

Monthly Performance Report

December 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
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L. Ty Blackford
President and
Chief Executive Officer

Monthly Performance Report

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December 2020
CHPRC-2020-12, Revision 0

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EXECUTIVE SUMMARY

CH2M HILL Plateau Remediation Company (CHPRC) advanced cleanup throughout the Hanford Site during December. CHPRC implemented plans to mitigate work delays and disruption and address impacts to programmatic work caused by the coronavirus (COVID-19). In compliance with state and federal government COVID-19 guidance, and as required by the U. S. Department of Energy (DOE), Richland Operations Office (RL), CHPRC has taken and continues to take reasonable actions to protect and provide support to the workforce.

Major accomplishments included:

- **Plutonium Finishing Plant (PFP) Closure Project:**
The PFP Closure Project continued to maintain essential mission-critical operations. The project performed surveys of PFP radiological boundaries, re-applied soil fixative to the PFP demolition site and performed equipment maintenance. The PFP senior management team continued preparations and planning to support the resumption of loadout and shipments of debris.
- **Waste and Fuels Management (W&FM) Project:**
The W&FMP continued to perform essential mission-critical operations. The W-135 Management of Cesium and Strontium Capsules (MSCS) Project continued construction of the raw water pipeline in support of fire protection requirements at the Capsule Storage Area. Transmitted the Waste and Encapsulation Storage Facility (WESF) Modifications Line Item construction contract consent package to RL for approval. At WESF, the crew completed wall and floor scans in the WESF Canyon to support the completed installation of the WESF sink enclosure. At the Canister Storage Building, the crew performed videoscope monitoring of four multi-canister overpacks. At T Plant, the Sludge Transport and Storage Container load cell testing and certification of calibration and replacement of 291T Pre-filters Banks 1, 2, 3 and 4 was completed.
- **Soil and Groundwater Remediation Project (S&GRP):** The S&GRP team continued progress and is ahead of schedule in the treatment goal of 2.2 billion gallons for fiscal year (FY) 2021. The new ion exchange (IX) train was received, supporting the optimization of the 200 West Pump and Treat facility. Routine groundwater sampling and analysis, delayed by the COVID-19 partial stop work order (PSWO) in FY2020, was completed in December. Drilling crews continued supporting recovery of well drilling previously delayed by the PSWO, with seven drill rigs in the field. The four wells completed in December concluded the FY2020 drilling campaign at the 100-HR-3 Operable Unit. The 100K West Treatability Test Report was published in December, demonstrating S&GRP's successful use of soil flushing remedial technology to remove continuing sources of contaminants from the soil and accelerate the cleanup of the 100-KR-4 aquifer. The approved 100-D/H Remedial Design/Remedial Action Work Plan was transmitted to RL in December, allowing progress toward the remedy in the final Record of Decision on the river corridor.
- **K Basins Operations (KBO):** In December, the KBO team began the Operational Acceptance Testing for the Garnet Filter Media Retrieval System (GFMRS). The second test for Vertical Pipe Casing (VPC) grouting mockup commenced. A Notice to Proceed was issued to the VPC contractor to support installation of the VPC components. The 105K West Facility teams completed a replacement of the basin water



Workers added a pipeline between two leachate collection tanks to manage runoff and dust-suppression water that will be collected from the Integrated Disposal Facility, where immobilized low-activity waste containers will be safely and permanently disposed.

treatment system IXM-4 IX module, and completed the disassembly of the Integrated Water Treatment System strainer in the west bay. The team completed the electrical engineering documentation for the support trailer for the 105K East Interim Safe Storage. Completed demolition of the 166K East structure; loadout of the resulting debris will continue during second quarter FY2021. Demolition is underway with heavy equipment staging at 165K East, while the remaining repackaged mercury-tainted equipment continues to be removed.

- **River Risk Management Project:** The project continued the essential mission-critical operations. The construction forces core teams for the general contamination area/high contamination area/airborne radiation areas (ARAs) have completed eighteen of the 20 corrective actions for the 324 Facility Contamination Event Phase 1. Integrated Disposal Facility (IDF) personnel continue to ramp up procedures and processes necessary to support active disposal operations. Construction of IDF infrastructure upgrades continued with installation of electrical and communication systems, continued leachate system modifications, completed the placement of the final working surfaces in the waste receiving and handling area, and completed erection of the inspection buildings. The IDF permitting team continued working on responses to the Washington State Department of Ecology (Ecology) final deficiency report from a *Resource Conservation and Recovery Act of 1976* (RCRA) Permit modification request to bring the IDF into active status disposal operations. The permitting team also continued efforts to produce another major permit modification request, at Ecology's request, to bring the leachate collection tanks into the permit.
- **Central Plateau Risk Management (CPRM) Project:** The Aging Structures team filled approximately 75 percent of the 216-Z-9 Crib and finalized the return approach to complete stabilization of the 241-Z-361 Tank. At the Reduction-Oxidation (REDOX) Facility, crews completed installation of temporary electrical power in the north and south pipe and operation galleries, blower rooms 3 and 5, and in the west administration area. Crews at the 224B Facility initiated construction of the containment structures in order to make personnel entries into the hot cells. The Plutonium Uranium Extraction Plant North team entered 203A for the first time in 20 years in order to support electrical clearance investigations, as well as completed verifications of hazardous energy isolations for the 2701AB, 2714A and 214A Buildings. In addition, the crew completed tank inspections, ultrasonic testing of pipes, radiological surveys above eight feet, and sampling within the 211A Building to support characterization efforts. Finally, at U Plant, crews navigated elevated and very difficult to access locations to abate 50 feet of asbestos containing pipe insulation.
- **West Area Remediation Project (WARP):** The WARP team completed the hazardous waste removal, demolition and debris loadout of four former mobile office trailers (MO2121, MO2122, MO2123 and MO031) in the South Trailer Village. Crews also completed the disposition of legacy diesel fuel at 234-5Z-BA and the electrical isolations to 216-ZP-1.

The President's Zero Accident Council (PZAC) meeting for December was hosted by Business Services and Resource Management & Strategic Integration via Virtual Meeting. The three main ideas were:

- Mental health during the holidays
- Winter recreation safety
- Don't give up - Transition

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

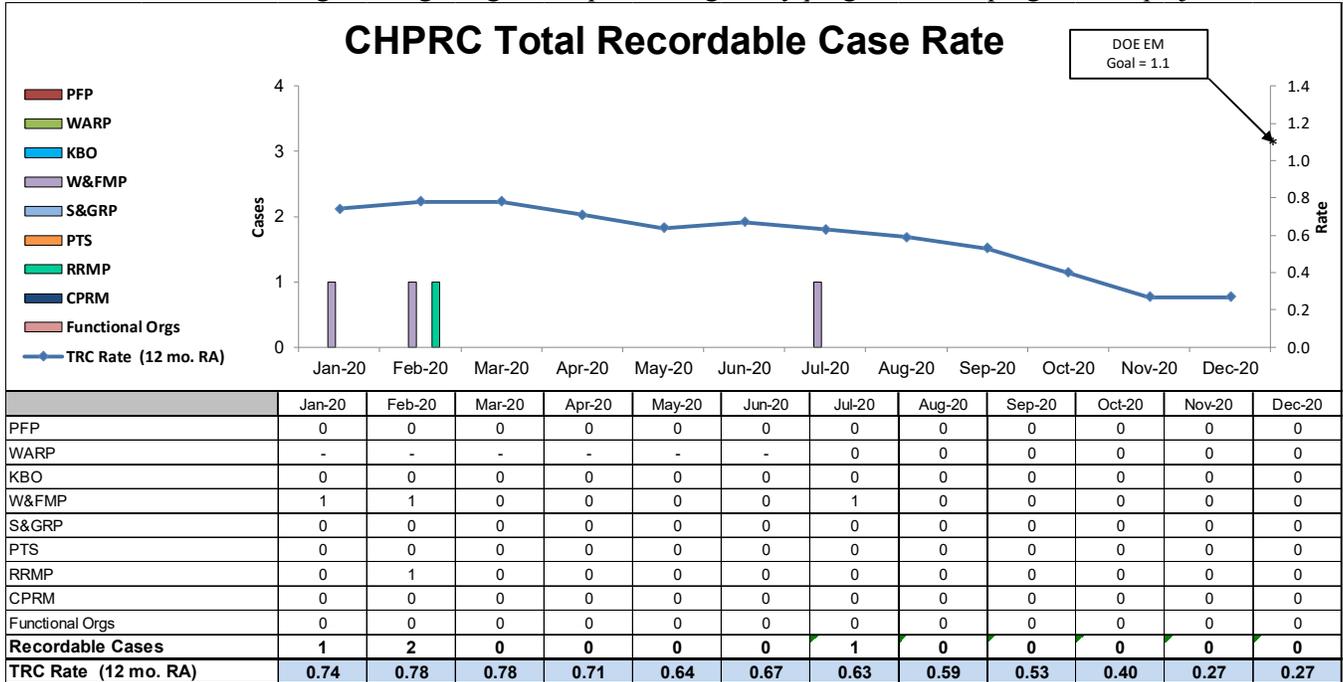
- Frigid temperatures
- Safe winter driving
- GREEN ice melt
- Avoid overexertion

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

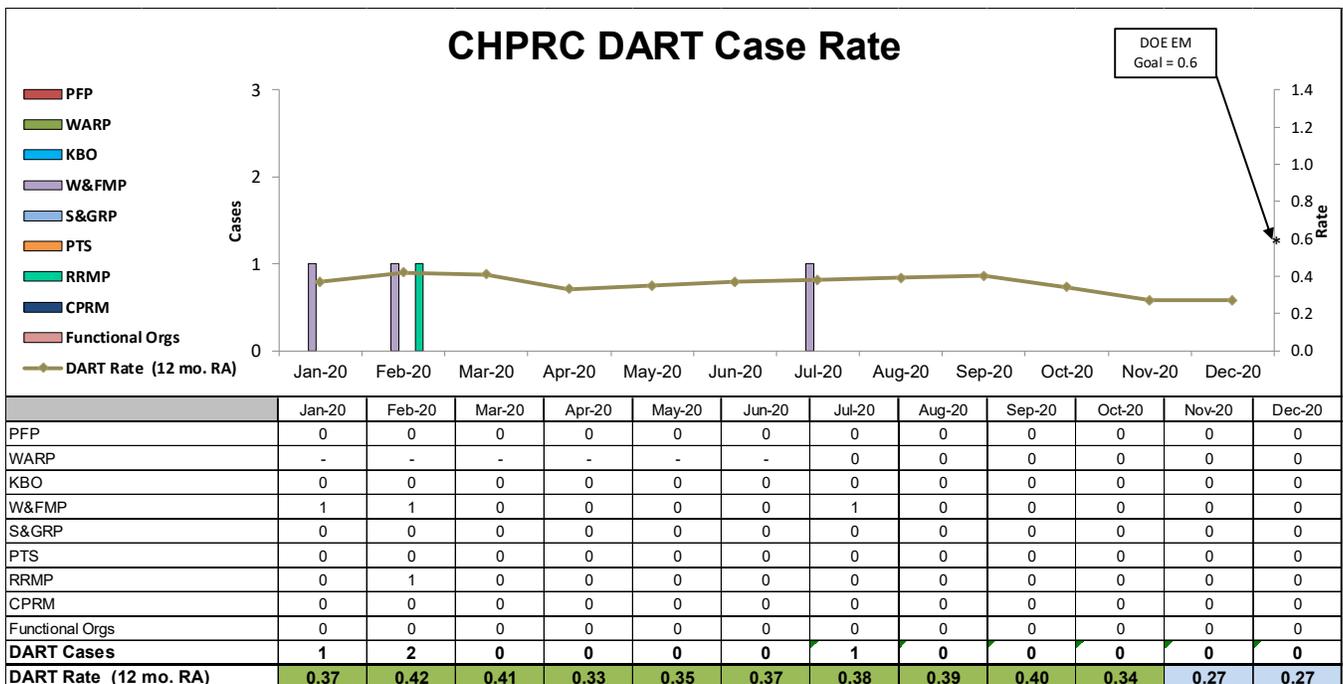
- Four Lessons Learned:
 - OPEXShare: 37064-11-24-2020 New DOE OPEXShare launches December 7
 - OPEXShare: LL-2020-LLNL-13 Quiet Cars and Pedestrian Safety
 - OPEXShare: 37110_12-16-2020 Holiday Safety
 - OPEXShare: 2020-BNL-I-1509 Operating electrical equipment without proper PPE and required training
- Injuries
- Weekly ethics moments
- Vehicle events
- Hard hats in cold weather
- Year-end dosimeter exchange
- Travel safety reminders
- Winter driving mistakes
- Training and work delays
- Wintering bald eagles
- Welcome back! Safety re-focus
- Safe use of ice melt
- Winter poster #3 Avoid Overexertion in the Cold
- Exertion in cold weather

