-19 impacts. The forecast date reflects the unanticipated continuing impacts of COVID-19, which are anticipated to preclude work resumption as planned in the CD-2 and CD-3 package.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
J.12/C.2.2, C.2.3	PBS RL-0011, PFP Closure Project	Offsite transportation of radioactive material: RL provides equipment and government drivers to transport TRU materials outbound/inbound between the Hanford Site and PFNW locations. RL is the authorized shipper, acts as signatory on the shipping papers and ensures compliance with DOE Manual 460.2-1A, <i>Radioactive Material Transportation Practices Manual for Use with DOE O 460.2A</i> . RL arranges for Commercial Motor Vehicle Safety Alliance Level VI vehicle inspections and verifies that the government drivers meet applicable U.S. Department of Transportation (DOT) Federal Motor Carrier Safety Regulations (49 CFR 382 and 383). RL also inspects the load securement to ensure compliance with DOT regulations and/or transportation safety document requirements.	Ongoing

DOE ACTIONS/DECISIONS

DOE activities supporting the approval of ancillary facility status change forms are complete to date.

Section C

Solid Waste Stabilization and Disposition (RL-0013)

CH2MHILL
Plateau Remediation Company

a Jacobs company



K. R. Shupe
Vice President for
Waste and Fuels Management Project

M. L. Douglas
Vice President for
River Risk Management Project

M. A. Wright
Vice President for
Project Technical Services

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In the August reporting period (July 23 – August 23, 2020), the Waste and Fuels Management Project (W&FMP) and the River Risk Management Project continued essential mission-critical operations in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL) partial stop work order (PSWO) issued as a part of the Hanford Site response to the novel coronavirus (COVID-19).

The following items were accomplished in August:

- The Management of Cesium and Strontium Capsule (MCSC) Project, W-135, *Waste and Encapsulation and Storage Facility (WESF) Modifications*, Line Item project completed work on DOE Order (DOE O) 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, Critical Decisions (CD)-2 and CD-3, and transmitted the deliverables to RL for approval. The Capsule Storage Area (CSA) Project continued construction of the capsule storage pad (CSP). Structural backfill of the operational pad (OP) has also completed. Fabrication of the Cask Storage System (CSS) transfer and ancillary equipment continued for future installation in WESF and the mockup facility.
- WESF G Cell and canyon window refurbishment were completed.
- At the Central Waste Complex (CWC), nondestructive assays (NDA) of waste packages in Outside Storage Area (OSA)-A were completed (15 packages).
- At T Plant, fieldwork was initiated to change the 291-T high-efficiency particulate air (HEPA) filters.
- Integrated Disposal Facility (IDF) infrastructure upgrades continued as water and sewer system installation nears completion, mobile offices were installed and ready for utilities, electrical and communication installation was ramping up, steady progress was being made on earthwork and fencing.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
20-EMS-WFMP-OBJ1-P1	Complete installation of the Maintenance and Storage Facility (MASF) integrated testing mockup and demobilization.	Erect mockup structure and demobilization.	9/30/2020	20%
20-EMS-WFMP-OBJ2-P1	Receive three garnet filter shipments at T Plant.	T Plant Complex to receive three garnet filter shipments.	9/30/2020	Cancelled 8/20/2020
20-EMS-WFMP-OBJ3-P1	Repackage 400 m ³ of transuranic (TRU)/TRU mixed (TRUM) waste in preparation for certification/shipment to the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico.	Complete repackaging 400 m ³ of legacy TRU/TRUM waste.	9/30/2020	79%
20-EMS-RRMP-OBJ1-P1	Track maintenance/recycling activities at the Environmental Restoration Disposal facility (ERDF) (e.g., used oil recycling, tires, batteries and product drums, etc.)	On a quarterly basis, track the maintenance recycling activities of the ERDF subcontractor and CH2M HILL Plateau Remediation Company (CHPRC) transportation organization.	9/30/2020	75%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred (DART)	0	3*	* 1 DART, Project Technical Services (PTS) in support of RL-0013. * 1 DART, Mission Support Alliance, LLC (MSA) in support of RL-0013.
Total Recordable Injuries	0	0	N/A
First Aid Cases	1	9	8/11/2020 – Employee struck shin on a drum dolly while moving waste in a clean area. Employee was taken to HPM Corporation and returned to work without restrictions. (25551)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Waste and Fuels Management Project

13.01 Project Management

- On August 5, 2020, CHPRC transmitted a Class 1 permit modification, to update the Emergency Response Organization and Initial Command Post location during pre-active life for the CSA facility, to the Washington State Department of Ecology (Ecology) for informal review.
- On August 3, 2020, CHPRC transmitted the redline edits and comment responses for the Solid Waste Operations Complex (SWOC) building emergency plans to Ecology for final review. This is in support of the SWOC Part B Permit.
- On August 5, 2020, CHPRC transmitted the Low-Level Burial Grounds Green Islands Contingency Plan redline edits and comment responses to Ecology for final review. This is in support of the Revision 9 Permit.

13.02 Capsule Storage and Disposition

- Completed the WESF G Cell and canyon window refurbishment.
- Completed 30 preventative maintenance (PM) packages.

13.03 Canister Storage Building (CSB)

- Completed 27 PM packages.

13.06 TRU Repackaging

- Repackaging of 475.3m³ TRU/TRUM waste fiscal year to date (FYTD) was completed as of the end of August.

13.07 Waste Receiving and Processing

- Completed 168 surveillances and 18 PM packages.

13.08 T Plant

- Initiated fieldwork to change the 291-T HEPA filters.
- Completed 494 surveillances and 21 PM packages.

13.09 Central Waste Center and Low-Level Burial Grounds

- Completed paperwork on six of 15 NDA boxes in OSA-A.
- Completed 232 surveillances and 20 PM packages.

13.16 Offsite Spent Nuclear Fuel Disposition

- Maintained coordination of offsite spent nuclear fuel disposition.

13.21 Mixed-Waste Disposal Trenches

- Completed 163 surveillances.

13.24 Management of Cesium (Cs) and Strontium (Sr) Capsules Project

- WESF Modifications, Line Item project has completed work on DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, CD-2 and CD-3, and transmitted the deliverables to RL for approval. The CSA Project continued construction of the CSP. Structural backfill of the OP has completed. Fabrication of CSS transfer and ancillary equipment continued for future installation in WESF and the mockup facility.
- With the support of PTS, the following progress was made on MCSC subproject construction activities:
 - o Completed roughing-in a temperature-monitoring system conduit at the CSP and OP sites.
 - o Completed conduit trench backfill with controlled density fill.
 - o Commenced placing of concrete formwork and receipt of rebar for the CSP and OP sites.

- o Continued sewer line and electrical installation for MO-2267; estimated date of arrival for MO-2267 is September 8, 2020.
- o Continued steel construction of the G Cell mockup at the MASF.

River Risk Management Project

13.10 Environmental Restoration Disposal Facility

- Received 539 tons of waste for disposal.
- Received 31,882 tons of waste for disposal FYTD. Any corrections in previous months are reflected in this total.
- Container maintenance performed inspections and required maintenance on 48 containers.
- Performed heating, ventilation, and air conditioning maintenance on Building 6250.
- ERDF operations completed numerous tabletop exercises and mockups of the enhanced dump ramp, which enabled ERDF to begin disposing of high-hazard PFP waste safely.

13.12 Integrated Disposal Facility

- Care and Custody
 - o Performed six storm event inspections.
- IDF Operational Readiness
 - o Construction subcontractors have remobilized to IDF and made progress on trenching and installation of the sewer and potable water lines, inspection buildings and installation of security fencing.

MAJOR ISSUES

Issue

Retrieved and repackaged containers in storage are showing increased degradation, requiring additional mitigation activities.

Corrective Action

TRU disposition activities would prepare the contents of these containers in a configuration suitable for eventual disposal at WIPP. The configuration would also mitigate or eliminate the risk and additional cost for long-term management of these containers.

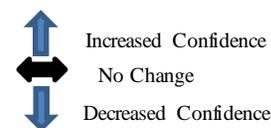
Status

Continued to use the best-demonstrated available technology to provide adequate configuration and minimize the potential for contamination spread during long-term storage (i.e., protecting boxes with tarps or protective shoring; over-packing drums). Streamlined and consolidated container management procedures. RL authorized the resumption TRU commercial repackaging, allowing shipments to Perma-Fix Northwest for repackaging to continue throughout fiscal year (FY) 2020.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

- Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.
- Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.
- Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.



Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0013/WBS-013													
Explanation of major changes to the project monthly spotlight chart: There were no major changes to the spotlight chart in August.													
Realized Risks (Risks that are currently impacting project cost/schedule)													
13-RCRA-REV9-001: RL-13 - Additional Dangerous Waste Management Units (DWMUs)	Unplanned DWMUs are added to the scope, requiring additional document support, impacting the project in both cost and schedule. Risk Handling Strategy: Control Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 48 days	●	↔	<p>Risk Event: Ecology provided technical comments on the permit addendum, expanding the number of DWMUs.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct weekly meetings with Ecology and RL.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No significant changes in August. Impacts associated with realization of this risk are ongoing; as such, this risk will continue to be reported for visibility until it no longer poses a threat to the project. The project does not expect to resolve this realized risk within the current contract period.</p>	Risk Recovery Action(s)	FC Date	%	Conduct weekly meetings with Ecology and RL.	Ongoing	N/A			
Risk Recovery Action(s)	FC Date	%											
Conduct weekly meetings with Ecology and RL.	Ongoing	N/A											
13-RCRA-REV9-003: RL-13 - Ecology Delays	Scope supported by Ecology is impacted by delays in Ecology review time that do not align with the permit management schedule. This issue requires that the project take recovery actions that result in schedule impacts. Risk Handling Strategy: Control Probability: Very likely (>90%) Worst Case Impacts: \$0, 96 days	●	↔	<p>Risk Event: Ecology's review time is impacting the permit management schedule.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct routine meetings with Ecology and the contractor to promote communication efforts.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No significant changes in August. Select staff are prepared to respond to comments when they are received. Impacts associated with the realization of this risk are ongoing; as such, this risk will continue to be reported for visibility until it no longer poses a threat to the project. The project does not expect to resolve this realized risk within the current contract period.</p>	Risk Recovery Action(s)	FC Date	%	Conduct routine meetings with Ecology and the contractor to promote communication efforts.	Ongoing	N/A			
Risk Recovery Action(s)	FC Date	%											
Conduct routine meetings with Ecology and the contractor to promote communication efforts.	Ongoing	N/A											
WSD-138: Regulatory Document (Closure Plan with Ecology) Results in Significant Comments from the Regulator	Significant comments from the regulator on closure plans submitted for approval results in non-approval of the permit or rework, causing schedule impacts to the project. Risk Handling Strategy: Control Probability: Very likely (>90%) Worst Case Impacts: \$0, 96 days	●	↔	<p>Risk Event: Eight closure plans were formally resubmitted to Ecology in August and November 2018. In January 2019, Ecology provided additional comments, changing the closure strategy for several units.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Use a standardized approach to quickly evaluate and categorize comments for resolution.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Conduct routine meetings to address agency comments and to remain current on the influences from agencies.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No significant changes in August. RL informed Ecology that additional document revisions would not be completed at this time. The impacts associated with the realization of this risk are ongoing; as such, this risk will continue to be reported for visibility until it no longer poses a threat to the project. The project does not expect to resolve this realized risk within the current contract period.</p>	Risk Recovery Action(s)	FC Date	%	Use a standardized approach to quickly evaluate and categorize comments for resolution.	Ongoing	N/A	Conduct routine meetings to address agency comments and to remain current on the influences from agencies.	Ongoing	N/A
Risk Recovery Action(s)	FC Date	%											
Use a standardized approach to quickly evaluate and categorize comments for resolution.	Ongoing	N/A											
Conduct routine meetings to address agency comments and to remain current on the influences from agencies.	Ongoing	N/A											

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0013/WBS-013													
WSD-CSA-018: CSA Design Errors and Omissions	CSA construction is impacted by errors and omissions in the issued design documents. Impacts could be to safety, quality, schedule and/or cost. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$650K, 24 days	●	↔	<p>Risk Event: The new CSA fire protection raw water line requires installation of a new Reduced-Pressure Backflow-Prevention Assembly (RPBA) at WESF. The RPBA was omitted from the original design. The omission was identified by the Hanford Fire Department during a supplemental review of the design in connection with a water system tie-in permit.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Revise the design to include an RPBA facility.</td> <td>9/15/20</td> <td>80</td> </tr> <tr> <td>Construct new RPBA facility.</td> <td>12/24/20</td> <td>0</td> </tr> </tbody> </table> <p>Recovery Action Assessment: The design revision to address the omission (i.e., to include an RPBA facility) will be released on September 15, 2020, and then the CSA contractor will construct the new facility. This risk is forecast to remain realized through calendar year 2020.</p>	Risk Recovery Action(s)	FC Date	%	Revise the design to include an RPBA facility.	9/15/20	80	Construct new RPBA facility.	12/24/20	0
Risk Recovery Action(s)	FC Date	%											
Revise the design to include an RPBA facility.	9/15/20	80											
Construct new RPBA facility.	12/24/20	0											
WSD-CSS-006: Fabrication of the Equipment from the Contractor	Fabrication of critical items for the long-term storage of the Cs and Sr capsules does not go exactly as planned, resulting in design changes and rework. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$5M, 144 days	●	↔	<p>Risk Event: Fabrication of required equipment and items does not go according to schedule, requiring redesign or additional components that will impact the project's cost and schedule baseline.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Automated Weld System (AWS) vendor to provide portions of design for review as available.</td> <td>12/08/20</td> <td>39</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No major changes in August. A design change for the AWS was proposed and accepted by CHPRC, which would minimize crane movements of the AWS and simplify operation. Implementation of this change requires seismic considerations in the design, which was not recognized by the fabricator/designer, resulting in cost and schedule delays. The contractor has submitted a proposal with realistic design duration. AWS gantry delivery is not on the project critical path. Further mitigation is for the AWS vendor to provide parts of the design to CHPRC for review as available to minimize formal design review time at the completion of full design. The preliminary gantry design review has been completed. Completion of the seismic analysis is taking longer than planned, extending design duration.</p>	Risk Recovery Action(s)	FC Date	%	Automated Weld System (AWS) vendor to provide portions of design for review as available.	12/08/20	39			
Risk Recovery Action(s)	FC Date	%											
Automated Weld System (AWS) vendor to provide portions of design for review as available.	12/08/20	39											
WSD-CSS-015: CSS Design Changes	During fabrication of the CSS equipment, necessary design changes are identified, resulting in cost and schedule impacts to the project. Risk Handling Strategy: Control Probability: Likely (75% to 90%) Worst Case Impacts: \$750K, 80 days	●	↔	<p>Risk Event: Design changes for the CSS equipment have been identified by National Agency Checks (NAC) and CHPRC engineering that will improve ease of fabrication, decrease operational risk and improve occupational safety.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Evaluate each proposed change for necessity, cost and schedule impacts, as well as benefit prior to implementing change.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Action Assessment: As fabrication began, NAC engineering identified design changes that were necessary for fabrication but required additional analysis and approval by CHPRC to implement, resulting in schedule delay. Additionally, CHPRC engineering staff assigned to other high priority projects during the CSS design period have identified changes from previous lessons learned. These changes reduce operational risk and improve occupational safety but resulted in additional costs and schedule delay. Mitigation is for CHPRC engineering to perform a cost/benefit analysis for presentation to the project management prior to requesting change from the contractor. Minor drawing changes have been communicated to the fabrication contractor for incorporation at the next drawing revision to avoid unnecessary diversion of critical resources from fabrication tasks.</p>	Risk Recovery Action(s)	FC Date	%	Evaluate each proposed change for necessity, cost and schedule impacts, as well as benefit prior to implementing change.	Ongoing	N/A			
Risk Recovery Action(s)	FC Date	%											
Evaluate each proposed change for necessity, cost and schedule impacts, as well as benefit prior to implementing change.	Ongoing	N/A											

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0013/WBS-013													
WSD-W135-36: MASF Mockup Construction Subcontractor Performance	<p>The MASF mockup construction contractor fails to perform per the proposal or fails to meet CHPRC expectations, leading to schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$350K, 64 days</p>	●	↔	<p>Risk Event: The MASF mockup construction contractor does not manage their subcontractors effectively and submits fabrication drawings that cannot be approved. Workmanship in the field is not adequate and results in nonconformance report conditions that require rework.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Provide additional oversight of apprentice employees.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Provide markups of fabrication drawings to shorten review, resubmit and approval cycles.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No significant changes in August. The mockup construction contractor submitted fabrication drawings for additional steel fabrication that could not be approved on the first review round. CHPRC provided markups to the drawings that would enable resubmittal and approval quickly.</p>	Risk Recovery Action(s)	FC Date	%	Provide additional oversight of apprentice employees.	Ongoing	N/A	Provide markups of fabrication drawings to shorten review, resubmit and approval cycles.	Ongoing	N/A
Risk Recovery Action(s)	FC Date	%											
Provide additional oversight of apprentice employees.	Ongoing	N/A											
Provide markups of fabrication drawings to shorten review, resubmit and approval cycles.	Ongoing	N/A											
WSD-W135-038: CSS Equipment Design Changes Impact Mockup	<p>Changes to the CSS design result in impacts to the mockup structure at MASF.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$300K, 48 days</p>	●	↑	<p>Risk Event: Design changes for the CSS equipment have been identified, which has impacted the construction of the MASF mockup.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Assist the mockup construction contractor in providing fabrication drawings to minimize design delays due to review/resubmit/approval cycles.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Work with the mockup construction contractor to re-sequence fieldwork to allow work to continue while structural steel fabrication is in progress.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Recovery Action Assessment: A recent entry into the WESF canyon to perform as-built measurements of the truckport opening resulted in design changes to the work platform that sits in the opening. The truckport opening in the simulated WESF canyon at the mockup could not accommodate this change without modification. A change in the AWS to remove a robotic arm and use a gantry-type delivery system required additional bracing to the simulated WESF canyon floor at the mockup. Both of these changes have resulted in change orders to the MASF mockup construction contract with cost and schedule delays. Project management is working proactively with the construction contractor to pull other work forward while steel fabrication is in progress such that when steel is installed, the remaining work can be accomplished without delay. These modifications to the mockup structure have been completed. This risk is no longer being realized and will be removed from the stoplight chart prior to September reporting.</p>	Risk Recovery Action(s)	FC Date	%	Assist the mockup construction contractor in providing fabrication drawings to minimize design delays due to review/resubmit/approval cycles.	Complete	100	Work with the mockup construction contractor to re-sequence fieldwork to allow work to continue while structural steel fabrication is in progress.	Complete	100
Risk Recovery Action(s)	FC Date	%											
Assist the mockup construction contractor in providing fabrication drawings to minimize design delays due to review/resubmit/approval cycles.	Complete	100											
Work with the mockup construction contractor to re-sequence fieldwork to allow work to continue while structural steel fabrication is in progress.	Complete	100											
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)													
WSD-097: Major Equipment Failure – T Plant	<p>T Plant suffers a major equipment failure (e.g., crane, primary power supply, etc.), resulting in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$3M, 96 days</p>	●	↔	<p>Risk Trigger Metric: During planned facility operation activities, a suspected system component is discovered that requires attention or an unexpected malfunction results in this risk being realized. This risk will continue throughout the CHPRC contract.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Implement aggressive corrective action/PM program</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in August. The project has commenced mitigating strategies (i.e., aggressive surveillance and maintenance activities) to help reduce this risk. The canyon crane is currently operational, and spare parts have been procured for the most critical spares.</p>	Mitigation Action(s)	FC Date	%	Implement aggressive corrective action/PM program	Ongoing	N/A			
Mitigation Action(s)	FC Date	%											
Implement aggressive corrective action/PM program	Ongoing	N/A											
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
No high threat value risks identified in August.													
FY2020 Key Risks													