TARGET ZERO PERFORMANCE

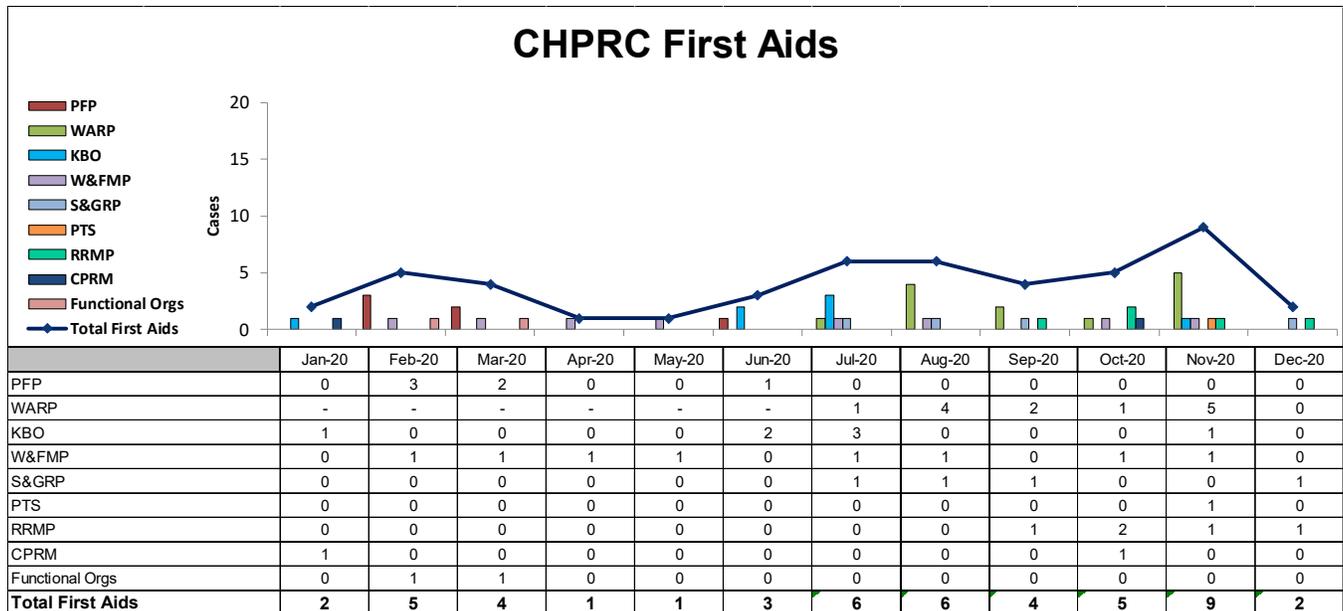
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.27 is based on four Recordable injuries. December had no reported OSHA Recordable cases.



Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.27 is based on four Days Away cases. December had no reported DART cases.



First Aid Case Summary: CHPRC reported two first aid cases in December. The contributors were one strain/sprain/pain and one abrasion/bruise/contusion 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 May 22, 2020, the RL contracting officer approved CHPRC’s request for submission of the request for equitable adjustment 90 days after the end of the PSWO. On July 22, 2020, CHPRC received Contract Modification 747, extending the PSWO through September 30, 2020, unless the contracting officer directs an earlier date. On August 27, 2020, RL authorized CHPRC to implement Phase 2 of the remobilization plan starting August 31, 2020. On September 24, 2020, RL issued letter 20-PRO-0297, informing CHPRC that the PSWO would expire on September 30, 2020. The PSWO noted that CHPRC would have 30 days following termination of the PSWO

to assert its rights for an equitable adjustment. On October 26, 2020, CHPRC submitted CHPRC-2003535R1 that discusses assertion of rights to equitable adjustment due to the PSWO, as required per the PSWO to be submitted within 30 days after the PSWO expiration. On October 28, 2020, CHPRC submitted CHPRC-2004023 that discusses potential excusable delays in FY2021 due to COVID-19. 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

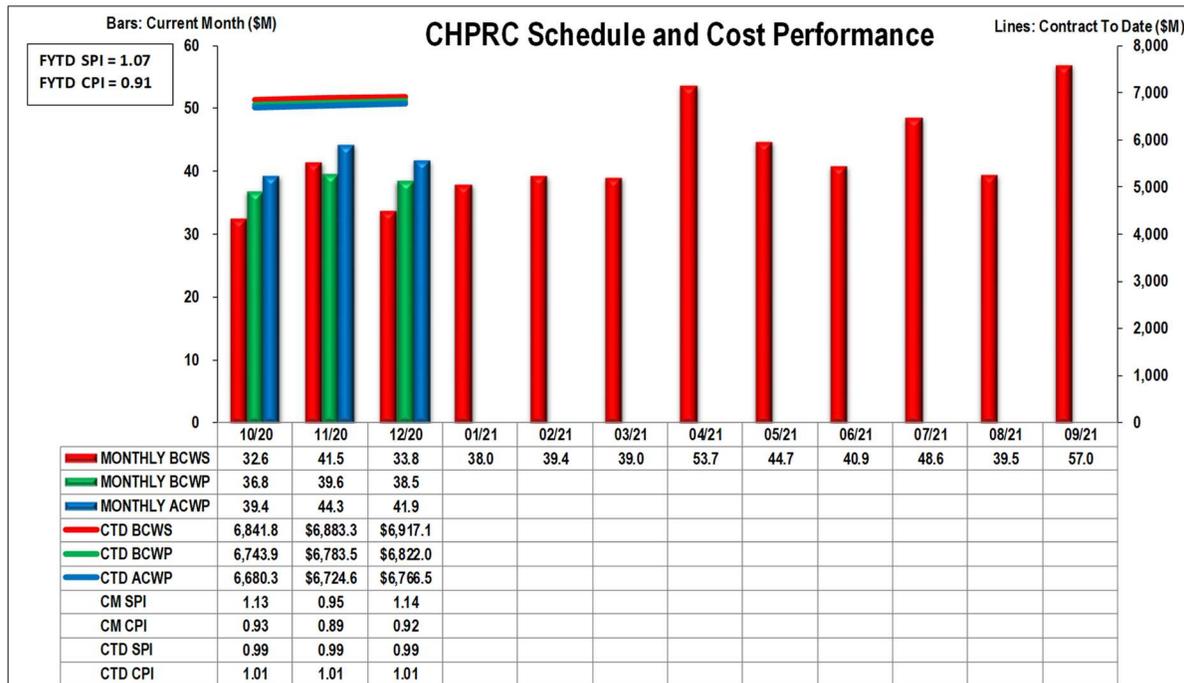
Following receipt of RL’s PSWO direction, a PSWO implementation and restart plan was developed. To support workforce stability as directed by RL, CHPRC employees were provided attendance code “COV” to be used for charging hours not worked but in a paid status for time not spent on portable work or for those where performance of meaningful productive work is not practical. CHPRC provided similar guidance to the subcontractors in order to ramp up and execute to full performance. This guidance also notified CHPRC 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 to cost effectively address unanticipated impacts to programmatic work. CHPRC remains in constant contact with RL to ensure related information requests and deliverables meet RL needs, and CHPRC stays abreast of potential changes so the information requests and deliverables can be anticipated and addressed in a timely manner should they occur. 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. CHPRC continues to communicate to RL the cost and schedule impacts of the COVID-19 pandemic and prepared two requests for equitable adjustments for submission to RL.

During September, CHPRC worked with RL on adjustments to the staffing remobilization plan, implemented Phase 2 and achieved the goal of returning all workers performing non-portable tasks back to work. During December, CHPRC received Contract Modification 764 extending the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) to December 18, 2020, and it is expected that Congress will allow this to be extended to March 31, 2021. These extensions allow workers performing non-portable tasks to be paid without the need to take time out of their personal time bank (PTB), if directed by a medical professional to isolate and under the following conditions: remain healthy and “ready to work,” or remain asymptomatic with a positive COVID-19 result and had potential COVID-19 exposure or pending COVID-19 testing results. Not being required to take PTB is expected to encourage workers to stay home, reducing the potential of passing COVID-19 to others at the workplace. RL approved Revision 3D of the resumption plan on November 4, 2020. This moved Plutonium Reclamation Facility rubble removal and shipment to the Environmental Restoration Disposal Facility as well as GFMRS removal and shipment to T Plant into Phase 2. High-risk field activities that require significant personal protective equipment (PPE) have not resumed due to local COVID-19 impacts and PPE limitations. Portable work continues to be performed via teleworking. In compliance with state and federal government COVID-19 guidance and RL direction, 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 to Date			Contract Period					
	Budgeted Cost	Actual Cost	Variance	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	3.0	0.8	0.6	(2.2)	0.2	1,145.2	1,133.1	1,244.3	(12.1)	(111.2)	1,152.8	1,264.7	(112.0)		
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	11.3	11.8	12.6	0.5	(0.9)	1,713.4	1,693.4	1,606.4	(20.0)	87.0	1,860.3	1,773.4	86.9		
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	6.9	10.4	7.6	3.5	2.8	1,775.8	1,761.1	1,701.4	(14.7)	59.7	1,861.9	1,802.7	59.1		
RL-0040 - Nuc Fac D&D - Remainder	5.0	5.9	11.4	0.9	(5.4)	659.4	637.3	648.6	(22.1)	(11.2)	728.3	741.5	(13.2)		
RL-0041 - Nuc Fac D&D - RC Closure Project	7.4	9.4	9.5	2.0	(0.1)	830.9	804.9	808.5	(26.0)	(3.6)	919.8	931.6	(11.8)		
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.2	0.2	(0.0)	(0.0)	32.8	32.6	27.5	(0.2)	5.1	35.5	30.2	5.3		
(Values are rounded to the nearest \$0.1M)	Total	33.8	38.5	41.9	4.7	(3.4)	6,917.1	6,822.0	6,766.5	(95.1)	55.5	7,318.1	7,274.1	44.0	

Performance Summary

CHPRC continues to track completion of the contract within budget. Currently, a variance at completion of \$44.0 million is projected, with an additional \$42.8 million of management reserve (MR), for a total positive variance of \$86.8 million. For December, the project was 14.0 percent ahead of schedule and 8.8 percent over planned cost. Contract to date, the project was 1.4 percent behind schedule and 0.8 percent under planned cost.

The current month (CM) positive schedule variance is primarily the result of schedule recovery at S&GRP for the delivery and placement of the IX train and recovery in sampling that was a result from a reduction in requirements. Additionally, there was significant schedule recovery for the resumption training for general contaminated areas in preparation for readiness in the 300 Area. These schedule variances were partially offset by demolition delay at PFP. Due to the worldwide response to COVID-19 the reliability of PPE supply is uncertain, high-risk activities requiring significant use of PPE like PFP have not resumed as planned.