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0013/WBS-013																
WSD-086: W&FM Industrial Accident or Contamination	An industrial accident or contamination event requires corrective actions. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$3M, 0 days	●	↔	<p>Risk Trigger Metric: An industrial accident or contamination event requires corrective actions, resulting in cost impacts.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Adhere to CHPRC procedures, safety programs and training programs that are designed to minimize the potential of worker injury.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in August. This risk was identified as a key project risk for FY2020. The project continued to follow CHPRC procedures and safety programs to minimize any industrial accidents or contamination events.</p>	Mitigation Action(s)	FC Date	%	Adhere to CHPRC procedures, safety programs and training programs that are designed to minimize the potential of worker injury.	Ongoing	N/A						
Mitigation Action(s)	FC Date	%														
Adhere to CHPRC procedures, safety programs and training programs that are designed to minimize the potential of worker injury.	Ongoing	N/A														
WSD-125: Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues	A pause in waste processing results in an unexpected container degradation within SWOC (excluding TRU retrieval activities) and requires additional resources to respond. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$5M, 0 days	●	↔	<p>Risk Trigger Metric: Degraded containers are discovered in CWC.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform daily/weekly waste container surveillances to identify container abnormalities.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Manage a "watch list" of waste containers that have shown signs of degradation or are associated with degraded containers.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Process waste packages at a rate funded by RL.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in August. This risk was identified as a key project risk for FY2020. Surveillances continue to be performed for the project to identify container and container-cover abnormalities. The remaining containers require surveillance and enhanced monitoring.</p>	Mitigation Action(s)	FC Date	%	Perform daily/weekly waste container surveillances to identify container abnormalities.	Ongoing	N/A	Manage a "watch list" of waste containers that have shown signs of degradation or are associated with degraded containers.	Ongoing	N/A	Process waste packages at a rate funded by RL.	Ongoing	N/A
Mitigation Action(s)	FC Date	%														
Perform daily/weekly waste container surveillances to identify container abnormalities.	Ongoing	N/A														
Manage a "watch list" of waste containers that have shown signs of degradation or are associated with degraded containers.	Ongoing	N/A														
Process waste packages at a rate funded by RL.	Ongoing	N/A														
WSD-136: CWC/Waste Receiving and Processing (WRAP) Components Fail	CWC facilities and components may reach their end of life. These items will need to be replaced and/or repaired outside of planned funding profiles, resulting in cost impacts. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$4.1M, 0 days	●	↔	<p>Risk Trigger Metric: Maintenance activities at CWC increase due to aging facilities.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct floor repairs as necessary.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Conducting doorframe replacements and electrical equipment repairs as necessary.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Draft statement of work (SOW) for the WRAP roof replacement.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in August. This risk was identified as a key project risk for FY2020. The WRAP roof was analyzed for structural integrity following water intrusion. There was insufficient basis for the roof's integrity, which will lead to an eventual roof replacement. A SOW for the roof replacement design was drafted. The master documented safety analysis container-stacking requirements are complete. Maintenance work at CWC will be scheduled based on facility work priorities.</p>	Mitigation Action(s)	FC Date	%	Conduct floor repairs as necessary.	Ongoing	N/A	Conducting doorframe replacements and electrical equipment repairs as necessary.	Ongoing	N/A	Draft statement of work (SOW) for the WRAP roof replacement.	Complete	100
Mitigation Action(s)	FC Date	%														
Conduct floor repairs as necessary.	Ongoing	N/A														
Conducting doorframe replacements and electrical equipment repairs as necessary.	Ongoing	N/A														
Draft statement of work (SOW) for the WRAP roof replacement.	Complete	100														
WSD-140: As-Found-Unknown Conditions - W&FMP Facilities	Unknowns, as found or emergent conditions impact the operability of one or more W&FMP facilities, requiring recovery actions that result in in-scope unplanned work. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$2M, 0 days	●	↔	<p>Risk Trigger Metric: Unknowns, as found or emergent conditions impact the operability of one or more W&FMP facilities, requiring recovery actions that result in in-scope unplanned work.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in August. This risk was identified as a key project risk for FY2020. This risk is an accepted risk, as the project cannot mitigate for unknown conditions.</p>	Mitigation Action(s)	FC Date	%	None identified at this time.	N/A	N/A						
Mitigation Action(s)	FC Date	%														
None identified at this time.	N/A	N/A														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0013/WBS-013																
WSD-144: Changes to Ecology Strategy	<p>Ecology issues a permit that significantly differs from planned scope, resulting in both cost and schedule impacts to the project.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$10M, 192 days</p>	●	↔	<p>Risk Trigger Metric: Ecology issues a permit that does not align with CHPRC's plans. RL does not appeal the permit, causing CHPRC to incorporate all permit requirements.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Continuous communication and routine meetings to address agency comments.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Periodic meetings with RL to discuss the impacts of Ecology decisions.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in August. This risk was identified as a key project risk for FY2020. W&FMP personnel continue to meet routinely with Ecology to resolve comments on permit addenda and preclude issuance of a draft permit different in scope than anticipated.</p>	Mitigation Action(s)	FC Date	%	Continuous communication and routine meetings to address agency comments.	Ongoing	N/A	Periodic meetings with RL to discuss the impacts of Ecology decisions.	Ongoing	N/A			
Mitigation Action(s)	FC Date	%														
Continuous communication and routine meetings to address agency comments.	Ongoing	N/A														
Periodic meetings with RL to discuss the impacts of Ecology decisions.	Ongoing	N/A														
WSD-CSA-013: Cask Storage Area (CSA) Site Location Found to Have Extensive Contamination	<p>The CSA location is found to have contaminated soil or volumes of unfavorable (e.g., loose) soils.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$20K, 32 days</p>	●	↔	<p>Risk Trigger Metric: Significant volumes of contaminated or otherwise unsuitable soils are discovered during CSA construction that cause delays and costs, resulting in the required excavation of additional soil and potentially causing the contamination of leased equipment.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: As of the end of August, excavation of loose foundation materials within the footprints of the CSP and the OP were completed without encountering contamination. However, significant excavation remains related to the installation of the new fire protection raw water line between WESF and CSB; therefore, this risk is retained as a key risk for September. This risk has been accepted because the project has taken great precautions to plan the location of the CSA away from any potential contamination. In the unlikely event that contamination is detected within the CSA site location, project costs and a schedule delay will be accepted, and shipping the contaminated soil to ERDF for disposal will proceed.</p>	Mitigation Action(s)	FC Date	%	None identified at this time.	N/A	N/A						
Mitigation Action(s)	FC Date	%														
None identified at this time.	N/A	N/A														
WSD-W135-31: Canyon Crane Non-Functional/ Not Serviceable	<p>The WESF crane was put back into limited usage for the W-130 Project; however, the crane is found to be unserviceable or fails during the W-135 Project construction and/or operational activities to move Cs/Sr capsules to dry storage.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$300K, 96 days</p>	●	↔	<p>Risk Trigger Metric: The canyon crane fails during use or cannot be returned to service after maintenance.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform preventative/corrective maintenance procedures on the crane to facilitate reliability.</td> <td>9/30/20</td> <td>85</td> </tr> <tr> <td>Procure critical spares.</td> <td>9/30/21</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in August. This risk has been identified as a key risk for FY2020. Facility personnel will complete crane PMs in FY2020. Critical spares will be evaluated and procured prior to the end of FY2021.</p>	Mitigation Action(s)	FC Date	%	Perform preventative/corrective maintenance procedures on the crane to facilitate reliability.	9/30/20	85	Procure critical spares.	9/30/21	0			
Mitigation Action(s)	FC Date	%														
Perform preventative/corrective maintenance procedures on the crane to facilitate reliability.	9/30/20	85														
Procure critical spares.	9/30/21	0														
WSD-IDF-11: Discovery of Unplanned Site Conditions	<p>Unexpected site conditions are encountered during soil excavation activities, resulting in recovery actions.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Low (10% to 24%)</p> <p>Worst Case Impacts: \$240K, 16 days</p>	●	↔	<p>Risk Trigger Metric: During excavation (i.e., underground trenching for sewer, electrical and potable water), the project encounters unplanned contamination, debris, legacy waste (drums) or utilities.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Review of historical as-built drawings.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Site walk downs as needed.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Radiological surveying, as needed.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in August. This risk has been identified as a key project risk for FY2020. Detailed reviews of existing drawings, site walk downs and continuous site radiological surveys throughout excavation efforts are being executed as best practices and included in the baseline; therefore, this risk is accepted with residual probability and consequences.</p>	Mitigation Action(s)	FC Date	%	Review of historical as-built drawings.	Complete	100	Site walk downs as needed.	Ongoing	N/A	Radiological surveying, as needed.	Ongoing	N/A
Mitigation Action(s)	FC Date	%														
Review of historical as-built drawings.	Complete	100														
Site walk downs as needed.	Ongoing	N/A														
Radiological surveying, as needed.	Ongoing	N/A														
Unassigned Risks (Pending ownership of identified risks/opportunities)																
No unassigned risks identified in August.																

PROJECT BASELINE PERFORMANCE

Current Month (CM)

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	16.4	15.0	13.6	(1.4)	-8.6%	1.4	9.6%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (-\$1.4M/-8.6%)

The CM negative schedule variance was the result of the PSWO issued to CHPRC by RL on March 24, 2020. The PSWO covered non-portable work activities not associated with essential mission-critical operations that could not be performed in a safe and compliant manner consistent with the Centers for Disease Control and Prevention (CDC) COVID-19 guidelines and the “Stay Home, Stay Healthy” order issued by the governor of Washington State. Non-portable work activities is work that cannot be performed in a remote manner (e.g., telework from home). The negative schedule variance is also due to a delay in awarding storage system fabrication scope to the subcontractor for the Capital Equipment Storage System. In addition, material receipt completion for the Universal Capsule Sleeves were delayed due to COVID-19 impacts to stainless steel production in France.

CM Cost Performance (+\$1.4M/+9.6%)

The CM positive cost variance resulted from a PSWO issued by RL to CHPRC on March 24, 2020. The PSWO covered non-portable work activities not associated with continuation of essential mission-critical operations that could not be performed in a safe and compliant manner consistent with the CDC COVID-19 guidelines and the “Stay Home, Stay Healthy” order issued by the governor of Washington State. Non-portable work activities are work that cannot be performed in a remote manner (e.g., telework from home). ERDF non-labor costs being less than expected with waste generation being slow due to the Hanford Site being in an essential mission-critical operations posture in response to COVID-19 also contributed to the positive cost variance.

Contract-to-Date (CTD)

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	1,655.9	1,633.0	1,548.2	(22.9)	-1.4%	84.8	5.2%	1,676.0	1,596.1	47.9	79.9

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$22.9M/-1.4%)

The CTD schedule variance is within threshold.

CTD Cost Performance (+\$84.8M/+5.2%)

The CTD favorable cost variance is a result of realizing the following efficiencies:

- Organizational flattening and streamlining.
- Right-sizing capabilities for planned scope.

- Optimizing resources with reorganization and consolidation of engineering capabilities across W&FMP.
- Combined administrative/records functions across WESF and CSB.
- Removing waste from building(s) and reducing the need for inspections/surveillances.
- Reducing the size and number of radioactive areas/radioactive material and associated surveillances/routines and records.
- Tagging out unneeded equipment and reducing the frequency and number of PM activities.
- Increasing shared resources across all of SWOC.
- Reducing dedicated resources for the Corrective Action System and using project-wide support.
- Optimizing maintenance scheduling and execution and reducing operations fieldwork supervision.
- Increasing emphasis on managing planned absence coverage within existing resources.
- Simplifying and optimizing acquisition and procurement management within W&FMP.
- Eliminating the separate waste forecast system by integrating forecasting as part of the baseline process and the Solid Waste Inventory Tracking System.

Variance at Completion (+\$79.9M/+4.8%)

The CTD VAC is within threshold.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

RL-0013 Solid Waste Stabilization and Disposition	FY2020		Variance
	Projected Funding	Spending Forecast	
Waste Stabilization and Disposition	197.8	176.7	21.1
Management of Cesium and Strontium Capsules (Line Item)	2.3	1.2	1.1
RL-0013 – Total	200.1	177.9	22.2

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The current FY2020 projected funding level of \$200.1 million decreased by \$16.4 million from the prior month. Projected funding for Project W-135, WESF Modifications Line Item 18-D-404 was reduced by \$12 million, which will be held by RL until FY2021. The remaining \$4.4 million was reduced for reallocation to MSA to support COVID-19 related impacts to usage-based services. The spending forecast of \$177.9 million reflects a decrease of approximately \$7.3 million from August, primarily for W&FMP scope that pushed into FY2021 due to delays in the ability to implement the original RL-directed PSWO resumption of work plan for subcontracted activities due to COVID-19 impacts extending longer than anticipated in the July spending forecast. ERDF reduced the forecast due to non-labor costs being less than expected with waste generation being slow due to the Hanford Site being in an essential mission-critical operations posture in response to COVID-19.

Critical Path Analysis

Critical path analysis will be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of project breakdown structure (PBS) RL-0013, *Hanford Federal Facility Agreement and Consent Order*-enforceable milestones, nonenforceable target due dates and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-091-53	Submit Milestone Change Request to Replace Target Dates for Capabilities to Process TRUM Waste	9/30/2018			Ecology has not agreed to the change form
M-091-03N	TPA M-091-03N Submit Revision of TRUM Waste and Mixed Low-level Waste to Ecology	9/30/2020		9/30/2020	On schedule
M-091-44T	Submit Change Request to Establish Schedule for Achieving Offsite Shipment of All TRUM Waste	9/30/2020		9/30/2020	On schedule
M-091-49A	Submit a Change Request to Establish a Schedule for Achieving the Retrieval of Retrievably Stored Waste	9/30/2020		9/30/2020	On schedule
M-091-52-T01C	Remove twenty (20) Additional Mixed Waste Containers from Outside Storage Area A and/or Outside Storage Area B	11/30/2020	4/2/2020(A)		Complete

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
J.12/C.2.2, C.2.3	PBS RL-0011, <i>Plutonium Finishing Plant Closure Project</i> PBS RL-0013, <i>Solid and Liquid Waste Treatment and Disposal</i>	Offsite transportation of radioactive material: RL provides equipment and government drivers to transport TRU materials outbound/inbound between the Hanford Site and northwest locations. RL is the authorized shipper, acts as signatory on the shipping papers and ensures compliance with DOE Manual 460.2-1, <i>Radioactive Material Transportation Practices Manual for Use with DOE O 460.2A</i> . RL arranges for Commercial Motor Vehicle Safety Alliance Level VI vehicle inspections and verifies that the government drivers meet the applicable U.S. Department of Transportation (DOT) Federal Motor Carrier Safety Regulations (49 CFR 382 and 383). RL also inspects the load securement to ensure compliance with DOT regulations and/or treatment, storage and disposal requirements.	Ongoing
J.12/C.2.3.6	PBS RL-0013, <i>Transuranic Waste Certification</i>	WIPP provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable, and the number of shipments is controlled by DOE-Headquarters on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the Carlsbad Field Office.	No WIPP shipments are planned within the remaining contract period of performance.

DOE ACTIONS/DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review/Approve CSA Preliminary Documented Safety Analysis (first FY)	5/16/2019(A)	10/13/2020
RL Review/Approve Project W-135, WESF Modifications, CD-2 and CD-3 Documentation	7/27/2020(A)	11/20/2020
RL Approve IDF Final Hazard Categorization	8/3/2020(A)	9/30/2020

Section D

Soil and Groundwater Remediation Project (RL-0030)

CH2MHILL
Plateau Remediation Company
a Jacobs company



W. F. Barrett
Vice President and
Project Manager for
Soil and Groundwater
Remediation Project

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

M. N. Jaraysi
Vice President for
Environmental Program
and Strategic Planning

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

In August, the Soil and Groundwater Remediation Project (S&GRP) continued performance of essential mission-critical work and remobilization of non-portable high priority, low risk and low personal protective equipment (PPE) activities in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL) partial stop work order (PSWO) that was issued as a part of the Hanford Site response to the novel coronavirus (COVID-19) and the CH2M HILL Plateau Remediation Company (CHPRC) phased return to work plan as approved by RL. Progress continued on the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)* remedial process documentation for the River Corridor and Central Plateau. The project team continued to operate groundwater pump and treat (P&T) facilities in a safe and compliant manner. Groundwater treatment and well drilling (including development) that was completed include the following:

Treatment Facility	Million Gallons Treated		Chrome (kg)		Carbon Tet (kg)		Tech-99 (pCi)		Uranium (kg)	
	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD
DX P&T	24.9	309.5	1.0	17.1						
HX P&T	31.2	267.6	2.6	34.0						
KR-4 P&T	13.0	138.8	0.1	1.4						
KW P&T	13.2	139.8	0.5	10.0						
KX P&T	31.4	388.2	1.3	20.3						
200 West P&T	108.5	1,022.6	1.0	5.4	187.0	1,814.0	1.52x10 ¹¹	1.27 x10 ¹²	5.7	60.7
Combined	222.1	2,266.0	6.4	88.2	187.0	1,814.0	1.52x10 ¹¹	1.27 x10 ¹²	5.7	60.7
FY2020 Gold Metric	--	2,200.0	--	80.0	--	1,800.0	--	N/A	--	90.00

Current month (CM) Fiscal year (FY) to date (TD)

Well Drilling Completion by Area*	FY2020 Planned	Current Calendar Month	FY2020 Cumulative
100-KR-4	3	0	3
100-HR-3	9	0	0
200-DV-1	2	0	0
200-ZP-1	7	0	0
M-24 Milestone	3	0	0
Total FY2020 Wells	24	0	3
Site Wide Boreholes	0	0	0
	FY2019 Carryover	Current Calendar Month	Cumulative
200-BP-5	2	0	2
200-ZP-1	1	0	1
Total FY2019 Carryover Wells	3	0	3

*Well drilling "completion" indicates achieving all drilling activities (drill, construct, develop and complete).

EMS Objectives and Target Status

Objective Action Plan#	Objective	Due Date	Status
20-SGRP-OBJ-1-P1	With the suspension of biological treatment, carbon tetrachloride concentrations will be monitored in the air emissions for measuring granulated activated carbon loading and meeting regulatory limits.	7/30/2020	75%
20-SGRP-OBJ-2-P1	The number and types of spills at the S&GRP will be tracked, the workforce will be briefed on spill prevention, and if needed, a plan for reducing spills will be created.	9/30/2020	48%
20-SGRP-OBJ-3-P1	S&GRP operates six P&T facilities that remove contaminants from groundwater at the Hanford Site. The goal is to treat and remediate a total of 2.2 billion gallons of groundwater.	9/30/2020	100%
20-SGRP-OBJ-4-P1	Utilization of the new Centralized Groundwater CERCLA Waste Storage Area will lead to simplification of waste management and reduction in greenhouse gas emissions from operations vehicles.	9/30/2020	78%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	1	3	8/14/2020 - An employee received minor abrasions to both hands. Personnel were in the process of sampling well 299-E13-12, using a downrigger to lower a bailer into the well, when the bailer and cable started to free fall due to equipment malfunction. The individual instinctively grabbed the cable wearing nitrile gloves. Individual was evaluated at HPM Corporation and returned to work with no restriction. (25554)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

100-HR-3 Operable Unit (OU)

- Submitted draft non-significant change to RL on August 10, 2020. RL will provide the draft non-significant change to the U.S. Environmental Protection Agency (EPA) and Washington State Department of Ecology (Ecology) for review. The non-significant change is a memorandum to the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Administrative Record that describes a change to the 100-D/H, 100-F/IU and 300 Area record of decision (RODs) to identify the modular storage units as onsite disposal locations for purgewater. Approval of this non-significant change will enable completion of the 100-HR-3 Design/Remedial Action Work Plan (RD/RAWP).
- Completed drilling and construction for Well C9925 (699-97-47D) on August 21, 2020. This is the fifth well of nine planned for FY2020. The completion of these wells is anticipated in September.

100-KR-4 OU

- Provided the DOE/RL-2018-43, *Technical Impracticability Documentation for Strontium-90 100-kr-4 Groundwater operable Unit Hanford Site, Benton County Washington*, Draft D, to RL for submittal to EPA for review on August 4, 2020.
- Completed comment resolution with EPA on DOE/RL-97-01, *Interim Action Waste Management Plan for the 100-KR-4 Operable Unit*, Revision 7 on August 18, 2020. The document will continue to be finalized but will not be issued until the 100-HR-3 RD/RAWP is complete.

100-NR-2 OU

- Submitted the TI waiver document for the strontium-90-contaminated groundwater to RL and the regulators for review on August 23, 2020.

300-FF-5 OU

- Completed the resolution of comments and submitted SGW-63113, *300-FF-5 Operable Unit Enhanced Attenuation Uranium Sequestration Completion Report*, to RL on August 21, 2020.

Central Plateau

200-UP-1 OU

- Transmitted the Revision 1 documents for the 200-UP-1 Groundwater RD/RAWP (DOE/RL-2013-07), and the Performance Monitoring Plan for the 200-UP-1 Groundwater OU Remedial Action (DOE/RL-2015-14) to RL on August 26, 2020.

200-WA-1, 200-EA-1, and 200-IA-1 OUs

- Obtained RL, EPA and Ecology signatures approving the Tri-Party Agreement Change Control Form C-20-02, *Waste Site Re-Assignment to 200-IA-1 OU based on IAMIT Determination 2020-006*, on August 11, 2020. This change control form implements the new Central Plateau Inner Area (IA) OU agreements documented in Interagency Management Integration Team 2020-006 and reassigns 101 waste sites from 200-WA-1 and 200-EA-1 OUs to the 200-IA-1 OU.

200-ZP-1 OU

- Completed CERCLA requirement to brief EPA on the 200 West Area P&T second quarter calendar year (CY) 2020 Performance August 5, 2020.

Groundwater P&T Facilities**200 West P&T**

- Operated the 200 West Area P&T at an average of 2,428 gpm.

100 Area P&Ts

- Operated the DX P&T at 577 gpm, below the facility capacity of 775 gpm. DX was shut down on July 11, 2020, due to an electrical utility outage and was restarted on August 13, 2020.
- Operated the KR-4 P&T at 290 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 296 gpm, below the facility capacity of 330 gpm.
- Operated the KX P&T at 702 gpm, below the facility capacity of 900 gpm.
- Operated the HX P&T at 702 gpm, below the facility capacity of 900 gpm.

MAJOR ISSUES

Issue

Progress to complete the 100-BC Area ROD is being hindered by concerns from the Yakama Nation (YN) and indications they may issue a notice of intent to sue if the ROD is issued with the current plan for groundwater cleanup. Monitored natural attenuation is the preferred remedy for groundwater, and the YN does not agree with this remedy. YN also asserts that the Cr(VI) 10 µg/L surface water cleanup level is applicable throughout the aquifer per Washington State code. This issue has the potential to impact all groundwater OUs with existing Cr(VI) cleanup levels by causing them to change to the lower surface water cleanup level.

Corrective Action

No corrective action has been identified.

Status

RL agreed to move forward in developing a ROD using 10 µg/L as the cleanup level for Cr(VI) in groundwater. This agreement is in response to a comment from the Yakama Nation (YN) and their assertion that 10 µg/L surface water cleanup level for Cr(VI) is applicable throughout the aquifer per Washington State code. Ecology agreed with YN on this matter and notified RL by email on July 9, 2020, that for purposes of groundwater cleanup at the 100-B/C OU, Washington State codes are considered applicable or relevant and appropriate requirements (ARARs), and as such, the surface water quality standard for Cr(VI) cleanup level of 10 µg/L applies throughout the plume. This issue is closed and will not be reported in future issues of the monthly report.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

- Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.
- Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.
- Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

- Increased Confidence
- No Change
- Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0030/WBS-030										
Explanation of major changes to the project monthly spotlight chart: Risk <i>SGW-171: Increase in Routine Sampling & Analysis Requirements</i> , will be removed from the spotlight chart next reporting period for the remainder of the fiscal year and will be re-evaluated in FY2021 based on the FY2021 Annual Risk Analysis results.										
Realized Risks (Risks that are currently impacting project cost/schedule)										
SGW-216B-02: 216-B-63 Closure Plan Atypical Comments	Atypical 216-B-63 comments result in multiple rounds of comment resolution that require additional effort and duration. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$174.0K, 80 days	●		<p>Risk Event: RL's 216-B-63 Closure Plan comments provided in June 2019 requested removal of the pipeline for consistency with the 241-CX Tank System Closure Plan and because they were being addressed in the 200-IS-1 OU. CHPRC was coordinating with both RL and Ecology to resolve these comments while the review was ongoing. Efforts to resolve the pipeline comment were nearing completion between RL and Ecology in July 2019 when additional Ecology comments and research requests were provided from the new Ecology lead. The issue has grown to include a more global conveyance discussion (based on a December 2019 meeting), and new comments have been received that requested additional historic information (based on a January 2020 meeting). CHPRC continues with efforts to support RL in resolving the original pipeline comments and the new comments. Ecology has expressed the desire to incorporate the resolutions into the two other closure plans currently in process (216-S-10 and 216-B-3), as well as other closure plans already certified or frozen. RL or CHPRC have not acted on this request. The issues will be revisited once resolution is reached within this 216-B-63 Closure Plan.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 80%;">Recovery Action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p>Recovery Assessment: No significant changes in August. Ecology concurrence on language for the 216-B-63 Closure Plan was received on April 20, 2020, and frozen. Similar comments on other closure plans are being addressed in the same approach as decided in the 216-B-63 Closure Plan. Once resolution on the 216-B-63, 216-S-10 and 216-A-29 Closure Plans is achieved, CHPRC will pursue certification. There maintains a concern that CHPRC may be asked to unfreeze this closure plan to facilitate comment resolution based on current discussions and historical experience, resulting in a reduced health trend assessment.</p>	Recovery Action(s)	FC Date	%	CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.	Ongoing	N/A
Recovery Action(s)	FC Date	%								
CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.	Ongoing	N/A								

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0030/WBS-030													
SGW-216S-01: 216-S-10 Closure Plan Atypical Comments	Atypical 216-S-10 comments result in multiple rounds of comment resolution that require additional effort and duration. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$174.0K, 80 days	●	↓	<p>Risk Event: RL and Ecology comments were originally received in April 2019. Since that date, additional Ecology comments were received in August, November and December 2019 as part of Ecology’s “confirm comment capture” task. Additional comments were received via the 216-B-63 Closure Plan review.</p> <table border="1"> <thead> <tr> <th>Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Assessment: No significant changes in August. CHPRC has completed comment resolution, and the document is frozen. Similar to the 216-B-63 Closure Plan, there maintains a concern that CHPRC may be asked to unfreeze the 216-S-10 Closure Plan to facilitate additional comments to align all four closure plans before the closure plan package is certified. This will result in additional in-scope, unplanned work to support additional revisions to the document. Recovery actions have proven to be ineffective in reducing in-scope, unplanned work...</p>	Recovery Action(s)	FC Date	%	CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.	Ongoing	N/A			
Recovery Action(s)	FC Date	%											
CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.	Ongoing	N/A											
SGW-216A-01: 216-A-29 Closure Plan Atypical Comments	Atypical 216-A-29 comments result in multiple rounds of comment resolution that require additional effort and duration. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$174.0K, 80 days	●	↓	<p>Risk Event: This closure plan was “frozen” by Ecology in April 2019, with the remaining activity of certification and transmittal to occur concurrently with the in-process 216-B-63, 216-B-3 and 216-S-10 Closure Plans. During the 216-B-63 Closure Plan comment resolution meeting held in December 2019, Ecology expressed a desire to update the 216-A-29 Closure Plan upon resolution of the conveyance discussions. During the January 2020 conveyance follow-up meeting with Ecology, new comments were provided regarding a request for additional historical information and an informal statement that the other certified or frozen closure plans may also need to be revised accordingly.</p> <table border="1"> <thead> <tr> <th>Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Assessment: No significant changes in August. The resolution of comments for the 216-B-63 and 216-S-10 Closure Plans and the description for conveyances in 216-B-3 Closure Plan has resulted in the need to unfreeze this closure plan and support additional revisions, resulting in in-scope unplanned work. Revisions to the 216-A-29 Closure Plan are currently with Ecology for review and concurrence. However, there exists a likely probability Ecology will not be able to support a closure plan concurrence by September 3, 2020. Recoverable actions have proven to be ineffective in reducing the in-scope, unplanned work associated with Ecology’s requests. The health assessment of this risk has been changed to reflect a downward trend.</p>	Recovery Action(s)	FC Date	%	CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.	Ongoing	N/A			
Recovery Action(s)	FC Date	%											
CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.	Ongoing	N/A											
SGW-KR4-05: FS (Feasibility Study) – Greater Than Expected Comments from RL or Regulators	Atypical RL or regulator review comments result in multiple rounds of comment resolution and/or are global in nature, requiring additional time for comment incorporation and/or rework. Risk Handling Strategy: Control Probability: Likely (75% to 90%) Worst Case Impacts: \$120.0K, 48 days	●	↔	<p>Risk Event: Early collaborative reviews of the decisional draft FS by EPA has resulted in a change of approach in the alternative evolution that created rework of the FS during preparation of the Draft A version.</p> <table border="1"> <thead> <tr> <th>Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Develop a standardized approach to quickly evaluate and categorize comments for resolution.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Conduct routine meetings to address agency comments and to remain current on the influences from agencies.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Assessment: No significant changes in August. Continue collaborating with EPA on the FS to help reduce the number of comments during their review. The completion of EPA review of the FS is scheduled for September 25, 2020.</p>	Recovery Action(s)	FC Date	%	Develop a standardized approach to quickly evaluate and categorize comments for resolution.	Ongoing	N/A	Conduct routine meetings to address agency comments and to remain current on the influences from agencies.	Ongoing	N/A
Recovery Action(s)	FC Date	%											
Develop a standardized approach to quickly evaluate and categorize comments for resolution.	Ongoing	N/A											
Conduct routine meetings to address agency comments and to remain current on the influences from agencies.	Ongoing	N/A											
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)													
No Critical Risks identified in August.													
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
No High Risks identified in August.													

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0030/WBS-030										
FY2020 Key Risks										
SGW-009: Key Environmental Modeling Hardware Failure	<p>Computer hardware components for environmental modeling fail, requiring immediate replacement and resulting in cost and schedule impacts to CHPRC and other Hanford Site contractor's projects.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Low (10% to 25%) Worst Case Impacts: \$350K, 25 days</p>	●	↔	<p>Risk Event: A primary node of the Gaia Environmental modeling super computer server fails. This failure results in delays to composite analysis and cumulative impact evaluation work activities and requires the purchase and validation of new components.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Implement the use of a virtual server for modelling activities.</td> <td>TBD</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: CHPRC was able to work with Mission Support Alliance, LLC (MSA) to complete the install of an additional computing node, which helps, but is still not the end vision, as a virtual front-end is still the preferred method for risk mitigation. Currently, impacts from COVID-19 and transition support of the MSA site service contract are delaying the path forward for a virtual server. CHPRC intends to gain traction with MSA in FY2021.</p>	Mitigation Action(s)	FC Date	%	Implement the use of a virtual server for modelling activities.	TBD	0
Mitigation Action(s)	FC Date	%								
Implement the use of a virtual server for modelling activities.	TBD	0								
SGW-171: Increase in Routine Sampling & Analysis Requirements	<p>Sampling and characterization requirements increase above planning assumptions due to changes from data quality objective/sampling and analysis (SAP) sessions and/or other requested changes to analyses, resulting in cost impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Medium (26% to 74%) Worst Case Impacts: \$448K, 0 days</p>	●	↔	<p>Risk Event: During review of the completed SAPs for multiple well locations, it is determined that an increase in the number of samples or complexity of sample type is above the baseline planning.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: After review of the planned scope for the remainder of FY2020, it has been determined that this risk will not be triggered in FY2020. This risk will be removed from the stoplight chart during the next reporting period and re-evaluated for inclusion into FY2021, based on the results of the FY2021 Risk Analysis.</p>	Mitigation Action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation Action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in August.										

PROJECT BASELINE PERFORMANCE

Current Month (CM)

(\$M)

RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	9.2	8.7	7.0	(0.5)	-5.9%	1.7	19.8%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (-\$0.5M/-5.9%)

The primary driver of the CM negative schedule variance is the delay in the procurement and installation of a third ion exchange (IX) treatment train that is being procured and installed at the 200 West Area P&T facility to treat uranium and technetium-99 contaminated groundwater from the 200-BP-5 and 200-PO-1 OUs. Procurement activities were initially delayed due to design changes and were further delayed due to onsite production delays at the vendor's location as a result of COVID-19, and CHPRC request for vessel sandblasting and instrumentation upgrades.

The CM negative schedule variance also reflects the continued impact of the PSWO issued to CHPRC by RL on March 24, 2020. The PSWO covered non-portable work activities not associated with essential mission-critical operations that could not be performed in a safe and compliant manner consistent with the U.S. Centers for Disease Control and Prevention COVID-19 guidelines and the “Stay Home, Stay Healthy” order issued by the governor of Washington State. The Hanford Site began phased return-to-work operations on May 26, 2020. In August, the S&GRP continued performing essential mission-critical operations and partial remobilization of high priority, low risk and low PPE field activities in accordance with CHPRC’s phased return to work plan as approved by RL. Although drilling and sampling crews have begun remobilization to the Hanford Site, well drilling (and associated sampling) and well realignment activities remain behind schedule.

The negative schedule variance is offset in part by schedule recovery for the composite analysis, which had been delayed due to in scope unplanned work and computing issues earlier in the FY. The composite analysis sensitivity cases were not as complex as planned, and the saturated zone activities were supported by additional computing resources, allowing significant schedule recovery in August.

CM Cost Performance (+\$1.7M/+19.8%)

The primary drivers of the CM positive cost variance include the composite analysis sensitivity case analyses and the 200 West Area P&T preventative maintenance (PM) activities, which generated efficiencies by completing annual/semi-annual PMs simultaneously with the August monthly PMs.