The CM negative cost variance is primarily due to higher-than-planned costs for the stabilization of the 216-Z-2 Crib and the 241-Z-361 Tank that was a result from unexpected field conditions including an obstruction in the void space to be grouted. At CPRM, REDOX experienced negative cost variance on corrective actions during the Phase 2 addressing of work conditions due to more conservative work controls. B Plant was impacted by the unplanned procurement of a portable criticality monitor and impacts of COVID-19 on labor resources. These variances were partially offset by the S&GRP positive cost variances for the procurement of the IX train and reduced sampling costs due to reduced requirements.

FUNDING ANALYSIS

FY2021 Funds vs. Fiscal Year Spend Forecast (\$M)

PBS	Project	FY2021		Variance
		Projected Funding	Spending Forecast	
RL-0011	Nuclear Materials Stabilization and Disposition	24.9	22.2	2.7
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	0.0	0.0	0.0
RL-0013	Waste and Fuels Management Project	206.1	205.2	0.9
RL-0013	Management of Cesium and Strontium Capsules	13.1	13.1	0.0
RL-0030	Soil, Groundwater and Vadose Zone Remediation	127.9	124.8	3.1
RL-0040	Nuclear Facility D&D, Remainder of Hanford	114.1	114.1	0.0
RL-0041	Nuclear Facility D&D, River Corridor	146.1	143.4	2.7
RL-0042	Fast Flux Test Facility Closure	4.4	3.4	0.9
Total Fiscal Year Spending Forecast		636.6	626.1	10.5

Funds/Variance Analysis

FY2021 projected funding of \$636.6 million remains unchanged from last month. The spending forecast of \$626.1 million reduced only slightly from last month.

BASELINE CHANGE REQUESTS

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

Change Request#	Title	PBS	Summary of Change
BCR-013-21-002R0	<i>W-135 MCSC Project Cask Storage System Fabrication Schedule Re-Plan</i>	RL-0013	This BCR modified the PMB to implement the subcontractor re-plan of work scope for the Cask Storage System fabrication. This BCR did not change the PMB value.
BCR-030-21-003R0	<i>Incorporate Opportunistic SAP for M24 Well</i>	RL-0030	This BCR incorporated activities to prepare the sampling analysis plan for the 20 M24 wells to be drilled in FY2022. This BCR increased the PMB by \$195.6K.
BCR-030-21-004R0	<i>MR Draw for ZP1 Well Drilling Change in Conditions</i>	RL-0030	This BCR drew down MR and revised the PMB to incorporate the anticipated impacts of the realization of risk RL30 DRL-001-T, Field Issues Impact Well Drilling Performance. This BCR increased the PMB by \$221.8K.
BCR-040-21-002R0	<i>200-MG-1 Waste Sites in Support of TPA M-016-257</i>	RL-0040	This BCR modified the FY2021 PMB to incorporate activities to support confirmatory sampling/no further action for six sites in the 200-MG-1 Operable Unit in support of the <i>Hanford Federal Facility Agreement and Consent Order</i> Milestone M-016-257. This BCR increased the PMB by \$1,808.6K.
BCR-040-21-003R0	<i>MR Draw for Custom Tools for Stabilization of 216-Z-2 Crib</i>	RL-0040	This BCR drew down MR and revised the PMB to address in-scope, unplanned work in FY2021 related to unanticipated changes associated with the stabilization efforts of aging structure 216-Z-2. This BCR increased the PMB by \$258.7K.
BCR-041-21-002R0	<i>Add FY2021 100-KE Reactor ISS Scope</i>	RL-0041	This BCR incorporated scope for the development of awarding one or more contract releases for the widening and upgrade of the Pit 24 Haul Road and for excavation and fabrication/installation of the foundation for the Safe Storage Enclosure for the 100K East Reactor. This BCR increased the PMB value by \$995.0K.
BCRA-PRC-21-007R0	<i>HPIC Updates December 2020</i>	RL-0013 RL-0040 RL-0041	This administrative BCR incorporated December 2020 Hanford Programs Integrated Control Module (HPIC) updates. This BCR did not change the PMB value.
BCR-PRC-21-005R0	<i>FY2021 Realignment of Management Reserve - OA</i>	RL-0011 RL-0013 RL-0030 RL-0040 RL-0041 RL-0042	This BCR documented the MR values reallocation based on the CHPRC FY2021 Annual Risk Analysis. This BCR did not change the PMB value.

The allocated (distributed) budget increased \$3,479.8K.

Undistributed Budget (UB) Activity

BCR Number	Title	PBS	Fiscal Year	UB
N/A	N/A	N/A	2021	N/A

There was no change to UB in December.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
BCR-030-21-004R0	<i>MR Draw for ZP1 Well Drilling Change in Conditions</i>	RL-0030	2021	(\$221.8K)
BCR-040-21-003R0	<i>Add FY2021 100-KE Reactor ISS Scope</i>	RL-0040	2021	(\$258.7K)
BCR-PRC-21-005R0	<i>FY2021 Realignment of Management Reserve - OA</i>	RL-0011 RL-0013 RL-0030 RL-0040 RL-0041 RL-0042	2021	\$0.00

The MR decreased by \$480.5K in December.

Fee Activity

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

There was no change to FEE in December.

The PMB values of BCRs 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.

December 2021 Summary of Changes (\$M)

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	FY2019	FY2020	FY2021	Contract Period Total	Total PMB
November 2020 Estimate												
PMB	3,391.5	391.7	471.3	504.8	485.0	470.6	2,323.5	563.1	531.2	505.4	7,314.6	7,314.6
MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	35.4	43.3	43.3
Fee	155.5	14.3	14.5	27.8	10.6	18.9	86.1	36.5	20.1	8.2	306.3	306.3
Total	3,547.0	406.0	485.8	532.6	495.6	489.5	2,409.6	599.5	559.2	548.9	7,664.2	7,664.2
December 2020 Change												
PMB												
Change to PMB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.5	3.5
MR												
Change to MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.5	-0.5
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	0.0
Total Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
December 2020 Estimate												
PMB	3,391.5	391.7	471.3	504.8	485.0	470.6	2,323.5	563.1	531.2	508.8	7,318.1	7,318.1
MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	34.9	42.8	42.8
Fee	155.5	14.3	14.5	27.8	10.6	18.9	86.1	36.5	20.1	8.2	306.3	306.3
Total	3,547.0	406.0	485.8	532.6	495.6	489.5	2,409.6	599.5	559.2	551.9	7,667.2	7,667.2

Changes to/Utilization of Management Reserve in December 2021 (\$M)

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	FY2019	FY2020	FY2021	Total
November 2020 MR Totals											
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	8.8	11.2
RL-0012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	5.4
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
RL-0030	0.0	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	0.0	8.4	8.4
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	7.6	7.7
RL-0042	0.0	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	7.9	35.4	43.3
December 2020 MR Changes/Utilization											
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.7	-1.7
RL-0012	0.0	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	0.0	2.4	2.4
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	-0.8
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.6	-1.6
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.5
December 2020 MR Totals											
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	7.1	9.5
RL-0012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	5.4
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	6.7
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	9.0	9.1
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	34.9	42.8

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 - 11/30/2020					
Reporting Category					
	\$ Value	%	Goal %		
SB	\$1,792.01	56.89%	49.3%	PRC clause H.20b small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
SDB	\$344.53	10.94%	8.2%		
SWOB	\$316.49	10.05%	7.5%	CHPRC Contract Value:	\$7,326.94
HUB	\$105.46	3.35%	2.2%	SB actual:	\$1,792.01
VOSB	\$277.14	8.80%	3.5%	SB Performed %:	24.72%
SDVO	\$182.84	5.80%	1.3%	PRC clause H.20a max self performed requirement ≤ 65% of Contract Price Self Performed	
NAB	\$119.47	3.79%	N/A		
Large	\$854.99	27.14%	N/A	CHPRC Contract Value:	\$7,326.94
GOVT	\$6.09	0.19%	N/A	CHPRC Self Performed:	\$4,471.18
GOVT CONT	\$483.23	15.34%	N/A	CHPRC Self Performed %:	60.61%
EDUCATION	\$0.18	0.01%	N/A		
NONPROFIT_	\$4.53	0.14%	N/A		
FOREIGN	\$8.98	0.29%	N/A		
Total	\$3,150.01	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, Radioactive Material Transportation Practices Manual for Use with DOE Order 460.2A. 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-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

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

December 2020
CHPRC-2020-12, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In December, the Plutonium Finishing Plant (PFP) Closure Project team performed work included surveying PFP radiological boundaries, re-applying soil fixative to the PFP demolition site and performing equipment maintenance. The PFP senior management team continued preparations and planning to support the resumption of Plutonium Reclamation Facility (PRF) work scope.

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/TRUM) Shipped	0 m ³	5,016 m ³
Low-level Waste (LLW)/Mixed (M)LLW Shipped	0 m ³	23,507 m ³

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	6	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments:

- Operations in December consisted of the 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, re-applying soil fixative to the PFP demolition site and performing equipment maintenance.
- Crews continued work on the disposition of legacy waste.
- The PFP senior management team continued preparations and planning to support the resumption of PRF work scope.

MAJOR ISSUES

None currently identified.

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 spotlight chart: Risk RL11 PFP-0003-T, <i>Stop Work From Concerned Workers</i> , was removed from the spotlight chart as it is no longer considered a key risk in fiscal year (FY) 2021.									
Realized Risks (Risks that are currently impacting project cost/schedule)									
No realized risks identified in December .									
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)									
No critical risks identified in December .									
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)									
RL11 PFP-0001-T: Unavailable Resources	The project lacks adequate resource coverage to complete work package development and fieldwork activities. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$123K, 120 days	● ↔	Risk Trigger: Shortage of resources leads to the projects inability to complete planned fieldwork. <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Monitor and maintain adequate staffing levels to completed planned work scope.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in December. This risk was identified as a key risk for FY2021. While no discrete mitigation actions have currently been identified, the project continues to monitor staffing levels closely.	Mitigation Action(s)	FC Date	%	Monitor and maintain adequate staffing levels to completed planned work scope.	Ongoing	N/A
Mitigation Action(s)	FC Date	%							
Monitor and maintain adequate staffing levels to completed planned work scope.	Ongoing	N/A							
RL11 PFP-00011-T: Bump and Roll, LAMP, or Other Contractor Hiring of Bargaining Unit Employees	Hanford Atomic Metal Trades Council (HAMTC) labor resources are not available or unqualified due to the bump and roll, LAMP (Labor Assets Management Program) or other job postings, resulting in schedule impacts to the project. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 48 days	● ↔	Risk Trigger: Shortage of HAMTC resources leads to project inability to complete planned fieldwork. <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Monitor and maintain adequate staffing levels to completed planned work scope.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in December. This risk was identified as a key risk for FY2021. While no discrete mitigation actions have currently been identified, the project continues to monitor staffing levels closely and potential upcoming bump and rolls or LAMPs.	Mitigation Action(s)	FC Date	%	Monitor and maintain adequate staffing levels to completed planned work scope.	Ongoing	N/A
Mitigation Action(s)	FC Date	%							
Monitor and maintain adequate staffing levels to completed planned work scope.	Ongoing	N/A							

Unmitigated Risk Impacts	Assessment		Comments									
	Month	Trend										
RL-0011												
FY2021 Key Risks												
RL11 PFP-0013-T: Weather Impacts During 236-Z Demolition Risk Handling Strategy: Accept Probability: Unlikely (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%;"> <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> Mitigation Assessment: No major changes in December . No weather events impacted the project in December .	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										
RL11-PFP-0017-T: Delay of PRF Debris Loadout Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 32 days	●	↔	Risk Trigger: The project experiences delays to PRF debris loadout, impacting project completion. <table border="1" style="width: 100%;"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</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> Mitigation Assessment: No major changes in December . PRF debris loadout has not resumed due to PPE availability.	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										
RL11-PFP-0018-T: Novel Viral Pandemic (COVID-19) Impacts Project Performance Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 32 days	●	↔	Risk Trigger: Impacts from the COVID-19 pandemic impact the project's ability to maintain planned fieldwork activities. <table border="1" style="width: 100%;"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Maintain the COVID-19 controls as detailed in the CHPRC general industrial hazards analysis.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in December . This risk was identified as a key risk for FY2021. PFP discrete fieldwork activities have not resumed due PPE availability.	Risk Recovery Action(s)	FC Date	%	Maintain the COVID-19 controls as detailed in the CHPRC general industrial hazards analysis.	Ongoing	N/A			
Risk Recovery Action(s)	FC Date	%										
Maintain the COVID-19 controls as detailed in the CHPRC general industrial hazards analysis.	Ongoing	N/A										
Unassigned Risks (Pending ownership of identified threats/opportunities)												
No unassigned risks identified in December .												