Contract-to-Date (CTD)

(\$M)

RL-0030 Soil and Groundwater Remediation	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	1,744.4	1,720.7	1,670.2	(23.7)	-1.4%	50.5	2.9%	1,755.1	1,700.8	30.5	54.4

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$23.7M/-1.4%)

The CTD negative schedule variance is within reporting thresholds.

CTD Cost Performance (+\$50.5M/+2.9%)

The CTD positive cost variance is within reporting thresholds.

Variance at Completion (+\$54.4M/+3.1%)

The variance at completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST

(\$M)

RL-0030 Soil and Groundwater Remediation	FY2020		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	112.2	98.3	13.9

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

Projected FY2020 funding was reduced from \$117.3 million to \$112.2 million in August for reallocation to MSA to support COVID-19 related impacts to usage based services. The spending forecast of \$98.3 million reflects an overall decrease of \$7 million, primarily due to the continued schedule impacts of the PSWO and the delay of the receipt of the IX train.

Critical Path Analysis

Critical path analysis will be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of project breakdown structure RL-0030, Tri-Party Agreement-enforceable milestones, non-enforceable target due dates and commitments for CHPRC.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-015-93C	Initiate Characterization Fieldwork for 200-SW-2 Operable Unit Landfills	9/30/2018		To be determined (TBD)	In abeyance
M-015-98	Complete Remedial Investigation of U Plant Related Waste Sites located in 200-WA-1	6/30/2019		TBD	In abeyance
M-085-70	Submit to Ecology a Remedial Investigation/Feasibility Study Work Package for 200-CB-1	9/30/2019		2/20/2023	In abeyance
M-015-99	Complete Remedial Investigation of Plutonium Finishing Plant (PFP) Related Waste Sites Located in 200-WA-1	12/31/2019		TBD	In abeyance
M-085-80	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CP-1 to Ecology	9/30/2020		9/21/2020	On schedule
M-015-112	Submit Draft B 200-IS-1 RFI/CMS/RI/FS Work Plan to Ecology with Schedule Dates	11/30/2020		3/7/2023	In abeyance
M-024-71	Complete the Construction of All Wells Listed for CY20 and Before	12/31/2020		12/31/2020	On schedule
M-024-58N	Initiate Discussions of Well Commitments	6/1/2021		6/1/2021	On schedule
M-024-72-T01	Conclude Discussions of Well Commitments Initiated Under M-024-58	8/1/2021		7/29/2021	On schedule
M-085-90	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CR-1 to EPA	9/30/2021		5/20/23	In abeyance

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS*

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review ZP-1 Hydraulic Test Plan	8/3/2020(A)	8/27/2020
RL Review 100-HR-3 Groundwater Monitoring SAP Decisional Draft A	8/5/2020(A)	8/27/2020
RL Transmit 200-BP-5 WMA C Drilling SAP, Draft A to Regulators for Review	9/3/2020	9/6/2020
RL Review of KW Rebound Study Parent SAP Draft	9/11/2020	10/10/2020
RL Review of 100-KE Soil Flushing Explanation of Significant Difference	9/15/2020	10/14/2020
RL Transmit 200-CP-1 RI/FS WP Draft A to Ecology	9/17/2020	9/21/2020
RL Certify and Submit 216-S-10 Pond and Ditch Addendum to Ecology	9/30/2020	10/13/2020
RL Transmit I-129 TIARAR Waiver Request Document Draft A to Regulator for Review	10/1/2020	10/15/2020
RL Review of 100-D-H Waste Site Closeout Package C	10/19/2020	10/29/2020
RL Transmit Final 100-HR-3 RD/RAWP Revision 0 to Ecology	10/21/2020	10/30/2020
RL Review of 100-KR-4 FS Draft 0	10/29/2020	11/5/2020
RL Review 200-BP-5/200-PO-1 Decisional Draft IA RD/RAWP	10/29/2020	11/27/2020
RL Transmit 100-KE Soil Flushing ESD to EPA	10/30/2020	11/13/2020
RL Approve 100-HR-3 RD/RAWP Revision 0	10/21/2020	10/30/2020
RL Review 100-KR-4 FY2021 Drilling SAP Addendum Draft	11/5/2020	12/4/2020
RL and Ecology Review of the 216-A-37-1 Crib Draft Groundwater Monitoring Plan	11/11/2020	11/25/2020

*This table identifies key DOE actions/decisions only.

Section E

Nuclear Facility D&D, Remainder of Hanford (RL-0040)

CH2MHILL
Plateau Remediation Company

a Jacobs company



T. E. Bratvold
Vice President for
Central Plateau Risk
Management Project

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure/West Area
Remediation Projects

PROJECT SUMMARY

In August, the Central Plateau Risk Management (CPRM) Project and the West Area Remediation Project (WARP) continued essential mission-critical Phase I operations in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL) partial stop work order (PSWO) issued as a part of the Hanford Site response to the novel coronavirus (COVID-19). CPRM and WARP continued slowly returning personnel to the Hanford Site in August. The CPRM Aging Structures team procured a spider boom to support stabilization of the 216-Z-2 Crib and the 216-Z-9 Crib and installed and configured the temporary construction support trailer village necessary for implementation of stabilization efforts. Additionally, the team completed proficiency dry runs for dress and undress. At the Reduction-Oxidation (REDOX) canyon, crews continued work package development, set up of the dress out and step-off pad (SOP) trailer, completed ground scans in areas 27 and 28 to support cold and dark efforts, and restarted and returned the existing REDOX fans to service. At the 224B Facility, both communication line and electrical isolations were completed to also support cold and dark efforts. At the Plutonium Uranium Reduction Extraction Facility (PUREX) North complex, crews removed previously deactivated communication lines to help clear the footprint for future fieldwork activities. The WARP team completed radiological characterization and sampling as well as the radiological characterization report for the 216-ZP-1 200 West Area pump and treat (P&T) and the 234-5Z-BA and 234-5Z-BE boiler annexes that are required for their future demolition. Crews also completed beryllium sampling for the Plutonium Finishing Plant (PFP) south trailer village, as well as 216-ZP-1, 234-5Z-BA and 234-5Z-BE, and started hazardous waste removal to prepare the structures for demolition.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
20-EMS-CPRM-OBJ1-P1	Improve compliance, Environmental Management System (EMS) awareness and employee involvement.	Present or facilitate a discussion of EMS topics to personnel on a minimum of four different occasions in fiscal year (FY) 2020 and recruit personnel (other than environmental) to participate in at least two-compliance review/programmatic walk downs.	9/30/2020	45%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	4	8	<p>8/3/2020 – Employee tripped on a survey meter cord, hitting their right hand on the instrument. There was no abrasion, and a cold pack was administered. The employee returned to work with no restrictions. (25545)</p> <p>8/10/20 – Employee needed to untangle a knot in a bungee strap used for Environmental Restoration Disposal Facility (ERDF) cans and used a personal knife. The knife slipped and cut through the employee’s work glove, cutting the right index finger. Employee was treated at HPMC Corporation (HPMC) and returned to work with no restrictions. (25549)</p> <p>8/13/20 – Employee was lining ERDF containers when dust got into the right eye. The employee immediately notified supervisors and was taken to HPMC for treatment and returned to work with no restrictions. (25553)</p> <p>8/17/20 – Employee received an insect bite/sting while out in the field. Employee was treated and returned to work with no restrictions. (25555)</p>
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Central Plateau Risk Management

Surveillance and Maintenance (S&M)

- Completed the monthly As Low As Reasonably Achievable Current Technology surveys at the canyon facilities.
- Completed set up of the MO-294 CPRM mask station.
- Completed CPRM universal waste shipment.
- Supported a Washington Department of Health (DOH) inspection of CPRM emission units.

REDOX Canyon Risk Mitigation

- Completed installation of personnel contamination monitor at MO-2195.
- Completed relocation of the decontamination trailer for REDOX's Phase I corrective action.
- Completed ground scans to support the new REDOX Container Transfer Area.
- Completed ground scans to advance the cold and dark activities for 202S.
- Completed ultrasonic testing of chemical lines from 211S to 202S to support cold and dark activities.

Aging Structures Stabilization

- Completed animation model development for the 216-Z-2 and 216-Z-9 Cribs and the 241-Z-361 Tank.
- Completed the mockup for installing conveyance system for Cribs 216-Z-2 and 216-Z-9.
- Received procurement of ventilation and filtration equipment required for active ventilation during the grouting of the 216-Z-2 and 216-Z-9 Cribs and 241-Z-361 Tank.

224B Facility Demo Prep

- Completed asbestos removal for three areas to allow for electrical isolations (approximately 6 feet removed).
- Completed electrical isolations and signed off on the validation of hazardous energy isolation to complete electrical isolation of the 224B Facility.
- Completed inspections of the both decontamination trailers supporting 224B Facility cleanup efforts.

PUREX North Risk Mitigation

- Removed deactivated communication lines to clear the PUREX North footprint for future demolition.

West Area Remediation Project

- Completed radiological characterization and sampling as well as the radiological characterization report for the 234-5Z-BA and 234-5Z-BE boiler annexes and 216-ZP-1 200 West Area P&T.
- Crews completed beryllium sampling for the PFP south trailer village, as well as 216-ZP-1, 234-5Z-BA and 234-5Z-BE and started hazardous waste removal for this area.
- Completed down posting of the majority of the PFP south trailer village from a high-contamination area to a contamination area.

MAJOR ISSUES

Issue

Management directed a work stand down at the REDOX canyon on October 2, 2019, to address a variety of issues, including SOP upgrades, temporary lighting and lack of ventilation throughout the facility. This management-directed work stand down was intended to obtain feedback from REDOX personnel about recommendations to improve the infrastructure at REDOX to support future work scope and minimize the risk of potential issues the project has previously experienced.

Corrective Action

On October 3, 2019, CPRM and REDOX management held a meeting with REDOX personnel to identify all issues and concerns that workers experience while performing risk mitigation activities at REDOX. From this meeting, a list of actions was developed and assigned to functional managers. A phased approach was established and categorized into two sections to address the issues identified and captured as actions. Phase I consisted of improving infrastructure that would better facilitate entries into radiologically posted areas at REDOX and reviewing all governing documentation (i.e., work packages, radiological work permits, etc.) for adequacy. Phase II addressed the working conditions on the interior of REDOX in radiologically posted areas, including ways to improve ventilation and temporary power needs in the areas where risk mitigation activities were being performed. The list of actions is updated weekly and posted in a location that is easily accessible to all REDOX personnel.

Status

With engagement from REDOX personnel, REDOX management identified a path of improving the infrastructure at REDOX that includes moving the radiation zone SOP outside the facility. Procurement and activities are complete to improve the SOP. REDOX management and personnel have completed work package reviews and procedure reviews to address the future work scope. The development of a work package to install temporary power and lighting within REDOX is expected to finish in September to ensure that Phase II activities can begin after the completion of Phase I. The one-month delay in the forecasted completion date for the work package is due to the continued impacts and the associated RL-directed PSWO and COVID-19 impacts.

Issue

In February, electricians entered the 224B Facility and noticed exposed electrical wiring hanging out of the back of a standalone metal equipment rack in the gallery control room. The lead electrician recognized the potential hazard and ordered the room cleared. The initial investigation determined this to be a legacy condition found in the older buildings scheduled for demolition. When the legacy buildings were closed, the common practice was to decommission the building's electrical equipment by air gapping or equipment isolation. However, records of these actions are not part of the current work record, and techniques/requirements have evolved over time.

Corrective Action

Determine how to bring the building to electrical neutrality before going to a cold and dark state and review recent events at the 224B Facility to determine if a common cause or a negative trend exists. In addition, all annual S&M rounds on aged facilities are stopped until configuration control is established.

Status

Electrical investigations of the 224B Facility completed in August and placed the facility in an electrically safe condition to allow for resumption of fieldwork, completing the resolution of this issue. This will be the last month this issue will be reported.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

- Opportunity realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.
- Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.
- Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

- Increased Confidence
- No Change
- Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0040/WBS-040																
Explanation of major changes to the project monthly spotlight chart: Risk REDOX-VS-004, <i>Unexpected Design Changes</i> , was added to the spotlight chart as a realized risk.																
Realized Risks (Risks that are currently impacting project cost/schedule)																
224B-007: Cold & Dark Latent Condition	During cold and dark activities, an unexpected condition (e.g., higher-than-expected radiological readings; inaccuracies in historical drawings and documentation; and discovery of unidentified electrical, mechanical or sewer/water utilities/configuration) results in unplanned work resulting in cost and schedule impacts to the project. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$100K, 24 days	●		Risk Event: The risk event was due to exposed electrical wires discovered during an electrical safe condition being performed, thus posing a potential electrical risk. This was identified for all CPRM legacy facilities that are currently being electrically investigated for potential electrical risk. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Complete electrical isolations.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> Recovery Action Assessment: Electrical isolations are complete in support of the cold and dark activities of the 224B Facility. This risk is no longer being realized and will be removed from the spotlight chart prior to September reporting.	Risk Recovery Action(s)	FC Date	%	Complete electrical isolations.	Complete	100						
Risk Recovery Action(s)	FC Date	%														
Complete electrical isolations.	Complete	100														
224B-008: Impacted by OHC (Other Hanford Contractors) or Other CH2MHill Plateau Remediation Company (CHPRC) Projects	Delays by OHC or other CHPRC projects impact the schedule and technical approach due to inconsistencies with CHPRC execution, resulting in recovery actions. Risk Handling Strategy: Control Probability: Low (10% to 25%) Worst Case Impacts: \$30K, 12 days	●		Risk Event: Mission Support Alliance, LLC (MSA) Electrical Utilities (EU) impacted the 224B Facility electrical deactivation. The need for unforeseen electrical isolations due to an asbestos event at 2101M removed the EU planner from completing the work package to support the 224B Facility. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Mitigate OHC delays.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Recovery Action Assessment: Required resources needed to support the 224B Facility electrical deactivation returned to work in August. The electrical isolation work package is complete and has been reviewed by MSA. The power removal is expected to complete in September.	Risk Recovery Action(s)	FC Date	%	Mitigate OHC delays.	Ongoing	N/A						
Risk Recovery Action(s)	FC Date	%														
Mitigate OHC delays.	Ongoing	N/A														
REDOX-09: Concerned Citizen	Delays caused by public concern (i.e., stakeholders, other Hanford Site workers and concerned citizens) impact the project schedule and technical approach, resulting in recovery actions and causing unplanned, in-scope work. Risk Handling Strategy: Control Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 16 days	●		Risk Event: A concerned citizen called a stop work, which caused delays and unplanned work necessary to address the required action. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Procure and install the SOP trailer.</td> <td>September 2020</td> <td>99</td> </tr> <tr> <td>Create and implement a phased approach to address identified concerns.</td> <td>December 2020</td> <td>55</td> </tr> <tr> <td>Upgrade temporary power/lighting and localized ventilation.</td> <td>November 2020</td> <td>12</td> </tr> </tbody> </table> Recovery Action Assessment: This risk was realized in October 2019. Final SOP trailer setup is set to complete by September 2020 following the receipt of materials. A detailed corrective action list was created with REDOX personnel input. A phased approach schedule was developed and implemented to address infrastructure upgrades necessary to support future work demands. Action items have been assigned to the appropriate responsible manager, and REDOX management is interfacing with personnel for weekly updates on corrective actions.	Risk Recovery Action(s)	FC Date	%	Procure and install the SOP trailer.	September 2020	99	Create and implement a phased approach to address identified concerns.	December 2020	55	Upgrade temporary power/lighting and localized ventilation.	November 2020	12
Risk Recovery Action(s)	FC Date	%														
Procure and install the SOP trailer.	September 2020	99														
Create and implement a phased approach to address identified concerns.	December 2020	55														
Upgrade temporary power/lighting and localized ventilation.	November 2020	12														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0040/WBS-040													
REDOX-16: Facility Integrity	<p>Problems with aging building systems and components (e.g., roofing and overall structure) result in inoperability or require unscheduled maintenance or outages that impact planned decontamination and decommissioning activities, resulting in schedule delays and cost impacts.</p> <p>Risk Handling Strategy: Transfer</p> <p>Probability: Medium (26% to 74%) Worst Case Impacts: \$0, 0 days</p>	●	↔	<p>Risk Event: A leaking roof results in unsafe working conditions for personnel.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform cold and dark activities to shut off building power.</td> <td>December 2020</td> <td>45</td> </tr> <tr> <td>Repair minor roof defects.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No major changes in August. Integrity failures could lead to water issues within radiologically contaminated areas, causing a hazard to personnel. Going to a cold and dark state will minimize the risk for electrical shock due to water. Electrical cold and dark activities have slowed, with electrical engineers and electricians unable to access specific locations of REDOX to continue building the electrical isolation index. Project workers continue to make minor repairs of leaking roof parts to significantly reduce water intrusion. Electrical isolation indexing activities are expected to increase in September 2020 as employees return to work following implementation of COVID-19 social distancing protocols.</p>	Risk Recovery Action(s)	FC Date	%	Perform cold and dark activities to shut off building power.	December 2020	45	Repair minor roof defects.	Ongoing	N/A
Risk Recovery Action(s)	FC Date	%											
Perform cold and dark activities to shut off building power.	December 2020	45											
Repair minor roof defects.	Ongoing	N/A											
REDOX-VS-004: Unexpected Design Changes	<p>Unexpected ventilation system design changes result in rework of planned scope, resulting in cost and schedule impacts to the project.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%) Worst Case Impacts: \$2M, 96 days</p>	●	↔	<p>Risk Event: Necessary design changes have been identified for the REDOX ventilation system, including previously unidentified features for successful operation, requirements for fire detection or functionality/communication, and system inlet/outlet to the facility.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Design and procurement of 291S power distribution.</td> <td>September 2020</td> <td>5</td> </tr> <tr> <td>Design, fabrication and planning for procurement of the 202S ventilation system.</td> <td>December 2020</td> <td>72</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No major changes in August. The project team continues to integrate CPRM Engineering and Facility Design Authorities with vendor and vendor deliverable reviews for the objective of early detection of unexpected or emerging design changes to mitigate schedule and cost impact.</p>	Risk Recovery Action(s)	FC Date	%	Design and procurement of 291S power distribution.	September 2020	5	Design, fabrication and planning for procurement of the 202S ventilation system.	December 2020	72
Risk Recovery Action(s)	FC Date	%											
Design and procurement of 291S power distribution.	September 2020	5											
Design, fabrication and planning for procurement of the 202S ventilation system.	December 2020	72											
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)													
REDOX-05: Collapse of Sand Filter	<p>Due to the close proximity of equipment in operation (e.g., cranes, forklifts used for waste loadout, and steam lines and steam line stanchion removal activities), building age and structural integrity, a collapse of a REDOX ventilation system sand filter is experienced, resulting in cost and schedule impacts to the project.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Very low (<10%) Worst Case Impacts: \$260K, 48 days</p>	●	↔	<p>Risk Triggers: Due to the close proximity of equipment in operation (e.g., cranes, forklifts used for waste loadout and steam line stanchion removal activities), building age and structural integrity, a collapse of a REDOX ventilation system sand filter is experienced.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Establish sand filter access boundary.</td> <td>October 2020</td> <td>50</td> </tr> <tr> <td>Implement a communication plan between OHCs and other CHPRC projects.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in August. Current work scope has not yet impacted this potential risk. Based on the contractor schedule, new temporary exhausters for REDOX are not expected to arrive until November 2020. Based on this information, the current plan would move any excavation work near the sand filters to October 2020.</p>	Mitigation Action(s)	FC Date	%	Establish sand filter access boundary.	October 2020	50	Implement a communication plan between OHCs and other CHPRC projects.	Ongoing	N/A
Mitigation Action(s)	FC Date	%											
Establish sand filter access boundary.	October 2020	50											
Implement a communication plan between OHCs and other CHPRC projects.	Ongoing	N/A											
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
No high threat value risks identified in August.													