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	3.0	0.8	0.6	(2.2)	-72.5%	0.2	28.3%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Variance: (-\$2.2M/-72.5%)

PFP demolition was scheduled to resume in October, however, due to the continuing impacts of COVID-19, the reliability of the supply chain for personal protective equipment (PPE) required to perform the task is uncertain. Resumption of demolition activities is currently scheduled to begin in January 2021 when it is believed a reliable PPE supply will be available to continue and complete PFP demolition. The variance is partially offset by the completion of monthly site stabilization activities performed in December.

CM Cost Variance: (\$0.2M/28.3%)

The CM cost variance is within threshold.

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	1,145.2	1,133.1	1,244.3	(12.1)	-1.1%	(111.2)	-9.8%	1,152.8	1,264.7	20.4	(112.0)

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Variance: (-\$12.1M/-1.1%)

The CTD schedule variance is within threshold.

CTD Cost Variance: (-\$111.2M/-9.8%)

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) 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 project 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 project was demobilized and placed in a safe configuration in late March 2020 due to the RL-directed PSWO. 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 were 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): (-\$112.0M/-9.7%)

The unfavorable VAC reflects extended hotel load and field resource costs due to delays in demolition and demolition-ready 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	FY2021		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	24.9	22.2	2.7

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2021 variance of \$2.7 million reflects projected funding of \$24.9 million and a spending forecast of \$22.2 million.

Critical Path Analysis

The PFP critical path schedule begins with the completion of PRF loadout, which is forecast to occur by May 5, 2021, 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 August 24, 2021.

MILESTONE STATUS

The following table is a one-year look ahead to project breakdown structure RL-0011 Tri-Party Agreement-enforceable milestones, non-enforceable 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		5/5/2021	Work resumption was 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 for early October based on a phased resumption approach and to conserve PPE in response to COVID-19 impacts. The forecast completion date reflects a delay of 61 calendar days since the March 6, 2021, completion date reported in October 2020 due to the continuing impacts of COVID-19, which precluded 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

December 2020
CHPRC-2020-12, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In the December reporting period (November 23 – December 20, 2020), the Waste and Fuels Management Project (W&FMP) and the River Risk Management Project continued essential mission-critical operations.

Major accomplishments in December included:

- The W-135 Management of Cesium (Cs) and Strontium (Sr) Capsules Project (MCSC) continued construction of the raw water pipeline in support of fire protection requirements at the Capsule Storage Area (CSA). Continued fabrication of the Cask Storage System (CSS) equipment at offsite machine shops. Transmitted the Waste and Encapsulation Storage Facility (WESF) Modifications Line Item construction contract consent package the U. S. Department of Energy (DOE), Richland Operations Office (RL) for approval.
- At T Plant, Sludge Transport & Storage Container (STSC) load cell testing and certification of calibration was performed and the replacement of 291T Pre-filter Banks 1, 2, 3 and 4 was completed.
- At the Canister Storage Building (CSB), the crew performed videoscope monitoring of four multi-canister overpacks (MCO).
- At WESF, the crew completed wall and floor scans in the WESF Canyon to support the completed installation of the WESF sink enclosure.
- At the Integrated Disposal Facility (IDF), personnel continue to ramp up procedures and processes necessary to support active disposal operations. Construction of IDF infrastructure upgrades continued installation of electrical and communication systems, continued leachate system modifications, completed the placement of the final working surfaces in the waste receiving and handling area, and completed the inspection buildings. The IDF permitting team continued to work on responses to Washington State Department of Ecology's (Ecology) final deficiency report from a *Resource Conservation and Recovery Act of 1976* (RCRA) permit modification request to bring the IDF into active status disposal operations. The permitting team also continued efforts to produce another major permit modification request, to bring the leachate collection tanks (LCTs) into the permit.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
21-EMS-WFMP-OBJ1-P1	T Plant Complex will receive three filter media STSC shipments.	Each filter media STSC shipment will constitute one-third of completion of the objective, approximately 33 percent each.	9/30/2021	0%
21-EMS-WFMP-OBJ2-P1	W&FMP will repackage the remaining 284 m ³ of Transuranic (TRU)/ Transuranic mixed (TRUM) legacy waste.	Each 2.84 m ³ of waste repackaged and returned to the Central Waste Complex (CWC) will constitute 1 percent of completion of the objective.	9/30/2021	0%
21-EMS-WFMP-OBJ3-P1	W&FMP will complete CSA construction.	Completion of each of the five primary activities will constitute 20 percent completion of the objective.	9/30/2021	0%
21-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).	On a quarterly basis, track the maintenance recycling activities of the ERDF subcontractor and CH2M HILL Plateau Remediation Company (CHPRC) transportation organization.	9/30/2021	12%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	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 in support of RL-0013.
Total Recordable Injuries	0	0	N/A
First Aid Cases	0	11	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Waste and Fuels Management Project

13.01 Project Management

- Following Ecology issuance of the WESF RCRA Permit on November 16, 2020, W&FMP personnel reviewed the permit for inaccuracies and found no issues. The permit became effective on December 16, 2020.

13.02 Capsule Storage and Disposition

- Completed replacement of water heaters in 225B.
- Completed replacement of K3N filters and gasket.
- Completed installation of the WESF decontamination sink enclosure in the canyon.
- Completed repairs at manhole four.
- Completed wall and floor scans in the WESF canyon to support the completed installation of the enclosure around the canyon decontamination sink.
- Completed 29 preventative maintenance (PM) packages.

13.03 Canister Storage Building (CSB)

- Performed videoscope monitoring of four MCOs.
- Completed 26 PM packages.

13.07 Waste Receiving and Processing

- Completed 231 surveillances and 25 PM packages.

13.08 T Plant

- Completed field activities for weighing the Cell 15L STSCs.
- Completed the STSC load cell testing and certification of calibration.
- Completed replacement of 291T Pre-filters Banks 1, 2, 3 and 4.
- Shipped one empty STSC from 100K to T Plant.
- Completed 432 surveillances and 46 PM packages.

13.09 Central Waste Complex and Low-Level Burial Grounds

- Completed re-lamping Trench 34 leachate collection system control panel.
- Completed 335 surveillances and 19 PM packages.

13.16 Offsite Spent Nuclear Fuel Disposition

- Maintained coordination of offsite spent nuclear fuel disposition.

13.21 Mixed-Waste Disposal Trenches

- Received one drum and two boxes from Perma-Fix Northwest (PFNW) into mixed waste Trench 31.
- Completed 128 surveillances.

13.24 Management of Cesium and Strontium Capsules Project

- With the support of PTS, the following progress was made on MCSC subproject construction activities:
 - Continued construction of the raw water pipeline.
 - Installed Poles E686 and E3343 and installed transformer on Pole E702.
- Transmitted the WESF Modifications Line Item Construction Contract consent package to RL for approval.
- Transmitted the final WESF Modifications Critical Decision (CD)-2 and CD-3 documentation to RL for approval.

13.25 Capsules Interim Storage Operations

- Fabrication of CSS equipment continued at offsite vendors.

River Risk Management Project

13.10 Environmental Restoration Disposal Facility

- Received 3,448 tons of waste for disposal.
- Received 9,441 tons of waste for disposal fiscal year to date (FYTD). Any corrections in previous months are reflected in this total.
- Performed annual inspections on 50 containers and corrective maintenance on 31 containers.
- Surveyed 44 Green B (Plutonium Finishing Plant closed loop) roll-on/roll-off containers for down posting to general purpose status.

13.12 Integrated Disposal Facility

- Operations and Maintenance
 - Completed monthly inspections.
 - Performed one significant storm event inspection.
 - Awarded new IDF operations and maintenance contract.
- IDF Operational Readiness
 - Systems and procedures
 - Continued procedure development for operations and maintenance activities.
 - Continued modifications of software for waste management and tracking at IDF.
 - Completed the first five-year waste projections for IDF.
 - Kicked off development of the safety programs (i.e., radiological control, industrial safety and industrial hygiene) specific to full operations at IDF.
 - Continued to support RL on approval of the IDF Final Hazard Categorization document.
 - Permitting
 - Continued work on a Class 3 Permit Modification request to authorize waste disposal at IDF.
 - Continued work on a Class 3 Permit Modification request to include the LCTs in the IDF Permit.
 - Continued work on development of a delisting petition for IDF leachate.
 - Continued work on a radiological and toxic notice of constructions for air permitting at IDF.

- o Infrastructure upgrades
 - Completed construction of the final working surfaces in the waste receiving and handling area.
 - Continued to make progress on installation of electrical and communication systems.
 - Completed constructing the inspection buildings.
 - Completed installation of a pipeline connecting the leachate collection systems at IDF.
 - Continued security fence installation.
 - Finalized test plans for tie-in of water and sewer utilities.
 - Initiated level, grading and graveling work areas in the balance of IDF.
- o Environmental
 - Completed four Waste Storage Area (WSA) inspections.
 - Completed a WSA dust control inspection.

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 the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico. 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). RL authorized the continuation of TRU commercial repackaging in FY2021.