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0040/WBS-040										
FY2020 Key Risks										
BOS-003: Facility Integrity	Problems with aging buildings, systems or components (e.g., roofing and structures, etc.) result in inoperability or recovery actions, causing unplanned in-scope work (e.g. unscheduled maintenance and outages). Risk Handling Strategy: Control Probability: Likely (75% to 90%) Worst Case Impacts: \$1M, 0 days	●	↔	<p>Risk Triggers: The project experiences problems with aging building systems and components (e.g., cribs, roofing and structures, etc.) during routine S&M activities. Scheduled maintenance activities must then be performed in addition to unplanned recovery actions.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform lifecycle evaluations of critical structures, systems and components.</td> <td>September 2020</td> <td>90</td> </tr> </tbody> </table> <p>Mitigation Assessment: The forecast completion of the lifecycle evaluations was slipped from August to September in August to allow comment resolution on the structural evaluation report. This risk was identified as a key project risk for FY2020. A subcontract to perform structural analysis of the 231-Z Facility was awarded in late April 2020. The contract work began in June 2020. The evaluation has been completed, and the report is currently being finalized. Routine S&M activities continue to be performed to mitigate risk.</p>	Mitigation Action(s)	FC Date	%	Perform lifecycle evaluations of critical structures, systems and components.	September 2020	90
Mitigation Action(s)	FC Date	%								
Perform lifecycle evaluations of critical structures, systems and components.	September 2020	90								
REDOX-VS-001: Changes to Stack & Stack Monitoring Requirements Affect the Project Schedule	Additional stack and stack monitoring requirements are issued by the regulators, resulting in cost impacts and schedule delays to the project. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$1.5M, 96 days	●	↔	<p>Risk Triggers: Regulators issue additional stack and stack monitoring requirements that mandate significant changes to the current plan. The supplemental ventilation unit is currently identified in the air-monitoring plan (AMP), as well as the associated monitoring requirements for the existing stack.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Negotiate changes to the AMP with regulators.</td> <td>September 2020</td> <td>15</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in August. CHPRC continues to meet with representatives of RL, the U.S. Environmental Protection Agency (EPA) and DOH to discuss the ventilation improvements proposed for REDOX to gain endorsement on the proposed changes to the system and stack monitoring. Revision to the AMP was submitted to RL, EPA and DOH on May 25, 2020, for their review, and resolution of this review is still outstanding.</p>	Mitigation Action(s)	FC Date	%	Negotiate changes to the AMP with regulators.	September 2020	15
Mitigation Action(s)	FC Date	%								
Negotiate changes to the AMP with regulators.	September 2020	15								
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in August.										

PROJECT BASELINE PERFORMANCE

Current Month (CM)

(\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	10.7	7.4	8.5	(3.3)	-30.5%	(1.1)	-14.4%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance: (-\$3.3M/-30.5%)

The CM unfavorable schedule variance was the result of the PSWO issued to CHPRC by RL on March 24, 2020. The PSWO covered non-portable work activities that are not associated with essential mission-critical operations that could not be performed in a safe and compliant manner consistent with the U.S. Centers for Disease Control and Prevention (CDC) COVID-19 guidelines and the “Stay Home, Stay Healthy” order issued by the governor of Washington State. Non-portable work activities are work that cannot be performed in a remote manner (e.g., telework from home).

In August, CPRM continued to progress the safe, steady and controlled ramp up of work activities and onsite employees to prepare for Phase II operations beginning in September 2020. The delay in the implementation of Phase II operations from the original schedule impacted the ability to perform a full ramp up of work activities at REDOX, 224B and PUREX North.

WARP scope planned in this period pushed out due to the delay in approval to resume Phase II operations from the planned schedule contributed to the negative schedule performance. Work that was delayed included 231-Z Facility risk mitigation and 222-T and 224-T demolition preparation activities.

CM Cost Performance: (-\$1.1M/-14.4%)

The CM unfavorable cost variance was the result of the PSWO issued to CHPRC by RL on March 24, 2020. The PSWO covered non-portable work activities that are not associated with essential mission-critical operations that could not be performed in a safe and compliant manner consistent with the CDC COVID-19 guidelines and the “Stay Home, Stay Healthy” order issued by the governor of Washington State. Non-portable work activities are work that cannot be performed in a remote manner (e.g., telework from home). CHPRC and subcontractor labor assigned to work that could not be performed in a remote manner was charged to the work breakdown structure 040.97.01.04.01 to collect and segregate unproductive time caused by the PSWO.

Contract-To-Date (CTD) (\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	630.1	607.5	607.0	(22.5)	-3.6%	0.6	0.1%	642.6	652.5	45.5	(9.9)

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance: (-\$22.5M/-3.6%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (+\$0.6M/+0.1%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (-\$9.9M/-1.5%)

The VAC is within reporting thresholds.

Contract performance report formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

RL-0040 Nuclear Facility D&D	FY2020		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	91.1	84.2	6.9

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2020 projected funding of \$91.1 million reduced \$2.2 million from last month for reallocation to MSA to support COVID-19 related impacts to usage based services. The FY spending forecast of \$84.2 million reflects a decrease of \$6.0 million from July. The primary causes of this decrease were the continued negative impacts of COVID-19 and the PSWO, on the ability to perform work as planned which resulted in the forecast performance of planned FY2020 work being delayed until FY2021.

Critical Path Analysis

Critical path analysis can be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of project breakdown structure RL-0040, *Hanford Federal Facility Agreement and Consent Order*-enforceable milestones, nonenforceable target due dates and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-256	Complete Removal of All Waste Sites for FY2019 as updated or modified in M-16-17-01	9/30/2019		TBD	In dispute resolution. In negotiations with RL to adjust the schedule.
M-085-100	Submit Removal Action Work Plan for 224T to EPA	9/30/2020	8/13/2020(A)		Complete.
M-016-250E	Submit to Ecology a 3-Year Rolling Prioritized Schedule to Implement Waste Site Removal Actions	9/30/2020		9/30/2020	On schedule.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Transmit DOE/RL-2019-37, 224T Sampling Analysis Plan (SAP) Draft A to Regulators for Review	11/19/2019(A)	8/13/2020(A)
RL Transmit DOE/RL-2019-36, 224T Removal Action Work Plan (RAWP), Draft A to Regulators for Review	2/14/2020(A)	8/13/2020(A)
RL Obtain Regulator Review DOE/RL-2016-53, PUREX Action Memorandum (AM)	5/6/2020(A)	9/2/2020
RL Review DOE/RL-2020-04, PUREX RAWP	5/20/2020(A)	8/27/2020
RL Obtain Regulator Review of DOE/RL-2017-06, REDOX RAWP, Revision 1 Draft	7/23/2020(A)	9/17/2020
RL Obtain Regulator Review of DOE/RL-2018-46, REDOX Air Monitoring Plan, Revision 1, Draft	7/23/2020(A)	9/17/2020
RL Obtain Regulator Review of DOE/RL-2017-05, REDOX SAP, Revision 1 Draft	7/23/2020(A)	9/17/2020
RL Review PUREX SAP Decisional Draft	8/4/2020(A)	8/31/2020
RL Review DOE/RL-2016-51, B Plant AM Decisional Draft	8/26/2020	9/15/2020

PUREX AM – Slipped 3 days due to an additional EPA comment received after first review period completed.

PUREX RAWP – Slipped 4 days due to additional RL comments received after first review period completed.

PUREX SAP – Slipped 1 day due to RL review delay.

B Plant AM – Slipped 6 days due to incorporating additional required information in the document.

Section F

Nuclear Facility D&D, River Corridor (RL-0041)

CH2MHILL
Plateau Remediation Company
a Jacobs company



R. M. Geimer
Vice President for
K Basin Operations

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

L.M. Douglas
Vice President for
River Risk Management Project

M. A. Wright
Vice President for
Project Technical Services

PROJECT SUMMARY

K Basin Operations (KBO)

At KBO, essential mission-critical operations continued in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL) partial stop work order (PSWO). The 100K Soil Remediation group continued to excavate the 100-K-60 waste site, removing over 10,000 m³ of overburden material in August. Overall, 21,100 m³ has been removed and stockpiled to date for future use.

River Risk Management Project (RRMP)

The project continued essential mission-critical operations in compliance with the RL-directed PSWO, as well as continued use of temporary alternate work locations for portable work, as appropriate. Planning continued for the performance of radiological testing of the acrylamide grouting that will be used for soil stabilization during B Cell excavation activities. Mockup facility modifications to simulate the Room 18 contamination area/high contamination area (CA/HCA) and support team training were completed. The final CA/HCA/airborne radioactivity area (ARA) don/doff guide demonstrations were video recorded in support of future training. Equipment procurement continued for the cell dams, universal cutting tool, waste boxes, modified airlock rail system and the B Cell 10-ton crane.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
20-EMS-KBO-OBJ1-P1	Evaluation of upcoming work activities at the 100K Area, which involves water discharge to the ground at the 100K Area.	Evaluate the upcoming work by the Hanford Fire Department to ensure decontamination and decommissioning (D&D) and soil remediation activities at the 100K Area follow requirements set by DOE/RL-97-67, <i>Pollution Prevention and Best Management Practices Plan for State Waste Discharge Permits ST4508, ST4509, and ST4510, Revision 3, and 100K-STD-OP-52370, Discharges to Ground.</i>	9/30/2020	100%
20-EMS-KBO-OBJ2-P1	Improve compliance/pollution and spill prevention.	Evaluate the status of spill prevention, use of secondary containment, universal waste and other recycling compliance, and waste reduction opportunities for compliance with CHPRC procedures.	9/30/2020	90%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Months	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	0	12	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

100K Basin Operations

- 100K Closure Project:
 - o 100K West Basin Deactivation
 - Action items from the CH2M HILL Plateau Remediation Company (CHPRC) Hazard Review Board (HRB) for the Settler Vessel Video Borescope Inspection were completed and has been forwarded to the HRB chairman in September for signature.
 - The statements of work for the 105KE Safe Storage enclosure earthwork and trailer installation subcontracts were completed and sent out for bids.
- The Environmental Compliance Officer completed the annual 100K WIDS site assessment and forwarded it to the Environmental Director for approval 100K Soil Remediation
 - o Overburden removal continued at the 100-K-60 waste site, removing over 10,000 m³ of overburden material in August for stockpiling.
 - o Excavation permit DAN20-113 for future remediation of the 100-K-79:7 waste site was prepared and approved.
- 100K Demolition
 - o 166KE demolition resumed in August and began shipping debris to the Environmental Restoration Disposal Facility (ERDF) for permanent disposal. At month end, demolition was approximately 70% complete.

RRMP, 324 Building Disposition Project

- Equipment procurements continued for the following:
 - o Cell dams for the 324 Building.
 - o Universal cutting tool.
 - o Water delivery system for the airlock.
 - o Concrete box for soil waste bins.
 - o Modified airlock rail.
 - o Waste bins and waste containers for the 324 Building.
 - o Self-leveling lifting device (staged for delivery at vendor).
 - o B Cell 10-ton crane.

- The following miscellaneous activities continued:
 - o Essential operations.
 - o Social distancing modifications.
 - o Resumption of work planning.
 - o Contamination event resumption training development.
- Engineering:
 - o Ongoing support to engineered equipment procurements.

Project Technical Services

- Training and Procedures:
 - o Created and edited a video of donning/doffing various personal protective equipment (PPE) configurations. This video will be used as a training tool to provide 324 Project-specific Advanced Radiation Worker Training in preparation for high-risk work resumption.
 - o Revised the 324 Building Stack Inspection Qualification Card to include more detail to tasks to reduce the subjectivity associated with evaluating personnel.
 - o Published a change to procedure 300A-PRO-OP-54285, *Testing and Training Mock-Up Facility Operations*, to update the precautions, limitations and confined space language.

MAJOR ISSUES

Issue

Task Cask Assembly (TCA)-1 is staged outside of the 105K West Facility and is awaiting disposition, and TCA-2 is staged inside the fuel transfer (FTS) annex attached to the north side of 105KW Basin. TCA-1 and TCA-2 were previously used to support transfer operations between 105K East and 105K West and are internally contaminated. Based on historical data, the casks contain residual amounts of basin water and sludge material. Both TCAs require further characterization to verify the source material, radiation levels and location of contamination in order to determine a disposal pathway.

Corrective Action

Characterization of the TCA-1 will require removal of the lid to obtain visual and radiological surveys. Due to anticipated levels of contamination and radiation, this work is presumed to pose a high radiological risk that requires mitigation by use of containments, temporary shielding and ventilation, and mockup training to complete the task. Engineering assessments along with advanced worker involvement will be necessary to plan the disposition of the TCA. Radiological engineering modeling indicates that if a dose rate measurement taken 10 inches above the bottom of the inner vessel exceeds 6 rem/hour, then the sludge heel will have to be removed and processed separately, most likely being directed to the north loadout pit vertical pipe container (if not grouted yet) or pumped into a separate approved container for disposition. If this condition does not exist, then the residual water and material can be solidified and the TCA transferred to ERDF for grouting and disposal. This approach will then be used to process TCA-2 after it is removed from the FTS annex.

Status

Results from a nondestructive assay (NDA) performed on a shielded ion exchange module staged west of 105K West in December through January were evaluated as a test case to determine if the NDA of TCA-1 is feasible for identifying specific radionuclide peaks in a shielded container. While the NDA of the ion exchange module was not deemed successful due to the complex configuration of the shielded module, actinide peaks were identified through the heavy shielding, indicating it will be a viable method for determining if residual solids/sludge contained within TCA-1 need to be removed versus solidified without performing intrusive characterization. After delays due to the RL-directed PSWO, the support trailer and area around TCA-1 have been set up to facilitate the NDA work. Initial measurements have

been taken for TCA-1, and the results are being compiled and reviewed. Following review of the results, NDA personnel will review the feasibility of performing additional NDA on TCA-2. Results of the NDA will be used to support fiscal year (FY) 2022 planning and engineering activities for dispositioning the contents of both TCAs.

Issue

On November 14, 2019, an individual at the 324 Building Disposition Project was discovered with radiological contamination on the skin after exiting the airlock. The individual was decontaminated and cleared. However, due to the event, CHPRC management suspended radiological work beyond essential mission-critical operation activities, pending identification and implementation of revised strategies and controls to reduce the potential of future contaminations.

Corrective Action

The evaluation of 324 practices as documented in the Root Cause Analysis and associated Corrective Action Plan (CAP) has identified 65 corrective actions. These corrective actions are broken into the following categories: Prestart Phase 1 (General CA/HCA activities), Prestart Phase 2 (Room 18 activities), Prestart Phase 3 (Airlock Activates), and Post-start corrective actions.

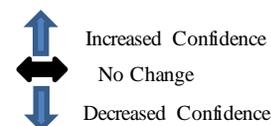
Status

Twenty of these corrective action are pre-starts to general Contamination Area/High Contamination Area (CA/HCA) activities (Phase1). Of these twenty Phase 1 prestart corrective actions, eight have been completed with the general HCA/ARA activities anticipated to start on 12/09/20.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

- Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.
- Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.
- Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.