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-0013/WBS-013													
Explanation of major changes to the project monthly stoplight chart:													
Risks RL13 CSA-0011-T, <i>CSA Site Location Found to Have Extensive Contamination</i> , and RL13 WFM-0011-T, <i>CWC/Waste Receiving and Processing Facility (WRAP) Components Fail</i> , were removed from the stoplight chart, as they are no longer considered key risks for FY2021. Risk RL13 MODS-0001-T, <i>Changes to CSS Equipment Impact WESF Modifications</i> , was added to the stoplight chart as a realized risk. Risk RL13 IDF-0010-T, <i>Discovery of Unplanned Site Conditions</i> , will be removed from the monthly stoplight chart next reporting period based on the reduced risk posture, as excavation scope nears completion.													
Realized Risks (Risks that are currently impacting project cost/schedule)													
RL13 CSA-0004-T: Configuration of Existing Facilities and Infrastructure Different from Assumed	The CSA construction is impacted by a discovery that configuration of existing facilities and infrastructure differs from that represented in the design documents. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$500K, 32 days	●	↑	Risk Event: The actual elevation of an existing buried sewer line as discovered during pot holing by the contractor was such that the alignment of the new fire protection raw water line in the immediate vicinity will be revised. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk Recovery Action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Revise the design to realign the raw water line.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Construct water line (no rework involved).</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> </tbody> </table> Recovery Action Assessment: A design revision and a contract change to address the new alignment were issued, and installation of the affected section of the raw water line was completed on December 17, 2020. This risk is no longer being realized and will be removed prior to January reporting.	Risk Recovery Action(s)	FC Date	%	Revise the design to realign the raw water line.	Complete	100	Construct water line (no rework involved).	Complete	100
Risk Recovery Action(s)	FC Date	%											
Revise the design to realign the raw water line.	Complete	100											
Construct water line (no rework involved).	Complete	100											
RL13 CSA-0012-T: 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: \$800K, 24 days	●	↔	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. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk Recovery Action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Revise the design to include an RPBA facility.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Construct new RPBA facility.</td> <td style="text-align: center;">5/20/2021</td> <td style="text-align: center;">5</td> </tr> </tbody> </table> Recovery Action Assessment: The design revision to address the omission (i.e., to include an RPBA facility) was released in September. A contract change has been processed with the CSA contractor. Consideration of winter weather has led to a forecast for construction completion of May 20, 2021. This risk is forecast to remain realized through that date. This risk is not challenging the critical path for the project because CSA heavy-haul path construction is not scheduled for completion until September 2021. Construction of the RPBA facility began in December.	Risk Recovery Action(s)	FC Date	%	Revise the design to include an RPBA facility.	Complete	100	Construct new RPBA facility.	5/20/2021	5
Risk Recovery Action(s)	FC Date	%											
Revise the design to include an RPBA facility.	Complete	100											
Construct new RPBA facility.	5/20/2021	5											

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0013/WBS-013										
RL13 CSS-0006-T: Fabrication of the Equipment from the Contractor	<p>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.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Somewhat likely (26% to 74%) Worst Case Impacts: \$6M, 192 days</p>	●	↔	<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>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Recovery Action Assessment: 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 were not recognized by the fabricator/designer, resulting in cost and schedule delays. The contractor has submitted a proposal with a realistic design duration. AWS gantry delivery is not on the project critical path. The preliminary gantry design review has been completed. Preliminary design review for the weld head and alternate motion platform was conducted in October. Preliminary design review for the weld head and remote visual inspection system was conducted on November 30, 2020. The final design package with installation drawings was provided to CHPRC on December 21, 2020, and is in CHPRC review; however, seismic calculations are still being finalized to confirm gantry anchorage design.</p>	Risk Recovery Action(s)	FC Date	%	Automated Weld System (AWS) vendor to provide portions of design for review as available.	Complete	100
Risk Recovery Action(s)	FC Date	%								
Automated Weld System (AWS) vendor to provide portions of design for review as available.	Complete	100								
RL13 CSS-0013-T: Novel Viral Pandemic (COVID-19) Impacts CSS Subcontractor Fabrication	<p>Unprecedented change in work practices/procedures (e.g., social distancing requirements) or lack of resources because of coronavirus (COVID-19) impacts CSS project fabrication and/or performance.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Likely (75% to 90%) Worst Case Impacts: \$0M, 192 days</p>	●	↓	<p>Risk Event: Subcontractor for CSS equipment fabrication has experienced loss of resources due to positive COVID-19 tests, adversely affecting the schedule to complete fabrication activities.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Subcontractor to manage resources to mitigate impacts for fabrication of critical path equipment.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Action Assessment: The fabrication subcontractor for critical path equipment is taking the following actions as necessary when workers are not available due to COVID-19: Adjust assignment of key resources that are available to maintain progress on critical path and near critical path equipment, hire additional temporary resources, subcontract some portions of the work and schedule overtime to meet key dates. This risk continues to be realized as workers are impacted by COVID-19.</p>	Risk Recovery Action(s)	FC Date	%	Subcontractor to manage resources to mitigate impacts for fabrication of critical path equipment.	Ongoing	N/A
Risk Recovery Action(s)	FC Date	%								
Subcontractor to manage resources to mitigate impacts for fabrication of critical path equipment.	Ongoing	N/A								
RL13 CSS-0015-T: CSS Design Changes	<p>During fabrication of the CSS equipment, necessary design changes are identified, resulting in cost and schedule impacts to the project.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Likely (75% to 90%) Worst Case Impacts: \$750K, 96 days</p>	●	↔	<p>Risk Event: Design changes for the CSS equipment have been identified by the Nuclear Assurance Corporation (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: No significant changes in December. 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 a 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 reduced operational risk and improved occupational safety, but resulted in additional costs and schedule delays. Mitigation is for CHPRC engineering to perform a cost/benefit analysis for presentation to project management prior to requesting changes 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													
RL13 MCSC-0010-T: Maintenance and Storage Facility (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: Mitigate</p> <p>Probability: Somewhat likely (26% to 74%)</p> <p>Worst Case Impacts: \$350K, 64 days</p>	●	↑	<p>Risk Event: The MASF mockup construction contractor has not managed their subcontractors effectively and has submitted fabrication drawings that cannot be approved by CHPRC. Workmanship in the field is not adequate and has resulted 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> </tbody> </table> <p>Recovery Action Assessment: The mockup structure at MASF was completed in early December. This risk is no longer being realized and will be closed and removed from the stoplight chart prior to January reporting.</p>	Risk Recovery Action(s)	FC Date	%	Provide additional oversight of apprentice employees.	Ongoing	N/A			
Risk Recovery Action(s)	FC Date	%											
Provide additional oversight of apprentice employees.	Ongoing	N/A											
RL13 MODS-0001-T: Changes to CSS Equipment Impact WESF Modifications	<p>Changes to CSS or other buyer-furnished equipment impact WESF Modifications construction.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very likely (>90%)</p> <p>Worst Case Impacts: \$750K, 48 days</p>	●	↓	<p>Risk Event: Ongoing changes to NAC CSS equipment designs are driving changes to WESF Modifications design that, in turn, will drive changes to WESF Modifications construction. Specific CSS design changes which impact WESF Modifications include but are not limited to:</p> <ul style="list-style-type: none"> - Changes to the Evacuation and Helium Backfill System 1 and 2. - Addition of a gantry for the AWS. - changes to the truckport floor and transfer pad coatings. - Miscellaneous, including design changes to equipment connectors (e.g., for electrical/instrument and control and mechanical), changes to equipment anchorage designs, redesign of dry transfer system (DTS) cable/hose reel to accommodate new DTS weight readout, additional penetrations and electrical receptacles. <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Revise the WESF Modifications design documents to reflect changes in design inputs from CSS equipment.</td> <td>9/30/2021</td> <td>10</td> </tr> <tr> <td>Construct WESF Modifications to revised design documents.</td> <td>3/31/2022</td> <td>0</td> </tr> </tbody> </table> <p>Recovery Action Assessment: There are changes under way to CSS equipment design by NAC that will impact WESF Modifications project design. The recovery action is to safely and efficiently complete WESF Modifications design changes and the corresponding construction activities so as not to impact the overall W-135 Project critical path.</p>	Risk Recovery Action(s)	FC Date	%	Revise the WESF Modifications design documents to reflect changes in design inputs from CSS equipment.	9/30/2021	10	Construct WESF Modifications to revised design documents.	3/31/2022	0
Risk Recovery Action(s)	FC Date	%											
Revise the WESF Modifications design documents to reflect changes in design inputs from CSS equipment.	9/30/2021	10											
Construct WESF Modifications to revised design documents.	3/31/2022	0											
RL13 WFM-0013-T: Regulatory Document Results in Significant Comments from the Regulator	<p>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.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Somewhat likely (26% to 74%)</p> <p>Worst Case Impacts: \$10M, 192 days</p>	●	↔	<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 December. This risk is being realized as Ecology has issued some versions with changes that the project has spent resources identifying and commenting on Ecology's changes. The project continues to address Ecology's comments and changes.</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											
RL13 WFM-0022-T: Additional Dangerous Waste Management Units (DWMUs)	<p>Unplanned DWMUs are added to the scope, requiring additional document support, impacting the project in both cost and schedule.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very likely (>90%)</p> <p>Worst Case Impacts: \$0, 48 days</p>	●	↔	<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 December. 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											
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)													
No critical risks identified in December.													

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0013/WBS-013																
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
RL13 CSS-0002-T: CSS Subcontractor Change Orders & Claims	<p>The CSS design/fabrication contractor submits more change orders and more claims than anticipated, resulting in schedule delays and increased subcontractor cost.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$14.7M, 48 days</p>	●	↔	<p>Risk Trigger Metric: CSS subcontractor issues significant change orders and claims.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Review scope of each task prior to initiation to ensure contractor is in alignment for the upcoming work.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Develop and implement subcontractor oversight plans for fabrication.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Conduct weekly status meeting with fabricators to ensure direct flow of information from CHPRC.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: A fabrication kickoff meeting was held with the Transportable Storage Canister fabricator in December. A Subcontractor Oversight Plan was issued (CHPRC-04368) to outline CHPRC engineering and quality assurance oversight during fabrication. Weekly status meetings are held directly with critical path fabricators to ensure direct flow of information from CHPRC to fabricator and vice versa. Weekly status meetings enable quicker resolution of problems and questions.</p>	Mitigation Action(s)	FC Date	%	Review scope of each task prior to initiation to ensure contractor is in alignment for the upcoming work.	Ongoing	N/A	Develop and implement subcontractor oversight plans for fabrication.	Ongoing	N/A	Conduct weekly status meeting with fabricators to ensure direct flow of information from CHPRC.	Ongoing	N/A
Mitigation Action(s)	FC Date	%														
Review scope of each task prior to initiation to ensure contractor is in alignment for the upcoming work.	Ongoing	N/A														
Develop and implement subcontractor oversight plans for fabrication.	Ongoing	N/A														
Conduct weekly status meeting with fabricators to ensure direct flow of information from CHPRC.	Ongoing	N/A														
RL13 WFM-0006-T: Major Equipment Failure – T Plant	<p>T Plant suffers a major equipment failure (e.g., crane, primary power supply), resulting in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Somewhat likely (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>Procure and receive crane trolley motor parts.</td> <td>1/11/2021</td> <td>95</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in December. 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. Additional spare parts will continue to be procured in FY2021.</p>	Mitigation Action(s)	FC Date	%	Procure and receive crane trolley motor parts.	1/11/2021	95						
Mitigation Action(s)	FC Date	%														
Procure and receive crane trolley motor parts.	1/11/2021	95														
RL13 WFM-0009-T: Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues	<p>A pause in waste processing results in an unexpected container degradation within the Solid Waste Operations Complex (SWOC) (excluding TRU retrieval activities) and requires additional resources to respond.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Somewhat likely (26% to 74%)</p> <p>Worst Case Impacts: \$5M, 0 days</p>	●	↔	<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>Mine/retrieve and overpack 50 containers (FY2021).</td> <td>9/30/2021</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in December. Surveillances continue to be performed for the project to identify container and container-cover abnormalities. Surveillance and enhanced monitoring is required on the remaining containers. Fifty containers are planned to be overpacked starting in late spring FY2021, reducing the risk of container integrity issues.</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	Mine/retrieve and overpack 50 containers (FY2021).	9/30/2021	0
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														
Mine/retrieve and overpack 50 containers (FY2021).	9/30/2021	0														
FY2021 Key Risks																
RL13 IDF-0010-T: 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: Unlikely (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: The project is nearing completion of the excavation activities, showing minimal concern for this risk to be realized; therefore, the project has elected to remove this risk from monthly spotlight report prior to January reporting.</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														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0013/WBS-013													
RL13 IDF-0009-T: RCRA Permit Process Impact Final Design to DWMU Components	<p>Changes identified in the RCRA Permit process have a direct impact to the final design of components identified within DWMU, resulting in cost and schedule delays.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Unlikely (10% to 24%) Worst Case Impacts: \$250K, 16 days</p>	●	↔	<p>Risk Trigger Metric: During review of the RCRA Permit documentation, Ecology finds issues to DWMU components, resulting in design changes to DWMU components identified in the RCRA Permit.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Working with state regulators to negotiate the acceptance of the current LCT design into the RCRA Permit, without modifications to the existing tank system.</td> <td>TBD</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant change in December. This risk has been identified as a key project risk for FY2021. The current LCT design is at risk of modifications to meeting the regulatory RCRA Permit design requirements. Negotiations are still in process. If negotiations are not successful, this risk may be triggered, resulting in in-scope and unplanned work to facilitate the modifications and fabrication.</p>	Mitigation Action(s)	FC Date	%	Working with state regulators to negotiate the acceptance of the current LCT design into the RCRA Permit, without modifications to the existing tank system.	TBD	N/A			
Mitigation Action(s)	FC Date	%											
Working with state regulators to negotiate the acceptance of the current LCT design into the RCRA Permit, without modifications to the existing tank system.	TBD	N/A											
RL13 MCSC-0003-T: 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: Accept</p> <p>Probability: Somewhat likely (26% to 74%) 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>1/28/2021</td> <td>90</td> </tr> <tr> <td>Procure critical spares.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: The completion of the crane PM was delayed 21 days from the December 17, 2020, forecast completion date due to resource constraints primarily associated with COVID-19 and higher priority work activities within the W&FMP facilities. WESF personnel are forecasting completion of crane PMs in January 2021. 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.	1/28/2021	90	Procure critical spares.	Ongoing	N/A
Mitigation Action(s)	FC Date	%											
Perform preventative/corrective maintenance procedures on the crane to facilitate reliability.	1/28/2021	90											
Procure critical spares.	Ongoing	N/A											
RL 13 WFM-0012-T: W&FM SWOC Contamination Event	<p>A contamination event at SWOC results in cost and schedule impacts to the project.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Unlikely (10% to 25%) Worst Case Impacts: \$1.1M, 32 days</p>	●	↔	<p>Risk Trigger Metric: A contamination event at SWOC results in cost and schedule impacts to the project.</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> <tr> <td>Ship four fiberglass reinforced plywood boxes to PFNW for treatment.</td> <td>9/30/2021</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in December. 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	Ship four fiberglass reinforced plywood boxes to PFNW for treatment.	9/30/2021	0
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											
Ship four fiberglass reinforced plywood boxes to PFNW for treatment.	9/30/2021	0											
Unassigned Risks (Pending ownership of identified risks/opportunities)													
No unassigned risks identified in December.													