Risk Title	Unmitigated Risk Impacts	Assessment		Comments																								
		Month	Trend																									
RL-0041/WBS-041																												
Explanation of major changes to the project monthly stoplight chart: No significant changes have been made to the stoplight chart in August:																												
Realized Risks (Risks that are currently impacting project cost/schedule)																												
RCC-300-296-07, 300-296 Failure of a Radiochemical Engineering Cells (REC) Cranes (B Cell, A Cell, A/D & Airlock, and/or CHA Cranes)	Major crane repair must be performed during operations. This in-scope, unplanned work results in cost and schedule impacts to the project. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$3,000K, 208 days	●	↔	Risk Event: In August 2019, the REC A/D Crane failed during operations. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Recovery Action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Award contract – B Cell 10-ton crane – 324 Building.</td> <td style="text-align: center;">6/20/19</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Vendor submit FAT/final datapackage – B Cell 10-ton crane.</td> <td style="text-align: center;">4/2/20</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Vendor delivery to Acquisition Verification Service (AVS) – B Cell 10-ton crane.</td> <td style="text-align: center;">1/13/20</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Perform remote decon/survey A Cell and A/D Cranes.</td> <td style="text-align: center;">4/21/21</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Perform follow-up A Cell and A/D Crane investigation.</td> <td style="text-align: center;">8/11/21</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Procure/fabricate A/D Crane parts.</td> <td style="text-align: center;">8/30/21</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Perform A/D Crane repair.</td> <td style="text-align: center;">10/12/21</td> <td style="text-align: center;">0</td> </tr> </tbody> </table> Recovery Assessment: It is anticipated that decontamination of the A/D Crane will be necessary prior to performing repairs. Procurement and fabrication of decontamination equipment has been initiated to decrease further impacts to the project. Procurement of spare parts has been delayed due to additional verification of components and measurements that cannot be acquired at this time due to COVID-19 and RL-directed PSWO impacts. The fabrication of the crane is complete; however, AVS is not accepting receipt inspections during the PSWO. The vendor is also in the process of fabricating the B Cell Crane bridge to assist with installation. As a result, the current forecast date for delivery to AVS is January 13, 2021 .	Recovery Action(s)	FC Date	%	Award contract – B Cell 10-ton crane – 324 Building.	6/20/19	100	Vendor submit FAT/final datapackage – B Cell 10-ton crane.	4/2/20	100	Vendor delivery to Acquisition Verification Service (AVS) – B Cell 10-ton crane.	1/13/20	0	Perform remote decon/survey A Cell and A/D Cranes.	4/21/21	0	Perform follow-up A Cell and A/D Crane investigation.	8/11/21	0	Procure/fabricate A/D Crane parts.	8/30/21	0	Perform A/D Crane repair.	10/12/21	0
Recovery Action(s)	FC Date	%																										
Award contract – B Cell 10-ton crane – 324 Building.	6/20/19	100																										
Vendor submit FAT/final datapackage – B Cell 10-ton crane.	4/2/20	100																										
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Procure/fabricate A/D Crane parts.	8/30/21	0																										
Perform A/D Crane repair.	10/12/21	0																										
RCC-300-296-36, Contamination Experienced During Radiochemical Engineering Cells Operations	During REC cell cleanout (e.g., soil/debris removal, waste handling and facility modifications), the cask handling area (CHA), truck lock or other support area becomes contaminated or the background dose is elevated to a level that operations cannot continue as currently planned. Significant cost and schedule impacts are incurred. Risk Handling Strategy: Control Probability: Very likely (>90%) Worst Case Impacts: \$225K, 70 days	●	↔	Risk Event: On November 14, 2019, low-level contamination was detected on an individual after exiting a radiological step-off pad (SOP). <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Recovery Action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Perform CHA floor scabbling and apply epoxy floorcoating.</td> <td style="text-align: center;">7/17/19</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Perform project resumption activities – CA/CHA.</td> <td style="text-align: center;">11/4/20</td> <td style="text-align: center;">25</td> </tr> <tr> <td>Return to Room 18 work – resumption actions.</td> <td style="text-align: center;">12/9/20</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Return to airlock work – resumption actions.</td> <td style="text-align: center;">1/5/21</td> <td style="text-align: center;">10</td> </tr> </tbody> </table> Recovery Assessment: The forecasted completion dates for returning to Room 18 and airlock work were delayed in August due to the impacts of the RL-directed PSWO. Resuming work scope in radiologically controlled areas (RCAs) within the building is pending resolution of recovery actions performed under three distinct group sets: general controlled area, Room 18 and the airlock. Upon successful completion of resumption actions and training, each group set will resume fieldwork scope.	Recovery Action(s)	FC Date	%	Perform CHA floor scabbling and apply epoxy floorcoating.	7/17/19	100	Perform project resumption activities – CA/CHA.	11/4/20	25	Return to Room 18 work – resumption actions.	12/9/20	10	Return to airlock work – resumption actions.	1/5/21	10									
Recovery Action(s)	FC Date	%																										
Perform CHA floor scabbling and apply epoxy floorcoating.	7/17/19	100																										
Perform project resumption activities – CA/CHA.	11/4/20	25																										
Return to Room 18 work – resumption actions.	12/9/20	10																										
Return to airlock work – resumption actions.	1/5/21	10																										
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																												
No critical risks are identified in August .																												

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0041/WBS-041										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
RCC-300-296-31, 300-296 Elevated Contamination Encountered While Performing Structural Modifications	To validate the assumptions supporting the 324 Building structural modification design, pilot holes will be drilled into the soil beneath B Cell to collect necessary data. If data shows contamination levels are much higher or deeper or the material encountered is different from anticipated, then an alternative approach will require the development and/or fabrication of equipment for contamination mitigation and control. These impacts will limit progress on fieldwork activities. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$3,318K, 256 days	●	↔	Risk Event: Unexpected contamination found while performing structural modification activities. <table border="1" style="width: 100%;"><thead><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr></thead><tbody><tr><td>This risk is accepted with no planned mitigation actions identified at this time.</td><td>N/A</td><td>N/A</td></tr></tbody></table> Mitigation Assessment: No significant changes in August. As low as reasonably achievable (ALARA) review evaluations for process improvements were completed in May. Increased PPE and additional control measures were successfully implemented. However, these controls have greatly reduced production rates than planned. The residual impacts of this risk are currently accepted with no further mitigation actions identified.	Mitigation Action(s)	FC Date	%	This risk is accepted with no planned mitigation actions identified at this time.	N/A	N/A
Mitigation Action(s)	FC Date	%								
This risk is accepted with no planned mitigation actions identified at this time.	N/A	N/A								
FY2020 Key Risks										
RCC-300-296-01, 300-296 Latent Conditions Impact Facility Modification	Latent conditions, poor visibility in REC cells or drawing omissions, inconsistencies or errors impact facility modifications (e.g., mechanical, electrical industrial hygiene/RCAs), resulting in unplanned work and subsequently, cost and schedule impacts. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$294.5K, 128 days	●	↔	Risk Trigger Metric: Based on a similar event experienced on March 28, 2019, unexpected beta-gamma contamination was detected while performing clearance surveys at the 324 Building SOP. Sampling determined it to be beta contamination (suspected strontium-90) without a corresponding gamma component, resulting in project impacts. <table border="1" style="width: 100%;"><thead><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr></thead><tbody><tr><td>Perform radiological surveying and analysis of facility drawings to reduce unexpected conditions while preparing for remote soil excavation activities.</td><td>Ongoing</td><td>N/A</td></tr></tbody></table> Mitigation Assessment: No significant changes in August. Follow-up contamination surveys were performed throughout the front side areas of the 324 Building using strontium controls (developed for Room 18) with no contamination detected. Based on the historical discovery of an elevated latent contamination level (CHPRC-1801178), this risk will be monitored continuously as routine Preventative Maintenance (PM) activities are in place to reduce the likelihood of occurrence.	Mitigation Action(s)	FC Date	%	Perform radiological surveying and analysis of facility drawings to reduce unexpected conditions while preparing for remote soil excavation activities.	Ongoing	N/A
Mitigation Action(s)	FC Date	%								
Perform radiological surveying and analysis of facility drawings to reduce unexpected conditions while preparing for remote soil excavation activities.	Ongoing	N/A								
RCC-300-296-08, 300-296 Failure of Cell Shield Door	Failure of shield door(s) or crane shield door(s) shuts down cleanout of REC cells/airlock, penetration sealing in the airlock and equipment installation and other activities for remote soil removal. It may not be possible to repair a shield door due to radiation dose rate and location, resulting in cost and schedule delays. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$460K, 96 days	●	↔	Risk Trigger Metric: Cell shield door fails, resulting in a shutdown of cleanout activities until repairs can be completed, similar to the event that occurred in September 2019. <table border="1" style="width: 100%;"><thead><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr></thead><tbody><tr><td>Perform B Cell and D Cell door pin isolations.</td><td>2/1/21</td><td>0</td></tr></tbody></table> Mitigation Assessment: No significant changes in August. To maintain REC shield door operability, engineering evaluations were conducted, resulting in the implementation of monthly PM and the procurement of spare parts. These mitigation efforts will reduce the likelihood of cost and schedule consequences, as applicable.	Mitigation Action(s)	FC Date	%	Perform B Cell and D Cell door pin isolations.	2/1/21	0
Mitigation Action(s)	FC Date	%								
Perform B Cell and D Cell door pin isolations.	2/1/21	0								

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0041/WBS-041																
RCC-300-296-15, 300-296 Cell Sealing, Micropile Installation, Interference Removal, Core Drilling and Soil Stabilization Takes Longer Than Planned	<p>Unexpected field conditions are encountered during interference removal, sealing of cell penetrations and/or core drilling work scope. The unexpected field conditions subsequently cause in-scope unplanned work and result in schedule impacts to the project.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%) Worst Case Impacts: \$3,317.6K, 96 days</p>	●	↔	<p>Risk Trigger Metric: The project experiences unexpected field conditions outside its control, impacting cell sealing, core drilling and soil stabilization, micropile installation, and interference removal making it more difficult than planned.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Mobilize and train a second soil stabilization crew.</td> <td>12/19/19</td> <td>100</td> </tr> <tr> <td>Perform pilot-hole drilling to aid as a mitigation action for micropile installation.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Perform Bond Zone load testing.</td> <td>11/17/20</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: The forecasted completion date for performance of Bond Zone load testing was delayed in August due to the impacts of the RL-directed PSWO. Mitigation efforts have reduced the probability of risk occurrence from likely to medium. However, due to the uniqueness involved with the work scope, there is potential for unexpected delays and additional pilot-hole drilling efforts. Mobilizing and training of a second soil stabilization crew was completed on December 19, 2019.</p>	Mitigation Action(s)	FC Date	%	Mobilize and train a second soil stabilization crew.	12/19/19	100	Perform pilot-hole drilling to aid as a mitigation action for micropile installation.	Ongoing	N/A	Perform Bond Zone load testing.	11/17/20	0
Mitigation Action(s)	FC Date	%														
Mobilize and train a second soil stabilization crew.	12/19/19	100														
Perform pilot-hole drilling to aid as a mitigation action for micropile installation.	Ongoing	N/A														
Perform Bond Zone load testing.	11/17/20	0														
RCC-300-296-06, 300-296 Remote Equipment Failure During Operations	<p>Failures of the following procured equipment: the floor saw, master slave manipulators (MSMs) used in REC cells, Remote Excavator Arms (REA), through supports, cell dams, transfer mechanism and cameras and lights.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Low (10% to 25%) Worst Case Impacts: \$1,336K, 90 days</p>	●	↔	<p>Risk Trigger Metric: Failure of remote equipment will result in schedule delays due to equipment replacement and repairs because of radiation damage to other equipment installed in the REC cells. These factors may shorten the operational life of equipment and result in replacing damaged equipment or components.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Procure MSM manipulators and storage carts.</td> <td>12/30/19</td> <td>100</td> </tr> <tr> <td>Procure spare upper REA.</td> <td>11/23/20</td> <td>53</td> </tr> <tr> <td>Procure universal cutting tool.</td> <td>12/15/20</td> <td>68</td> </tr> </tbody> </table> <p>Mitigation Assessment: Procurement of a spare upper REA and universal cutting tool will mitigate potential impacts to the project in the event of an REA failure. Potential impacts continue to be monitored and assessed for mitigation as project evolutions continue. The estimate to complete is updated monthly to reflect potential impacts of risk being realized.</p>	Mitigation Action(s)	FC Date	%	Procure MSM manipulators and storage carts.	12/30/19	100	Procure spare upper REA.	11/23/20	53	Procure universal cutting tool.	12/15/20	68
Mitigation Action(s)	FC Date	%														
Procure MSM manipulators and storage carts.	12/30/19	100														
Procure spare upper REA.	11/23/20	53														
Procure universal cutting tool.	12/15/20	68														
RCC-300-296-33, Increased Rad Exposure to Workers	<p>High dose in the airlock causes excessive radiation exposure to personnel, resulting in in-scope unplanned work impacts of cost and/or schedule.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Low (10% to 25%) Worst Case Impacts: \$240K, 36 days</p>	●	↔	<p>Risk Trigger Metric: During REC entries, background and present dose could cause workers to reach allowable dose limits sooner than anticipated, resulting in cost and schedule impacts.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Continue the use of increased shielding and ALARA controls.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Procurement of specialized containers – GC/44-inch bins.</td> <td>9/22/20</td> <td>75</td> </tr> </tbody> </table> <p>Mitigation Assessment: The forecast completion date for the procurement of specialized containers (GC/44-inch bins) was delayed in August due to the impacts of the RL-directed PSWO. Mitigation efforts have reduced the probability of risk occurrence to low. Procurement of specialized waste containers, shield lids and decontamination efforts has significantly minimized dose potential; however, the uniqueness of the work scope provides the potential for unexpected delays and/or cost impacts.</p>	Mitigation Action(s)	FC Date	%	Continue the use of increased shielding and ALARA controls.	Ongoing	N/A	Procurement of specialized containers – GC/44-inch bins.	9/22/20	75			
Mitigation Action(s)	FC Date	%														
Continue the use of increased shielding and ALARA controls.	Ongoing	N/A														
Procurement of specialized containers – GC/44-inch bins.	9/22/20	75														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0041/WBS-041																
100K-SR-05, Unexpected Site Conditions	<p>Unexpected site conditions are encountered during soil excavation activities, resulting in recovery actions, causing unplanned and project in-scope work and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$760K, 32 days</p>	●	↔	<p>Risk Trigger Metric: During soil excavation activities, different site conditions including underground utilities (i.e., wiring, fiber cable, pipes, asbestos, etc.), unknown construction material and greater-than-expected quantities of contamination could be encountered, resulting in increased volume of remediated soil. In addition, the overburden soil planned for backfill contains contaminants, resulting in the need to create a new clean-fill pit.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Data collection (includes review of the Waste Information Data System information, review of historical drawings, identify contaminants of concern, civil survey, etc.).</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Ground penetrating radar.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Develop/issue an approved excavation permit before remediation begins.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant change in August. The mitigation actions identified above are standard business practices when performing excavation activities on the Hanford Site. These steps are designed to minimize the probability of encountering unknown utilities, structures or contamination.</p>	Mitigation Action(s)	FC Date	%	Data collection (includes review of the Waste Information Data System information, review of historical drawings, identify contaminants of concern, civil survey, etc.).	Ongoing	N/A	Ground penetrating radar.	Ongoing	N/A	Develop/issue an approved excavation permit before remediation begins.	Ongoing	N/A
Mitigation Action(s)	FC Date	%														
Data collection (includes review of the Waste Information Data System information, review of historical drawings, identify contaminants of concern, civil survey, etc.).	Ongoing	N/A														
Ground penetrating radar.	Ongoing	N/A														
Develop/issue an approved excavation permit before remediation begins.	Ongoing	N/A														
Unassigned Risks (Pending ownership of identified risks/opportunities)																
No unassigned risks identified in August.																

PROJECT BASELINE PERFORMANCE Current Month (CM) (\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	9.0	7.5	8.5	(1.5)	-16.6%	(1.0)	-12.7%

Numbers rounded to the nearest \$0.1 million.

CM Schedule Performance (-\$1.5M/-16.6%)

The unfavorable schedule variance for the 324 Building Disposition Project and KBO Project is the result of the PSWO issued to CHPRC by RL on March 24, 2020. The PSWO covered non-portable work activities not associated with essential mission-critical operations that could not be performed in a safe and compliant manner consistent with the Centers for Disease Control and Prevention (CDC) COVID-19 guidelines and the “Stay Home, Stay Healthy” order issued by the governor of Washington State. Non-portable work activities consist of work that cannot be performed in a remote manner (e.g., telework from home). Most RL-0041 fieldwork is not considered essential mission-critical operations. Therefore, activities were demobilized and placed in a safe configuration. The majority of Earned Value Management is based on physical progress in the field. As a result, minimal performance was taken, causing the unfavorable schedule variance.

CM Cost Performance (-\$1.0M/-12.7%)

The unfavorable cost variance for the 324 Building Disposition Project and KBO Project are the result of the PSWO issued to CHPRC by RL on March 24, 2020. The PSWO covered non-portable work activities not associated with essential mission-critical operations that could not be performed in a safe and compliant manner consistent with CDC COVID-19 guidelines and the “Stay Home, Stay Healthy” order issued by the governor of Washington State. Non-portable work activities consist of work that cannot be

performed in a remote manner (e.g., telework from home). CHPRC and subcontractor labor assigned to the work scope that could not be performed in a remote manner were charged to work breakdown structure 041.97.01.04.01 to collect and segregate unproductive time caused by the PSWO. As a result, costs were incurred while minimal performance was taken, causing the unfavorable cost variance.

Contract-to-Date (CTD) (\$M)

WBS 041/ RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	795.9	769.7	771.6	(26.2)	-3.3%	(1.8)	-0.2%	808.2	812.4	40.9	-4.2

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$26.2/-3.3%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance (-\$1.8/-0.2%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (-\$4.2/-0.5%)

The variance at completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

RL-0041 Nuclear Facility D&D – River Corridor	FY2020		Variance
	Projected Funding	Spending Forecast	
RL-0041 Spending Forecast	148.5	143.4	5.1

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2020 projected funding reduced by \$2.4 million from last month for reallocation to MSA to support COVID-19 related impacts to usage-based services. The FY spending forecast of \$143.4 million reflects a decrease of \$1.7 million from July, which was primarily due to planned subcontracted work being delayed to FY2021 due to the impacts of COVID-19 and the RL-directed PSWO.

Critical Path Analysis

Critical path analysis can be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of project breakdown structure RL-0041, *Hanford Federal Facility Agreement and Consent Order*-enforceable milestones, nonenforceable target due dates and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/Comment
M-016-178	Initiate Deactivation of the 105KW Fuel Storage Basin	12/31/2019	12/12/2019(A)		Complete
M-093-28	Submit Change Package for Proposed Interim Milestones for 105KE/KW Reactor ISS	12/31/2019	12/19/2019(A)		Complete

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

None currently identified.