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	11.3	11.8	12.6	0.5	4.1%	(0.9)	-7.4%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (+\$0.5M/+4.1%)

The CM schedule variance is within threshold.

CM Cost Performance (-\$0.9M/-7.4%)

The CM negative cost variance is due to Transportable Storage Containers (TSC) Material Sourcing and Material Receipt values based on estimated values provided by the subcontractor. This pricing expired and was updated and included an in-contract award for storage system fabrication, resulting in a difference between values planned in the baseline (TSC Material Sourcing of \$1.4 million vs. actual \$2 million), thus creating the negative cost for the current period.

The IDF unfavorable cost variance is due to the following scope for which awarded subcontract costs were higher than planned: IDF infrastructure installation excavating and final grading, installation of electrical, Hanford Local Area Network, and supervisory control and data acquisition. Additionally, IDF facility modifications increased material costs through change orders caused by design changes for the leachate tank dome foundations.

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	1,713.4	1,693.4	1,606.4	(20.0)	-1.2%	87.0	5.1%	1,860.3	1,773.4	167.0	86.9

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$20.0M/-1.2%)

The CTD schedule variance is within threshold.

CTD Cost Performance (+\$87.0M/+5.1%)

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 (+\$86.9M/+4.7%)

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	FY2021		Variance
	Projected Funding	Spending Forecast	
Waste Stabilization and Disposition	206.1	205.2	0.9
Management of Cesium and Strontium Capsules (Line Item)	13.1	13.1	0.0
RL-0013 – Total	219.2	218.3	0.9

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2021 variance of \$0.9 million reflects projected funding of \$219.2 million and a spending forecast of \$218.2 million.

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, non-enforceable 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-091-03O	TPA M-091-03O Submit Revision of TRUM Waste and Mixed Low-level Waste to Ecology	6/30/2021		6/30/2021	On schedule
M-091-52-T02	M-091-52-T02 TPA Submit to Ecology an Interim Response Action to meet M-091-49A	9/30/2021		9/30/2021	On schedule

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 Project W-135, WESF Modifications, CD-2 and CD-3 Documentation	7/27/2020(A)	12/22/2020
RL Approve IDF Final Hazard Categorization	8/3/2020(A)	1/21/2021

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

J. A. Lerch
Vice President for
Environmental Program
and Strategic Planning

M. A. Wright
Vice President for
Project Technical
Services

December 2020
CHPRC-2020-12, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In December, pump and treat (P&T) operations continued progress on the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* remedial process documentation for the River Corridor and Central Plateau. Groundwater treatment and well drilling (including development) that was completed includes 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	31.1	91.9	1.6	5.4						
HX P&T	26.9	79.7	4.3	11.3						
KR-4 P&T	13.4	38.9	0.1	0.5						
KW P&T	13.7	39.1	0.3	2.0						
KX P&T	22.0	71.8	1.0	3.3						
200 West P&T	104.7	312.1	0.5	2.5	159.0	473.0	1.9x10 ¹¹	5.99 x10 ¹¹	6.0	24.6
Combined	211.8	633.5	7.8	25.1	159.0	473.0	1.9x10 ¹¹	5.99 x10 ¹¹	6.0	24.6
FY2021 Gold Metric	--	2,200.0	--	80.0	--	1,800.0	--	2.4Ci	--	90.00

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

Well Drilling Completion by Area*	FY2021 Planned	Current Calendar Month	FY2021 Cumulative
100-KR-4	1	0	0
100-HR-3	6	0	0
100-NR-2	1	0	0
M-24 Milestone	21	0	0
Total FY2021 Wells	29	0	0
Site Wide Boreholes	3	0	0
	FY2020 Carryover	Current Calendar Month	Cumulative
100-HR-3	5	4	5
200-DV-1	2	0	0
200-ZP-1	7	0	0
M-24 Milestone	3	0	3
Total FY2020 Carryover Wells	17	4	8

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

EMS Objectives and Target Status

Objective #	Objective	Plan	Due Date	Status
21-EMS-SGRP-OBJ1-P1	Prevent adverse environmental impact to health and the environment by monitoring and confirming low carbon tetrachloride emissions at the 200 West P&T facility.	Evaluate compliance sampling and process sampling quarterly.	7/30/2021	25%
21-EMS-SGRP-OBJ2-P1	Treat and remediate contaminants of at least 2.2 billion gallons of groundwater at the Hanford Site.	P&T gallons tracked monthly.	9/30/2021	29%

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	1	4	12/29/20 – Soil and Groundwater Remediation Project subcontractor employee tripped, fell and cut the right shin. Individual was taken to HPM Corporation for evaluation and returned to work with no restriction. (25623)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

River Corridor

100-HR-3 OU

- Transmitted DOE/RL-2017-13R0, *Remedial Design/Remedial Action Work Plan*, Revision 0, to the U.S. Department of Energy (DOE), Richland Operations Office (RL) on December 3, 2020.
- Completed drilling the final four of five wells, concluding the FY2020 monitoring well campaign.

Central Plateau

200-BP-5 and 200-PO-1 OU

- Provided DOE/RL-2020-41, *Remedial Design/Remedial Action Work Plan of the 200-BP-5 and 200-PO-1 Groundwater Operable Units*, Decisional Draft, to RL for review on December 8, 2020.

Groundwater P&T Facilities

200 West P&T

- Operated the 200 West P&T at an average of 2,380 gallons per minute (gpm).
- Received new ion exchange (IX) train on December 9, 2020.

100 Area P&Ts

- Operated the DX P&T at 716 gpm, below the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 300 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 309 gpm, below the facility capacity of 330 gpm.
- Operated the KX P&T at 493 gpm, below the facility capacity of 900 gpm.
- Operated the HX P&T at 610 gpm, below the facility capacity of 900 gpm.

MAJOR ISSUES

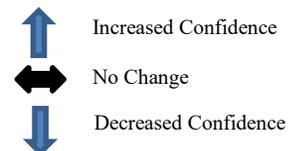
Issue

None currently identified.

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-0030/WBS-030										
Explanation of major changes to the project monthly stoplight chart:										
1. Realized closure plan risks have been removed from the stoplight chart and closed in the FY2021 risk database as a result of the formal certification of the closure plan bulk package. 2. Risk <i>RL30 TI-0003-T: TI-Key Environmental Modeling Hardware Failure</i> , has been removed from the stoplight chart based on the implementation of mitigation actions, which have reduced the risk to a low threat. 3. Risk <i>RL30 100PT-0001-T: Major Equipment Failure at a 100 Area Pump & Treat Facility</i> , was added to the FY2021 Key Risk section for tracking, per the project. 4. Risk <i>RL30 200PT-0001-T: Major Equipment Failure at a 200 Area Pump & Treat Facility</i> , was added to the FY2021 Key Risk section for tracking, per the project. 5. Risk <i>RL30 DRL-0007-T: Lack of Qualified Drilling Contractors</i> , was added to the FY2021 Key Risk section for tracking, per the project.										
Realized Risks (Risks that are currently impacting project cost/schedule)										
RL30 KR4-0004-T: Feasibility Study (FS) – Greater Than Expected Comments from RL or Regulators	Comments from RL or other regulators on the FS document (Draft B and Draft Revision 0) submitted for review/approval are atypical, need multiple rounds of comment resolution, are global in nature, or are causing both cost and schedule impacts to the project. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$120.0K, 32 days	●	↔	<p>Risk Event: After completion of the EPA review, the project is required to disposition more comments than planned and resolve global policy issues associated with the application of the Technical Impracticability (TI) waiver, resulting in in-scope and unplanned work.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #e0e0e0;"> <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>No discrete mitigation actions have been identified to further reduce the probability and consequences of this risk; therefore, the impacts identified are considered accepted by the project.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p>Recovery Assessment: No significant change in December. EPA completed review of the FS and provided comments in September 2020. Preliminary assessment of the comments indicate that 279 comments were received. The baseline assumption planned for only 200 comments to be dispositioned. Additionally, there are significant policy issues associated with the applicability of the TI waiver that could take up to six months to address.</p>	Recovery Action(s)	FC Date	%	No discrete mitigation actions have been identified to further reduce the probability and consequences of this risk; therefore, the impacts identified are considered accepted by the project.	Ongoing	N/A
Recovery Action(s)	FC Date	%								
No discrete mitigation actions have been identified to further reduce the probability and consequences of this risk; therefore, the impacts identified are considered accepted by the project.	Ongoing	N/A								
RL30 KR4-0003-T: Remedial Investigation (RI) – Unexpected comments on the RI Rev 0 based from the Regulator FS Review	Regulator review of the FS results in changes to the RI resulting in in-scope unplanned work. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$120.0K, 32 days	●	↔	<p>Risk Event: Comments received on the FS resulted in changes to the Ecology Risk section of the RI.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #e0e0e0;"> <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>The project has engaged in real-time hands-on interaction with regulators to assure a clear and concise understanding of comments received and appropriate disposition in a timely manner.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p>Recovery Assessment: No significant change in December. The recovery action stated above is intended to assure the timely resolution of comments received by regulators and minimize further impacts to the project, which have resulted in in-scope, unplanned work to the RI document. The current assessment indicates comment resolution is on track to complete by early April 2021.</p>	Recovery Action(s)	FC Date	%	The project has engaged in real-time hands-on interaction with regulators to assure a clear and concise understanding of comments received and appropriate disposition in a timely manner.	Ongoing	N/A
Recovery Action(s)	FC Date	%								
The project has engaged in real-time hands-on interaction with regulators to assure a clear and concise understanding of comments received and appropriate disposition in a timely manner.	Ongoing	N/A								

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0030/WBS-030										
RL30 SGW-0051-T: Novel Viral Pandemic (COVID-19) Impacts Project Performance – S&GW	<p>Unprecedented change in work practices/procedures (e.g., social distancing requirements) or lack of key resources (in-house and subcontracted) because the impact of coronavirus (COVID-19) on project performance, resulting in cost and schedule impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very likely (<90%)</p> <p>Worst Case Impacts: \$0K, 48 days</p>			<p>Risk Event: COVID-19 exposures and quarantine protocol has impacted the availability of key resources for both contract and subcontracted staff. Discrete scope such as ASHT tank layup and 200-DV-1 drilling has been delayed as a result of key team members required to quarantine. In addition, the delivery of the IX train was delayed by COVID-19 at the vendor facility.</p> <table border="1"> <thead> <tr> <th>Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Schedule delays in fieldwork will be recovered by utilization of overtime.</td> <td>TBD</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Assessment: No significant change in December. The scope that was impacted due to COVID-19 has not been recovered at this time. The recovery plan will continue to be monitored and updated, accordingly.</p>	Recovery Action(s)	FC Date	%	Schedule delays in fieldwork will be recovered by utilization of overtime.	TBD	N/A
Recovery Action(s)	FC Date	%								
Schedule delays in fieldwork will be recovered by utilization of overtime.	TBD	N/A								
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
No Critical Risks identified in December.										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
No High Risks identified in December.										
FY2021 Key Risks										
RL30 100PT-0001-T: Major Equipment Failure at a 100 Area Pump & Treat Facility	<p>A major equipment failure is experienced at one of the 100 Area P&T locations during operations of the facility or at the injection and extraction well network. This includes but is not limited to failure of: centrifugal pumps, plastic pipe joint saddles, IX vessels, tanks, computer system control center, extraction/injection wells and other related equipment supporting P&T.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Unlikely (10% to 25%)</p> <p>Worst Case Impacts: \$1,000.0K, 0 days</p>			<p>Risk Event: During plant or well operation, major equipment or components of major equipment could fail and need to be replaced. If replacement equipment or components are not readily available and/or spare parts were not properly identified within the spare parts inventory, the result could be significant plant down time or reduced capacity.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>100 Area P&T operations has incorporated weekly, monthly and annual preventative maintenance activities in the baseline to assure reliability of equipment within the P&T facilities.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: The 100K Area P&T facility is currently running at the planned capacity. Preventative and corrective maintenance activities planned for FY2021 have been performed, as needed, with no indications of a critical failure that require additional mitigations. This risk will continue to be monitored.</p>	Mitigation Action(s)	FC Date	%	100 Area P&T operations has incorporated weekly, monthly and annual preventative maintenance activities in the baseline to assure reliability of equipment within the P&T facilities.	Ongoing	N/A
Mitigation Action(s)	FC Date	%								
100 Area P&T operations has incorporated weekly, monthly and annual preventative maintenance activities in the baseline to assure reliability of equipment within the P&T facilities.	Ongoing	N/A								
RL30 200PT-0001-T: Major Equipment Failure at a 200 Area Pump & Treat Facility	<p>A major equipment failure is experienced at one of the 200 Area P&T locations during operations of the facility or at the injection and extraction well network. This includes but is not limited to failure of: plastic pipe joint saddles, tanks, air stripper, computer system control center, extraction/injection wells, and other related equipment supporting P&T.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Unlikely (10% to 25%)</p> <p>Worst Case Impacts: \$1,000.0K, 0 days</p>			<p>Risk Event: During plant or well operation, major equipment or components of major equipment could fail and need to be replaced. If replacement equipment or components are not readily available and/or spare parts were not properly identified within the spare parts inventory, the result could be significant plant down time or reduced capacity.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>200 Area P&T operations has incorporated weekly, monthly and annual preventative maintenance activities in the baseline to assure reliability of equipment within the P&T facilities.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: The 200K P&T facility is currently running at the planned capacity. Preventative and corrective maintenance activities planned for FY2021 have been performed, as needed, with no indications of a critical failure that require additional mitigations. This risk will continue to be monitored.</p>	Mitigation Action(s)	FC Date	%	200 Area P&T operations has incorporated weekly, monthly and annual preventative maintenance activities in the baseline to assure reliability of equipment within the P&T facilities.	Ongoing	N/A
Mitigation Action(s)	FC Date	%								
200 Area P&T operations has incorporated weekly, monthly and annual preventative maintenance activities in the baseline to assure reliability of equipment within the P&T facilities.	Ongoing	N/A								

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0030/WBS-030										
RL30 DRL-0007-T: Lack of Qualified Drilling Contractors	Availability of qualified drilling bidders to perform the FY2021 drilling scope becomes hindered, resulting in cost and schedule impacts. Risk Handling Strategy: Accept Probability: Unlikely (10% to 25%) Worst Case Impacts: \$1,510.0K, 0 days			Risk Event: With the potential hazards associated with performing work on the Hanford Site, there are many requirements needed to perform work safely (radiological training, safety training and qualifications, personal protective equipment, etc.). Due to many of these extensive requirements, in conjunction with a thriving drilling economy, many of the qualified drilling contractors are getting out of the nuclear environmental drilling industry. <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>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: The project is currently reviewing options to mitigate this risk; however, no viable actions have been identified. Once a viable mitigation action(s) have been identified, this risk will be updated.	Mitigation Action(s)	FC Date	%	None identified at this time	Ongoing	N/A
Mitigation Action(s)	FC Date	%								
None identified at this time	Ongoing	N/A								
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in December .										

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	6.9	10.4	7.6	3.5	50.5%	2.8	27.1%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (+\$3.5M/+50.5%)

The CM positive schedule variance is the result of partial schedule recovery of scope previously delayed due to the RL-directed partial stop work order (PSWO) for non-portable work or by the impacts due to COVID-19. Significant progress was made on FY2020 100-HR-3, 200-ZP-1, and *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-024-00 well drilling campaigns and their associated sampling, previously delayed by the PSWO.

After lengthy delays due to COVID-19 impacts at the manufacturer’s facility, as well as instrumentation changes and upgrades, the IX train was received in December. Routine sample collection and analysis that was missed in FY2020 due to the PSWO was earned in December after RL and the regulators came to an agreement on reduced sampling requirements in consideration of the PSWO, allowing significant performance to be earned for work planned in the prior year.

CM Cost Performance (+\$2.8M/+27.1%)

Routine sample collection and analysis that was missed in FY2020 due to the PSWO was completed and earned in December after RL and the regulators came to agreement on reduced sampling requirements in consideration of the PSWO, allowing significant performance to be taken.

The IX train received in December also generated a significant positive cost variance because the firm-fixed price contract was awarded at much less than the planned value, which was based on historical costs from the previous IX train procurement.

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	1,775.8	1,761.1	1,701.4	(14.7)	-0.8%	59.7	3.4%	1,861.9	1,802.7	101.3	59.1

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$14.7M/-0.8%)

The CTD negative schedule variance is within reporting thresholds.

CTD Cost Performance (+\$59.7M/+3.4%)

The CTD positive cost variance is within reporting thresholds.

Variance at Completion (+\$59.1M/+3.2%)

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	FY2021		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	127.9	124.8	3.1

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2021 variance of \$3.1 million reflects projected funding of \$127.9 million and a spending forecast of \$124.8 million.

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 CH2M HILL Plateau Remediation Company.

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 Washington State Department of Ecology (Ecology) a Remedial Investigation/Feasibility Study Work Plan for 200-CB-1	9/30/2019		TBD	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-015-112	Submit Draft B 200-IS-1 RFI/CMS/RI/FS Work Plan to Ecology with Schedule Dates	11/30/2020		TBD	In abeyance
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		TBD	In abeyance
M-015-84	Complete RI of 200-WA-1 and 200-BC-1 Waste Sites in Accordance with RI/FS Work Plan	12/31/2021		TBD	In abeyance
M-024-72	Complete the Construction of All Wells Listed for CY21 and Before	12/31/2021		07/29/2021	On Schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS*

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review 100-D-H Waste Site Closeout Package C	11/23/2020 (A)	12/22/2020
RL Review 200-BP-5/200-PO-1 Decisional Draft Interim Action (IA) Remedial Design/Removal Action Work Plan (RD/RAWP)	12/9/2020 (A)	1/8/2021
RL Review of 100-KE Soil Flushing Explanation of Significant Difference	1/8/2021	2/6/2021
RL Review 200-PO-1 Decisional Draft Conceptual Site Model Sampling and Analysis Plan (SAP)	1/22/2021	2/20/2021
RL Review KR-4 FY21 Parent Rebound KW SAP Addendum	1/28/2021	2/18/2021
RL Transmit 100-KE Soil Flushing Explanation of Significant Difference to EPA	2/24/2021	3/10/2021
RL Submit 200-BP-5/200-PO-1 Draft A IA RD/RAWP to Regulators	2/26/2021	3/11/2021
RL Review KR-4 FY21 KE Soil Flushing SAP	3/9/2021	4/7/2021
RL Review 100-HR-3 Decisional Draft Groundwater Rebound SAP	3/16/2021	3/26/2021

*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

December 2020
CHPRC-2020-12, 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 December, the Central Plateau Risk Management (CPRM) Aging Structures team filled approximately 76 percent of the 216-Z-9 Crib and finalized the return approach to complete stabilization of the 241-Z-361 Tank. At the Reduction-Oxidation (REDOX) facility, crews completed the installation of temporary electrical power in the north and south pipe and operation galleries, blower rooms 3 and 5, and in the west administration area. Crews at the 224B Facility initiated construction of the containment structures in order to make personnel entries into the hot cells. The Plutonium Uranium Extraction Plant (PUREX) North team entered 203A for the first time in 20 years in order to support electrical clearance investigations, as well as completed verifications of hazardous energy isolations for the 2701AB, 2714A, and 214A Buildings. In addition, the crew completed tank inspections, ultrasonic testing of pipes, radiological surveys above eight feet, and sampling within the 211A Building to support characterization efforts. Finally, at U Plant, crews navigated elevated and very difficult-to-access locations to abate 50 feet of asbestos-containing pipe insulation. The West Area Remediation Project (WARP) team completed the hazardous waste removal, demolition and debris loadout of four former mobile office trailers (MO2121, MO2122, MO2123 and MO031) in the South Trailer Village. Crews also completed the disposition of legacy diesel fuel at 234-5Z-BA and the electrical isolations at 216-ZP-1.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
21-EMS-CPRM-OBJ1-P1	Spill Prevention, Universal Waste, and Recycling Compliance	On a monthly basis, monitor and evaluate representative universal waste and recycling accumulation areas within the CPRM project.	9/30/2021	24%

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	15	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Central Plateau Risk Management

Surveillance and Maintenance (S&M)

- Completed B Plant annual surveillance.
- Radiation area remedial action deactivation and decommissioning (D&D) completed surveillance of 344 Waste Information Data System sites.

REDOX Canyon Risk Mitigation

- Completed workability for the wind tunnel excavation package.
- Completed installation of temporary electrical power in the north and south pipe and operation galleries, blower rooms 3 and 5, and in the west administration area.

Aging Structures Stabilization

- Placed 3,040 yd³ of controlled density fill out of 4,000 yd³ in the 216-Z-9 Crib (76 percent complete).