Section G

Fast Flux Test Facility Closure (RL-0042)

CH2MHILL
Plateau Remediation Company
a Jacobs company



T. E. Bratvold
Vice President for
Central Plateau Risk
Management Project

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The Fast Flux Test Facility (FFTF) is being held in a low-cost surveillance and maintenance (S&M) condition by the Central Plateau Risk Management Project. During the August reporting period, FFTF continued to maintain essential mission-critical operations in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL)-directed partial stop work order (PSWO) issued as a part of the Hanford Site response to the coronavirus.

EMS OBJECTIVES AND TARGET STATUS

None currently identified.

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	0	0	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

- Completed the quarterly pump and electric motor service inspection for pumps P-467 and P-468.
- Completed the semi-annual vibration analysis inspection for pumps P-467 and P-468.
- Completed work package review for FFTF electrical investigation.
- Completed 400 Area monthly septic system inspection.

MAJOR ISSUES

Issue

Initiated development of an engineering change request to replace the aging diesel engine fire pump P-28. However, work was stopped after determining that this replacement would require a long-term outage of the diesel backup to the fire water system.

Corrective Action

An alternative option is to replace the diesel engine fire pump P-61 in the 481-A Building. However, this work would require additional efforts to restore power to the building and install additional valves to connect the P-61 replacement to the area-wide water.

Status

Development of functional requirements for an engineering evaluation has been completed and the project has received direction to proceed from RL. A request for proposal has been issued to solicit prospective engineering firms for evaluation performance. The contract award is anticipated in early September.

RISK MANAGEMENT STATUS

None currently identified.

PROJECT BASELINE PERFORMANCE Current Month (CM) (\$M)

RL-0042 FFIF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	0.3	0.3	0.2	(0.1)	-25.2%	0.0	5.5%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance: (-\$0.1M/-25.2%)

The CM schedule variance is within reporting thresholds.

CM Cost Performance: (+\$0.0M/+5.5%)

The CM cost variance is within reporting thresholds.

Contract-to-Date (CTD) (\$M)

RL-0042 FFTF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	31.8	31.5	26.6	(0.3)	-1.0%	4.9	15.6%	32.3	27.3	0.7	5.0

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance: (-\$0.3M/-1.0%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (+\$4.9M/+15.6%)

The CTD favorable cost variance is due to reduction in S&M requirements at FFTF because the facility was deactivated. In addition, the efficient use of resources supporting deactivation activities within the project scope of work contributed to this favorable cost variance.

Variance at Completion: (+\$5.0M/+15.5%)

The VAC reflects efficient use of resources supporting deactivation activities.

Contract Performance Report Formats are provided in Appendix A.

FUNDS VS. SPEND FORECAST (\$M)

RL-0042 FFTF Closure	FY2020		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	4.8	3.2	1.5

Numbers are rounded to the nearest \$0.1 million.

Funds Analysis

Fiscal year (FY) 2020 projected funding of \$4.8 million includes support for electrical component failures and configuration challenges, interest by regulators requiring additional inspections and a recent failure of the water system/water piping. The spending forecast of \$3.2 million aligns with the RL Integrated Priority List. The \$300K reduction in the spending forecast from July reflects work delays associated with the RL-directed PSWO that has pushed work scope into FY2021.

Critical Path Analysis

Critical path analysis is not applicable to this project. The contract scope is the performance of interim S&M activities pending facility disposition.

MILESTONE STATUS

None currently identified.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

None currently identified.

Appendix A

Contract Performance

Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis

CH2MHILL
Plateau Remediation Company

a Jacobs company



August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE													FORM APPROVED OMB No. 0704-0188																													
1. CONTRACTOR													2. CONTRACT		3. PROGRAM		4. REPORT PERIOD																									
a. NAME CH2M HILL Plateau Remediation Company													a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract		a. FROM (YYYYMMDD) 2020 / 07 / 27																									
b. LOCATION (Address and ZIP Code) Richland, WA													b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020 / 08 / 23																									
c. TYPE CPAF													d. SHARE RATIO		c. EVMS ACCEPTANCE NO X YES (YYYYMMDD) 2009 / 09 / 18																											
5. CONTRACT DATA																																										
a. QUANTITY 1		b. NEGOTIATED COST 6,852,614		c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 9,412		d. TARGET PROFIT/FEE 298,170		e. TARGET PRICE 7,150,784		f. ESTIMATED PRICE 7,115,598		g. CONTRACT CEILING 7,150,784		h. ESTIMATED CONTRACT CEILING 7,115,598		i. DATE OF OTB/OTS (YYYYMMDD)																										
6. ESTIMATED COST AT COMPLETION													7. AUTHORIZED CONTRACTOR REPRESENTATIVE																													
MANAGEMENT ESTIMATE AT COMPLETION (1)													CONTRACT BUDGET BASE (2)		VARIANCE (3)		a. NAME (Last, First, Middle Initial) Underwood, Teresa		b. TITLE Prime Contract Compliance Manager																							
a. BEST CASE 6,772,925																	c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)																							
b. WORST CASE 6,846,144																																										
c. MOST LIKELY 6,817,427													6,862,026		44,598																											
8. PERFORMANCE DATA																																										
CAPN.PBS													CURRENT PERIOD			CUMULATIVE TO DATE				REPROGRAMMING ADJUSTMENTS			AT COMPLETION																			
ITEM (1)													BUDGETED COST		ACTUAL COST WORK PERFORMED		VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED		VARIANCE		COST VARIANCE (12a)		SCHEDULE VARIANCE (12b)		BUDGET (13)		BUDGETED (14)		ESTIMATED (15)		VARIANCE (16)							
													WORK SCHEDULED (2)		WORK PERFORMED (3)		SCHEDULE (5)		COST (6)		WORK SCHEDULED (7)		WORK PERFORMED (8)		COST (9)		SCHEDULE (10)		COST (11)													
RL-0011 Nuclear Mat Stab & Disp PFP													0		0		826		0		-826		1,143,564		1,129,875		1,243,176		-13,689		-113,301		0		0		1,143,564		1,253,974		-110,410	
RL-0012 SNF Stabilization & Disp													0		0		0		0		759,593		759,593		729,812		0		29,780		0		0		759,593		729,812		29,780			
RL-0013 Solid Waste Stab & Disp													16,407		14,998		13,552		-1,409		1,446		1,655,915		1,633,009		1,548,212		-22,906		84,797		0		0		1,676,039		1,596,115		79,924	
RL-0030 Soil &Water Rem-Grndwtr/Vadose													9,229		8,686		6,967		-543		1,718		1,744,361		1,720,704		1,670,231		-23,657		50,473		0		0		1,755,126		1,700,753		54,373	
RL-0040 Nuc Fac D&D - Remainder Hanfrd													10,658		7,403		8,469		-3,255		-1,066		630,054		607,537		606,974		-22,517		562		0		0		642,612		652,518		-9,906	
RL-0041 Nuc Fac D&D - RC Closure Proj													9,035		7,535		8,494		-1,499		-959		795,946		769,747		771,579		-26,198		-1,831		0		0		808,243		812,435		-4,191	
RL-0042 Nuc Fac D&D - FTF Proj													347		259		245		-88		14		31,831		31,509		26,598		-322		4,911		0		0		32,315		27,317		4,997	
b. COST OF MONEY													0		0		0		0		0		0		0		0		0		0		0		0		0		0			
c. GENERAL AND ADMINISTRATIVE													0		0		0		0		0		0		0		0		0		0		0		0		0		0			
d. UNDISTRIBUTED BUDGET																																										
e. SUBTOTAL													45,676		38,881		38,554		-6,794		328		6,761,264		6,651,974		6,596,583		-109,290		55,390		0		0		6,817,492		6,772,925		44,567	
f. MANAGEMENT RESERVE																																										
g. TOTAL													45,676		38,881		38,554		-6,794		328		6,761,264		6,651,974		6,596,583		-109,290		55,390		0		0		6,861,994					
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																																										
a. VARIANCE ADJUSTMENT																																										
b. TOTAL CONTRACT VARIANCE																																										

*CPR Format 1 displays fully burdened dollars which includes indirect G&A that is distributed to each Project.

CLASSIFICATION (When Filled In)

**CONTRACT PERFORMANCE REPORT
FORMAT 2 - ORGANIZATIONAL CATEGORIES**

DOLLARS IN Thousands of \$ FORM APPROVED OMB No. 0704-0188

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract		a. FROM (YYYYMMDD) 2020 / 07 / 27	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020 / 08 / 23	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE						REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)		
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)								
34 - Env Program & Strategic Plng	712	1,624	997	912	627	111,872	111,077	103,084	-795	7,993	0	0	0	112,820	104,307	8,512		
35 - Business Services	0	0	0	0	0	476,879	476,879	453,595	0	23,284	0	0	0	476,879	453,595	23,284		
36 - Prime Contract & Proj Integr	0	0	3,491	0	-3,491	1,111	1,111	68,013	0	-66,902	0	0	0	1,111	68,494	-67,383		
37 - Resource Mgmt & Strategic Intg	107	107	61	0	46	9,776	9,776	6,489	0	3,287	0	0	0	9,926	6,639	3,287		
38 - Project Technical Services	0	0	0	0	0	118,497	118,497	99,132	0	19,364	0	0	0	118,497	99,132	19,364		
3B - PFP Closure Project	4,659	2,549	3,193	-2,110	-644	1,070,421	1,048,281	1,164,746	-22,140	-116,465	0	0	0	1,076,214	1,204,532	-128,318		
3C - Waste & Fuels Management Project	12,491	11,004	10,869	-1,487	135	1,442,881	1,423,621	1,330,794	-19,260	92,827	0	0	0	1,457,600	1,369,604	87,996		
3D - Soil & Groundwater Remediation	8,490	7,035	5,943	-1,456	1,092	1,530,492	1,507,630	1,450,092	-22,862	57,538	0	0	0	1,540,272	1,479,354	60,918		
3G - K Basin Oper & Plateau Remediation Project	4,158	3,891	3,527	-267	364	1,041,823	1,032,268	995,261	-9,556	37,007	0	0	0	1,048,010	1,013,979	34,031		
3H - River Risk Management Project	8,738	7,584	5,345	-1,155	2,239	400,099	379,810	390,430	-20,289	-10,620	0	0	0	411,539	421,105	-9,566		
3K - Central Plateau Risk Reduction	6,320	5,087	5,129	-1,233	-42	557,413	543,025	534,946	-14,389	8,078	0	0	0	564,625	552,183	12,442		
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
d. UNDISTRIBUTED BUDGET																		
e. SUBTOTAL (Performance Measurement Baseline)	45,676	38,881	38,554	-6,794	328	6,761,264	6,651,974	6,596,583	-109,290	55,390	0	0	0	6,817,492	6,772,925	44,567		
f. MANAGEMENT RESERVE														44,502				
g. TOTAL	45,676	38,881	38,554	-6,794	328	6,761,264	6,651,974	6,596,583	-109,290	55,390	0	0	0	6,861,994				

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE													DOLLARS IN THOUSANDS			Form Approved OMB No. 0704-0188						
1. CONTRACTOR CH2M HILL Plateau Remediation Company			2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:				3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE d. YES X 9/18/2009				4. REPORT PERIOD a. FROM: 2020/07/27 b. TO: 2020/08/23											
5. CONTRACT DATA																						
a. ORIGINAL NEGOTIATED COST \$4,312,366			b. NEGOTIATED CONTRACT CHANGE \$2,540,247		c. CURRENT NEGOTIATED COST (A + B) \$6,852,614		d. ESTIMATED COST AUTH UNPRICED WORK \$9,412		e. CONTRACT BUDGET BASE (C + D) \$6,862,026		f. TOTAL ALLOCATED BUDGET \$6,861,994		g. DIFFERENCE (E - F) \$32									
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2020		k. CONT COMPLETION DATE 9/30/2020		l. EST COMPLETION DATE 9/30/2020													
6. PERFORMANCE DATA													BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)									
ITEM (1)	BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)	FY19 (16)	FY20 (17)	UNDISTRIB BUDGET (18)	TOTAL BUDGET (19)				
			+1 Sep-20 (4)	+2 Oct-20 (5)	+3 Nov-20 (6)	+4 Dec-20 (7)	+5 Jan-21 (8)	+6 Feb-21 (9)														
a. PM BASELINE (BEGIN OF PERIOD)	6,715,588	53,975	53,912	0	0	0	0	0	3,391,477	391,653	471,323	504,826	485,028	470,649	563,065	534,167	0	6,812,187				
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																						
BCR-013-20-024R0 - W-135 Project Realized Risk																767		767				
BCR-030-20-016R0 - Re-Plan KE Soil Flushing Final Design																0		0				
BCR-040-20-013R0 - MR Draw for REDOX Ventilation System Modification Changes																2,927		2,927				
BCR-040-20-014R0 - Trailers and Miscellaneous Equipment Supporting CPRM Project																1,610		1,610				
BCRA-PRC-20-022R0 - HPIC Updates August FY2020																0		0				
c. PM BASELINE (END OF PERIOD)	6,761,264	45,676	56,228	0	0	0	0	0	3,391,477	391,653	471,323	504,826	485,028	470,649	563,065	538,472	0	6,817,492				
7. MANAGEMENT RESERVE																						
																		44,502				
8. TOTAL																						
																		6,861,994				

CLASSIFICATION (When Filled In)

**CONTRACT PERFORMANCE REPORT
FORMAT 4 - STAFFING**

Dollars in: FTE

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract		a. FROM (YYYYMMDD)	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		2020 / 07 / 27	
		c. TYPE CPAF		d. SHARE RATIO		b. TO (YYYYMMDD)	
				c. EVMS ACCEPTANCE NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18		2020 / 08 / 23	

5. PERFORMANCE DATA															
WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)												AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 SEP 2020 (4)	+2 OCT 2020 (5)	+3 NOV 2020 (6)	+4 DEC 2020 (7)	+5 JAN 2021 (8)	+6 FEB 2021 (9)	MAR 2021 (10)	APR 2021 (11)	MAY 2021 (12)	JUN 2021 (13)	ATCOMPLETE (14)		
300 - Office of the President	19	2,335	14	3	3	3	3	0	-	-	-	-	-	2,360	
303 - Internal Audit	4	640	4	-	-	-	-	-	-	-	-	-	-	644	
304 - General Counsel	4	588	4	-	-	-	-	-	-	-	-	-	-	592	
32 - Safety Health Security & Quality	62	9,111	63	-	-	-	-	-	-	-	-	-	-	9,174	
34 - Env Program & Strategic Plng	37	6,211	43	-	-	-	-	-	-	-	-	-	-	6,255	
35 - Business Services	49	8,648	55	-	-	-	-	-	-	-	-	-	-	8,703	
36 - Prime Contract & Proj Integr	313	8,525	36	-	-	-	-	-	-	-	-	-	-	8,561	
37 - Resource Mgmt & Strategic Intg	40	3,758	43	-	-	-	-	-	-	-	-	-	-	3,801	
38 - Project Technical Services	37	9,177	40	-	-	-	-	-	-	-	-	-	-	9,218	
3B - PFP Closure Project	159	55,261	199	264	225	226	204	159	81	44	55	42	134	56,895	
3C - Waste & Fuels Management Project	375	61,878	387	13	6	19	25	6	19	2	0	0	0	62,356	
3D - Soil & Groundwater Remediation	232	45,050	239	69	54	41	33	15	5	1	0	0	73	45,581	
3G - K Basin Oper & Plateau Remediation Project	132	36,133	203	63	50	45	59	57	27	13	7	5	27	36,688	
3H - River Risk Management Project	144	10,788	210	31	38	31	29	27	28	15	9	9	135	11,351	
3K - Central Plateau Risk Reduction	171	21,986	258	38	30	48	38	20	13	11	11	1	0	22,454	
g. TOTAL DIRECT	1,778	280,088	1,799	479	406	412	393	283	173	87	83	58	370	284,630	

FORMAT 5, DD FORM 2734/5, EXPLANATION AND PROBLEM ANALYSIS

Contractually Required Cost, Schedule, EAC variance, Management Reserve Use

Variance in Performance BAC and EAC: The VAC between the BAC and EAC this month is a +\$44.6 million, +0.7% and is within reporting thresholds.

Format 1 and 3 Contract Data:

Contract Price Adjustments

CPS - In Process		
	Total Authorized Unpriced Work	\$9,412
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
	Grand Total Adjustments	9,412

Use of Undistributed Budget (UB), Management Reserve (MR), and Fee Activity:

Undistributed Budget Activity

BCR Number	Title	PBS	Fiscal Year	UB
N/A	N/A	N/A	2020	N/A

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
BCR-013-20-024R0	<i>W-135 Project Realized Risk</i>	13	2020	\$(767.3)
BCR-040-20-013R0	<i>MR Draw for REDOX Ventilation System Modification Changes</i>	40	2020	\$(2,926.9)

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2020	N/A

Best/Worst/Most Likely Estimate: The Best EAC is the EAC reported this month, which assumes all efficiencies gained contract-to-date will remain at completion with no use of management reserve. The most likely EAC is the EAC reported this month plus the to-go (available) management reserve, which assumes all efficiencies gained contract-to-date will remain at completion but all available management reserve is used (e.g., all identified risks realized). The worst EAC is the ACWP plus the ETC or BCWR if greater plus the to-go (available) management reserve, which assumes all efficiencies gained contract-to-date will be eroded at completion and all available management reserve is used (e.g., all identified risks realized), plus the scope identified in the Trend Log that is not in the EAC. The Best/Worst and Most Likely EAC values are documented in the Format 1 Report.

Prepared by:
Project Control Staff

Date:
9/18/2020

Approved by:

Date:

Appendix B

Project Services and Support (WBS 000)

CH2MHILL
Plateau Remediation Company



M. T. Hughey
Vice President for
Safety, Health, Security
and Quality

M. A. Wright
Vice President for
Project Technical
Services

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

M. N. Jaraysi
Vice President for
Environmental Program
and Strategic Planning

D. J. Henderson
Director of
Communications

K. K. Dickerson
Vice President for
Prime Contract and
Project Integration

M. W. Wells
Vice President for
Business Services
Chief Financial Officer

D. A. Gray
Vice President for
Resource Management
and Strategic Integration

This section is reported quarterly.

Appendix C

Capital Asset Project

CH2MHILL
Plateau Remediation Company

a Jacobs company



J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

Appendix C.2

Capital Asset Project

RL-0011.C2 - Demolition of PFP Facilities



J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In August, the Plutonium Finishing Plant (PFP) Closure Project team continued essential mission-critical operations in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL) partial stop work order (PSWO) issued as a part of the Hanford Site response to the novel coronavirus (COVID-19). Essential mission-critical operations consisted of a survey of PFP radiological boundaries and performing equipment maintenance. Seven previously loaded radioactive waste containers filled with final-phase demolition debris were shipped to the Environmental Restoration Disposal Facility (ERDF) for permanent disposal, including six Contaminated Equipment – Special Package Authorization shipments of containers of Plutonium Reclamation Facility (PRF) debris.

<i>Key Metrics</i>	<i>Current Month Plan</i>	<i>Current Month Actuals</i>	<i>Cumulative Plan</i>	<i>Cumulative Actuals</i>
COMPLETE Cold and Dark/Demo Ready activities for 234-5Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 236-Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 242-Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 291-Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for the PFP Ancillary Facilities	-	-	15	15
COMPLETE Demolition of 234-5Z	-	-	1	1
COMPLETE Demolition of 236-Z	-	-	1	-
COMPLETE Demolition of 242-Z	-	-	1	1
COMPLETE Demolition of 291-Z	-	-	1	1
COMPLETE Demolition of PFP Ancillary Facilities	-	-	15	15
Turnover Facility to Long-Term Surveillance & Maintenance	-	-	1	-

KEY ACCOMPLISHMENTS

RL-0011.C2 Accomplishments:

- Due to COVID-19, a national emergency was declared on March 13, 2020, and on March 24, 2020, RL issued a PSWO as a part of the Hanford Site response to COVID-19. The PFP Complex was transitioned to essential mission-critical operations and has maintained that configuration. Essential mission-critical operations consists of completion of required surveillance and maintenance (S&M) activities to protect government property and maintain safety and environmental compliance. These efforts included surveying PFP radiological boundaries and performing equipment maintenance.
- Seven containers of final-phase demolition debris were shipped to ERDF for permanent disposal, including six containers of PRF rubble debris.
- Crews continued work on the disposition of legacy waste.

MAJOR ISSUES

None to report

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

- Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.
- Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.
- Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

- ↑ Increased Confidence
- ↔ No Change
- ↓ Decreased Confidence

	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
RL-0011/C.2																			
Explanation of major changes to the project monthly stoplight chart: No major changes to the stoplight chart in August.																			
Realized Risks (Risks that are currently impacting project cost/schedule)																			
PFP-P5-007: Delay of PRF Debris Load Out	The loadout of PRF debris is delayed. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$0, 32 days	●	↔	Risk Event: The project has not executed debris loadout at the productivity rate that was planned. The project has experienced accumulation of water during PRF rubble loadout and more soil per loadout entry than expected. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 70%;">Risk Recovery Action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>Communicate PRF loadout options with RL.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Encourage additional worker involvement.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Recovery Action Assessment: No major changes in August. Crews are loading out more soil associated with debris collection than expected. Additional loadout may be needed that will push project completion. A change recommended by craft personnel in the demolition approach has shown early signs of improved performance.	Risk Recovery Action(s)	FC Date	%	Communicate PRF loadout options with RL.	Ongoing	N/A	Encourage additional worker involvement.	Ongoing	N/A						
Risk Recovery Action(s)	FC Date	%																	
Communicate PRF loadout options with RL.	Ongoing	N/A																	
Encourage additional worker involvement.	Ongoing	N/A																	
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																			
No critical risks identified in August.																			
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																			
No high threat risks identified in August.																			
FY2020 Key Risks																			
PFP-P4-002: Weather Impacts During 236-Z Demolition	Inclement weather, including moderate winds, low or high temperatures, and above average snowfall or thunderstorms will result in in-scope unplanned work and schedule impacts to the project. Risk Handling Strategy: Control Probability: Low (10% to 25%) Worst Case Impacts: \$0, 20 days	●	↔	Risk Trigger: High winds and cold weather may impact the project in the winter and spring seasons. Average winds above 15 mph shut down demolition activities, and average winds above 30 mph require additional surveys. Cold weather prevents the foggers from operating and, therefore, shuts down fieldwork activities. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 70%;">Mitigation Action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in August. No weather events impacted the project in August.	Mitigation Action(s)	FC Date	%	None identified at this time.	N/A	N/A									
Mitigation Action(s)	FC Date	%																	
None identified at this time.	N/A	N/A																	
PFP-P-004: Stop Work From Concerned Workers	Concerned workers can implement a stop work to address off-normal or safety issues. The work cannot be restarted until the implementation of corrective actions is completed, resulting in schedule impacts to the project. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$0, 16 days	●	↔	Risk Trigger: During PFP demolition activities, an increase in stop works could result in delays. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 70%;">Mitigation Action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>Update communications as positions change.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Provide new maps with entry/exit instructions when boundaries are revised.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Encourage additional worker involvement.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Increase frequency of post-job reviews.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in August. Increased communication and worker involvement to avoid confusion and concern to minimize stop works have continued; stop works may impact the project schedule going forward.	Mitigation Action(s)	FC Date	%	Update communications as positions change.	Ongoing	N/A	Provide new maps with entry/exit instructions when boundaries are revised.	Ongoing	N/A	Encourage additional worker involvement.	Ongoing	N/A	Increase frequency of post-job reviews.	Ongoing	N/A
Mitigation Action(s)	FC Date	%																	
Update communications as positions change.	Ongoing	N/A																	
Provide new maps with entry/exit instructions when boundaries are revised.	Ongoing	N/A																	
Encourage additional worker involvement.	Ongoing	N/A																	
Increase frequency of post-job reviews.	Ongoing	N/A																	
Unassigned Risks (Pending ownership of identified threats/opportunities)																			
No unassigned risks identified in August.																			

CRITICAL PATH ANALYSIS

The PFP critical path schedule begins with the completion of PRF loadout, which is forecast to occur by December 8, 2020, meeting the requirements for the *Hanford Federal Facility Agreement and Consent Order* Milestone M-083-00A, “Plutonium Finishing Plant (PFP) Facility Transition and Selected Disposition Activities.” Demolition completion will be followed by site stabilization and demobilization, turnover to S&M and project closeout activities, completing by March 10, 2021.

SCHEDULE MARGIN/MANAGEMENT RESERVE

Reference Appendix C.2 Formats 1, 2, 3 and 5 for specific schedule margin/management reserve utilization for this Capital Asset Project.

CRITICAL DECISION MILESTONE STATUS

Number	Title	Due Date*	Forecast Date†	Status/ Comment
RL-011.C2	Completion of demolition of all PFP facilities.	7/31/2020	5/18/2021	Work resumption is expected in October due to a phased resumption approach and to conserve personal protective equipment in response to COVID-19 impacts.

*Due date reflects Critical Decision-4 (CD-4) due date with RL contingency.

†Forecast date reflects CD-4 completion date (does not include RL schedule contingency).

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None to report at this time.

Appendix C.2

RL-0011.C2 - Demolition of PFP Facilities

Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis

CH2MHILL
Plateau Remediation Company

a Jacobs company



J. L. Casper
Vice President for
Plutonium Finishing Plant
Closure Project

August 2020
CHPRC-2020-08, Rev. 0
Contract DE-AC07-08RL14788
Deliverable C.3.1.3.1 - 1

**CONTRACT PERFORMANCE REPORT
FORMAT 2 - ORGANIZATIONAL CATEGORIES**

DOLLARS IN Thousands of \$ **FORM APPROVED**
OMB No. 0704-0188

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME RL_0011_C2 PFP Demolition Capital Asset Project		a. FROM (YYYYMMDD) 2020 / 07 / 27	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020 / 08 / 23	
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18	

WBS.Resp Org Group	CURRENT PERIOD											CUMULATIVE TO DATE			REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		ADJUSTMENTS			BUDGETED	ESTIMATED	VARIANCE				
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	(14)	(15)	(16)				
3B - PFP Closure Project	0	0	438	0	-438	138,704	125,431	171,518	-13,274	-46,087	0	0	0	138,704	179,912	-41,208				
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
d. UNDISTRIBUTED BUDGET														0	0	0				
e. SUBTOTAL (Performance Measurement Baseline)	0	0	438	0	-438	138,704	125,431	171,518	-13,274	-46,087	0	0	0	138,704	179,912	-41,208				
f. MANAGEMENT RESERVE														573						
g. TOTAL	0	0	438	0	-438	138,704	125,431	171,518	-13,274	-46,087	0	0	0	139,278						

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT														Form Approved						
FORMAT 3 - BASELINE														OMB No. 0704-0188						
DOLLARS IN THOUSANDS																				
1. CONTRACTOR CH2M HILL Plateau Remediation Company			2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:				3. PROGRAM RL_0011_C2 PFP Demolition Capital Asset Project			a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009				4. REPORT PERIOD a. FROM: 2020/07/27 b. TO: 2020/08/23						
5. CONTRACT DATA																				
a. ORIGINAL NEGOTIATED COST 51,683			b. NEGOTIATED CONTRACT CHANGE \$79,792		c. CURRENT NEGOTIATED COST (A + B) \$131,476		d. ESTIMATED COST AUTH UNPRICED WORK \$7,802		e. CONTRACT BUDGET BASE (C + D) \$139,278		f. TOTAL ALLOCATED BUDGET \$139,278		g. DIFFERENCE (E - F) \$0							
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2020		k. CONT COMPLETION DATE 9/30/2020			l. EST COMPLETION DATE 9/30/2020										
6. PERFORMANCE DATA																				
ITEM (1)	BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)										UNDISTRIB BUDGET (18)	TOTAL BUDGET (19)
			+1 Sep-20 (4)	+2 Oct-20 (5)	+3 Nov-20 (6)	+4 Dec-20 (7)	+5 Jan-21 (8)	+6 Feb-21 (9)	FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)	FY19 (16)	FY20 (17)				
a. PM BASELINE (BEGIN OF PERIOD)	138,704	0	0	0	0	0	0	0	0	0	6,090	29,182	19,407	628	66,598	16,800	0	138,704		
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																				
None at this time																				
c. PM BASELINE (END OF PERIOD)	138,704	0	0	0	0	0	0	0	0	0	6,090	29,182	19,407	628	66,598	16,800	0	138,704		
7. MANAGEMENT RESERVE																				
																		573		
8. TOTAL																				
																		139,278		

**CONTRACT PERFORMANCE REPORT
FORMAT 4 - STAFFING**

Dollars in: FTE

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME RL_0011_C2 PFP Demolition Capital Asset Project		a. FROM (YYYYMMDD) 2020 / 07 / 27	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020 / 08 / 23	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

5. PERFORMANCE DATA															
WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)								ENTER SPECIFIED PERIODS				AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)												
			+1 SEP 2020 (4)	+2 OCT 2020 (5)	+3 NOV 2020 (6)	+4 DEC 2020 (7)	+5 JAN 2021 (8)	+6 FEB 2021 (9)	MAR 2021 (10)	APR 2021 (11)	MAY 2021 (12)	JUN 2021 (13)	TCOMPLETE (14)		
3B - PFP Closure Project	1	4,991	4	87	86	66	42	23	-	-	-	-	-	-	5,298
g. TOTAL DIRECT	1	4,991	4	87	86	66	42	23	-	-	-	-	-	-	5,298

CLASSIFICATION (When Filled In)										
CONTRACT PERFORMANCE REPORT										
FORMAT 5 - Explanations and Problem Analysis										
FORM APPROVED										
OMB No. 0704-0188										
4. REPORT PERIOD										
1. CONTRACTOR		2. CONTRACT			3. PROGRAM			4. REPORT PERIOD		
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract			a. NAME RL_0011_C2 PFP Demolition Capital Asset Project			a. FROM (YYYYMMDD) 2020/07/27		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788			b. PHASE			b. TO (YYYYMMDD) 2020/08/23		
c. TYPE CPAF		d. SHARE RATIO			c. EVMS ACCEPTANCE No X Yes (YYYYMMDD) 2009 / 09 / 18					
Direct Projects										
5. Evaluation		Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI
Current:		0.0	0.0	438.3	0.0	0	-438.3	0	0	0.00
Cumulative:		138,704.4	125,430.5	171,517.9	-13,273.8	-9.6%	-46,087.4	-36.7%	0.90	0.73
		BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:		138,704.4	179,912.1	-41,207.7	-29.7%	0	1.58			
Explanation of Variance/Description of Problem:										
Current Month: Schedule Variance: The current month schedule variance is within thresholds.										
Cost Variance: The current month negative cost variances were the result of the Partial Stop Work Order (PSWO) issued to CHPRC by RL on March 24, 2020. The PSWO covered non-portable work activities not associated with continuation of essential mission-critical operations that could not be performed in a safe and compliant manner consistent with The Centers for Disease Control and Prevention COVID-19 guidelines and the "Stay Home, Stay Healthy" order issued by the Governor of Washington State. PFP scope has been further delayed due to limited personal protective equipment availability, pushing restart of Plutonium Reclamation Facility load out into FY2021. Continuing activities causing the negative cost variance are surveys of PFP radiological boundaries, performing equipment maintenance and shipments of previously loaded radioactive waste										
Cumulative to Date: Schedule Variance: The cumulative to date schedule variance is within thresholds.										
Cost Variance: The cumulative negative cost variance is associated with MSA resources arriving to support PFP demolition that were planned as P/Q shift support. Additionally, Readiness Assessment activities lagged due to a delay in the start of 236-Z Demolition and increased requirements to show readiness resulting in increased costs due to additional time and effort required from subcontracted and direct labor resources. The apportioned project management activities (i.e. project oversight and planning) and support activities are ongoing, while a delay in the discrete field work is resulting in minimal apportioned BCWP. Demolition mobilization activities took longer than originally assumed because of recommendations made during the readiness assessment and purchasing unplanned PBS fixative to support 236-Z demolition. In addition, significant winter weather impacts (i.e., snow, wind, freezing rain, etc.) have been recognized on the Hanford Site. Site closures, freezing temperatures and significant snowfall that required clearing of the demolition zone rather than performing physical demolition on the facilities while a constant staff provides demolition support services is a contributing factor. Unplanned Management Assessment efforts for the 234-5Z and 291-Z facilities took longer than originally assumed. Impacts associated with the Stop Work that was initiated by the HAMTC union leadership on November 11, 2017 "associated with concerns over events both inside and outside of the facility." The main issue involved employee proximity to radiological boundary areas during demolition. Radiological boundaries were reconfigured and impacted employees were relocated. As the project gets further into the demolition phase of the PRF Canyon, increased utilization of Personnel Protective Equipment to align with the original plan as well as increased material procurements to align with the scope being performed (i.e., P-100 filters, Labounty Shear, additional fixative, etc.) are also contributing to this variance. An adjustment to the General & Administrative (G&A) Rate for FY2017 resulted in a reduction to the Performance Measurement Baseline (PMB) of \$463K. Finally, impacts from a contamination event that occurred on Friday, December 15, 2017, swing shift where RadCon personnel performing routine surveys following the day shift demolition activities discovered low level contamination on a cookie sheet. This led to a wider search, and a "speck" of contamination was smeared from a government vehicle. A CHPRC management stop work on demolition activities was declared and a critique held to discuss the contamination spread, possible causes, and path forward. A root cause analysis was conducted and resumption actions identified.										
This is partially offset by recognized efficiencies associated with the removal of the 18 sections of the PRF gallery gloveboxes, progress on demolition of 236-Z, demolition of the 2727-Z and 2729-Z facilities, the 242-ZA and 242-Z facilities, the 291-Z facility, 291-Z stack, 234-5ZA, 252-Z1, 2503-Z, 2735Z, 2734ZA, ZB, ZC, ZD, and ZL facilities.										
Impact:										
Schedule Impact: Completion of all demolition activities followed by site stabilization and demobilization, turnover to surveillance and maintenance, and project closeout activities forecast to occur in February 2021. The TPA Milestone TPA-083-00A, complete PFP facility transition and selected disposition activities of November 30, 2017, was not met.										
Cost Impact: A negative VAC is reflective of impacts associated with recovery efforts from a contamination event that occurred on December 15, 2017.										
Corrective Action:										
Demolition and load out activities are expected to resume in October 2020 when personal protective equipment is expected to be available. The current slab on grade date is December 8, 2020.										
Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):										
There was no change in the difference between the Contract Budget Base and the Total Allocated Budget on Format 3 for the month of August.										
The following items are addressed, as applicable:										
1. Schedule Margin Analysis: No drawdowns of schedule margin were made in the month of August.										
2. Data dictionary Changes: No change in the month of August.										
3. Forecast Schedule with No Baseline: No change in the month of August.										
4. UB Balance: No change in the month of August.										
5. Negative Actual Cost of Work Performed (ACWP): No change in the month of August.										
6. Earned Actual Cost (EAC) Analysis: Best Case = \$179,912; Most Likely = \$180,485; Worst Case = \$185,365. The Best Case EAC is the EAC reported this month, which assumes all efficiencies gained contract-to-date will remain at completion with no realization of remaining risks. The Most Likely EAC is the ACWP plus what management believes is the most likely outcome based on a knowledgeable estimate of all authorized work, known risks, unknown risks, and probable future conditions. The Worst Case EAC is the ACWP plus the ETC plus realization of all identified risks, plus the scope identified in the Trend Log. The Best/Worst and Most Likely EAC values are documented in the Format 1 Report.										
7. Negative CV > VAC: No change in the month of August.										
8. Management Reserve Transactions: No change in the month of August.										
9. Freeze Period Changes: No change in the month of August.										
10. Retroactive Changes: No change in the month of August.										
11. Earned Value Type Changes: No change in the month of August.										
Prepared by: Jason Knowlton		Date: 9/16/2020			Approved by:			Date:		