PUREX North Risk Mitigation

- Completed verifications of hazardous energy isolation for 2701AB, 2714A and 214A.
- Completed investigative walk downs in order to support the mechanical and electrical isolation indexes for 211A.
- Completed tank inspections, ultrasonic testing of pipes, radiological surveys above eight feet and sampling within 211A to support characterization efforts.
- Entered 203A in order to support electrical clearance investigations. The facility had not been entered in over 20 years.

West Area Remediation Project

- Completed hazardous waste removal, demolition and debris loadout of four former mobile office trailers (MO2121, MO2122, MO2123 and MO031) in the South Trailer Village.
- Crews completed the disposition of legacy diesel fuel at 234-5Z-BA and the electrical isolations for 216-ZP-1.

MAJOR ISSUES

Issue

Management directed a work stand down at the REDOX Canyon on October 2, 2019, to address a variety of issues, including step-off pad (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) 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. Phase I corrective actions were completed in October. Phase II corrective actions are in progress to upgrade power, lighting and temporary ventilation. Delayed personal protective equipment (PPE) certifications, procurements, and coronavirus (COVID-19) resource impacts have pushed Phase II completion into April 2021.

RISK MANAGEMENT STATUS

<p>Unassigned Risk</p> <p>Risk Passed</p> <p>New Risk</p> <p>Change</p>	<p> Opportunity realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.</p> <p> 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.</p> <p> Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.</p>	<p> Increased Confidence</p> <p> No Change</p> <p> Decreased Confidence</p>
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0040/WBS-040													
Explanation of major changes to the project monthly spotlight chart:													
Risk RL40 REDOX-0005-T, <i>Collapse of Sand Filter</i> , was removed from the spotlight chart, as it is no longer considered a key risk in fiscal year (FY) 2021.													
Realized Risks (Risks that are currently impacting project cost/schedule)													
RL40 REDOX-0008-T: 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: Mitigate Probability: Likely (75% to 90%) Worst Case Impacts: \$350K, 48 days			<p>Risk Event: A concerned citizen called a stop work, which caused delays and unplanned work necessary to address the required action.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Create and implement a phased approach to address identified concerns.</td> <td>April 2021</td> <td>88</td> </tr> <tr> <td>Upgrade temporary power/lighting and localized ventilation.</td> <td>January 2021</td> <td>60</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No major changes in December. This risk was realized in October 2019. 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. Phase I corrective actions completed in October. Phase II corrective actions are ongoing and continue to experience delays due to COVID-19 impacts to resource availability.</p>	Risk Recovery Action(s)	FC Date	%	Create and implement a phased approach to address identified concerns.	April 2021	88	Upgrade temporary power/lighting and localized ventilation.	January 2021	60
Risk Recovery Action(s)	FC Date	%											
Create and implement a phased approach to address identified concerns.	April 2021	88											
Upgrade temporary power/lighting and localized ventilation.	January 2021	60											

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0040/WBS-040													
RL40 REDOX-0013-T: 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: Somewhat likely (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>June 2021</td> <td>50</td> </tr> <tr> <td>Repair minor roof defects.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Action Assessment: 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 to reduce water intrusion. Electrical isolation activities have been delayed due to resequencing activities based on a more conservative approach. Work package revisions are in progress; however delays due to COVID-19 impacted required offsite PPE certification and procurement. PPE certification was completed by the end of December, and PPE has been routed in procurement. Impacts from COVID-19 has negatively impacted resource availability and work progress.</p>	Risk Recovery Action(s)	FC Date	%	Perform cold and dark activities to shut off building power.	June 2021	50	Repair minor roof defects.	Ongoing	N/A
Risk Recovery Action(s)	FC Date	%											
Perform cold and dark activities to shut off building power.	June 2021	50											
Repair minor roof defects.	Ongoing	N/A											
RL40 REDOX-0018-T: Ventilation System - Unexpected Design Changes	<p>Unexpected design changes of the ventilation system result in rework of planned scope, resulting in cost and schedule impacts to the project.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Somewhat likely (26% to 74%) Worst Case Impacts: \$100K, 32 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, fabrication and planning for procurement of the 202S ventilation system.</td> <td>February 2021</td> <td>90</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No major changes in December. The project team continues to integrate CPRM engineering and facility design authorities with the vendor for the objective of early detection of unexpected or emerging design changes to mitigate schedule and cost impact. Necessary procurement of replacement flexible duct connectors and factory testing has delayed final delivery, with an estimate to complete in February.</p>	Risk Recovery Action(s)	FC Date	%	Design, fabrication and planning for procurement of the 202S ventilation system.	February 2021	90			
Risk Recovery Action(s)	FC Date	%											
Design, fabrication and planning for procurement of the 202S ventilation system.	February 2021	90											
RL40 ZSS-0003-T: Latent Condition Impacts	<p>Unknowns, as found or emergent conditions impact the Z Structure stabilization efforts, resulting in in-scope unplanned work and subsequently resulting in cost and schedule impacts.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Somewhat likely (26% to 74%) Worst Case Impacts: \$500K, 16 days</p>	●	↔	<p>Risk Event: Subcontractor change orders for unknown and as-found conditions resulted in the project experiencing cost and schedule impacts. The project discovered an obstruction in the 216-Z-2 Crib that prevents access to the void space.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Review and process change orders as appropriate to mitigate cost and schedule impacts.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Research potential recovery actions for grouting 216-Z-2 Crib void space.</td> <td>January 2021</td> <td>50</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Latent conditions regarding environmental compliance, access and riser load limitations resulted in multiple change orders that have been reviewed and processed. Additionally, in October, an unknown obstruction was discovered in the 216-Z-2 Crib that prevented access to the void space to complete investigations and place grout. The project team has completed their assessment and ranked seven options to complete stabilization of 216-Z-2. Option 6, which investigates the dry well and perforate/cuts the wall, along with Option 1, which attempts to dislodge/remove the obstructions, have been determined to be the best options for completion of stabilizing 216-Z-2. The subcontractor has procured the necessary material and equipment to support implementation of Options 6 and 1. The planning team has also drafted and will soon route the necessary work change notice to support the fieldwork. Implementation of Options 6 and 1 investigations are planned for mid-January.</p>	Risk Recovery Action(s)	FC Date	%	Review and process change orders as appropriate to mitigate cost and schedule impacts.	Complete	100	Research potential recovery actions for grouting 216-Z-2 Crib void space.	January 2021	50
Risk Recovery Action(s)	FC Date	%											
Review and process change orders as appropriate to mitigate cost and schedule impacts.	Complete	100											
Research potential recovery actions for grouting 216-Z-2 Crib void space.	January 2021	50											
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)													
No critical risks identified in December.													
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
No high threat value risks identified in December.													

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0040/WBS-040										
FY2021 Key Risks										
RL40 WARP-0001-T: Regulatory Documents Delayed	<p>The approvals of regulatory documents are delayed, resulting in schedule impacts to the project.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very likely (>90%)</p> <p>Worst Case Impacts: \$0, 96 days</p>	●	↔	<p>Risk Triggers: The approvals for regulatory documents required for project execution are delayed, resulting in significant project schedule delays. The project cannot complete demolition without approval from outside agencies (i.e., Washington State Department of Ecology [Ecology]). Regulatory documents include a Removal Action Work Plan (RAWP) for the 224-T Facility and the Documented Safety Analysis for the 231-Z Facility.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Maintain close contact with regulators to accelerate document reviews/approvals</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in December. CHPRC has implemented an aggressive schedule to complete the 200 West Area Tier II structures engineering evaluation (EE)/cost analysis, action memorandum (AM), sampling analysis plan (SAP) and RAWP by the end of FY2021. The subcontractor supporting document development has expressed concern, but continues to make progress on their schedule to support completion.</p>	Mitigation Action(s)	FC Date	%	Maintain close contact with regulators to accelerate document reviews/approvals	Ongoing	N/A
Mitigation Action(s)	FC Date	%								
Maintain close contact with regulators to accelerate document reviews/approvals	Ongoing	N/A								
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in December .										

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	5.0	5.9	11.4	0.9	19.0%	(5.4)	-91.3%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance: (+\$0.9M/+19.0%)

The CM favorable schedule variance is primarily the result of performing carryover scope from FY2020. December performance for scope that was planned to complete in FY2020 has no remaining budgeted cost of work scheduled, resulting in a CM favorable schedule variance. Carryover scope is predominantly due to the RL-directed PSWO issued on March 24, 2020, and was extended through September 30, 2020.

WARP completed four trailer demolitions and received the associated performance earlier than planned based on a change in priorities/schedule, as well as performance earned on 231-Z Facility activities that carried over from the prior year. This is offset by the lack of performance on activities for 216-ZP-1 D&D, which has been pushed into the future based on demolition priority.

CM Cost Performance: (-\$5.4M/-91.3%)

The CM negative variance is attributed to a multitude of factors. Impacts from COVID-19 continue to impact cost performance at the 224B Facility. Impacts consist of increased labor inefficiencies to account for expired training necessary to perform fieldwork activities, limited PPE and revising work plans to address new head count restrictions for personnel working in the field together.

In addition, the cost variance is attributed to in-scope, unplanned work supporting the stabilization of 216-Z-2 Crib and 241-Z-361 Tank. Specifically, subcontractor support for site preparation, investigation of the structures, conveyance and ventilation system installation, project management and stabilization of 216-Z-2 and 241-Z-361.

The stabilization project was not allowed to resume until mid-June 2020, which prevented the project from completing structure investigations as planned in the original baseline (May 2020). Completing the investigation early and with time to make adjustments and develop alternatives before starting stabilization was critical to overall success. As a result, the investigation did not start until August and the project team had to develop recovery actions from as-found conditions in parallel with the stabilization effort. This impacted the ability to grout both the 216-Z-2 Crib and the 241-Z-361 Tank, resulting in multiple remobilization efforts in order to focus on grouting 216-Z-9, while recovery actions were planned for 216-Z-2 and 241-Z-361. These adjustments, remobilization and recovery efforts added significant costs while achieving performance lower than planned resulting in a negative cost variance.

Recovery actions are currently in place, and the project team forecasts stabilization of 216-Z-2 and 241-Z-361 in fiscal January. The project continues to seek and maximize opportunities to recover the schedule where attainable to stabilize both 216-Z-2 and 241-Z-361 as safely and efficiently as possible. For instance, extended shift hours, weekend work and maximizing subcontractor support such as the mixer truck drivers that will be assigned to the stabilization effort.

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	659.4	637.3	648.6	(22.1)	-3.4%	(11.2)	-1.8%	728.3	741.5	92.9	(13.2)

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance: (-\$22.1M/-3.4%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (-\$11.2M/-1.8%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (-\$13.2M/-1.8%)

The VAC is within reporting thresholds.

Contract performance work report formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

RL-0040 Nuclear Facility D&D	FY2021		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	114.1	114.1	0.0
Numbers are rounded to the nearest \$0.1 million.			

Funds/Variance Analysis

The FY2021 projected funding and spending forecast of \$114.1 million are in alignment.

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, non-enforceable target due dates and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-250F	Submit to Ecology a 3-Year Rolling Prioritized Schedule to Implement Waste Site Removal Actions	3/31/2021		3/31/2021	On schedule
M-016-257	Complete Confirmation Sampling/No Further Action for All Waste Sites as Identified in Change Control Form M-16-20-01 in FY2021	9/30/2021		9/30/2021	On schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Obtain Regulator Review of DOE/RL-2017-06, REDOX RAWP, Revision 1 Draft	7/23/2020(A)	12/17/2020(A)
RL Obtain Regulator Review of DOE/RL-2018-46, REDOX Air Monitoring Plan, Revision 1, Draft	7/23/2020(A)	12/17/2020(A)
RL Obtain Regulator Review of DOE/RL-2017-05, REDOX SAP, Revision 1 Draft	7/23/2020(A)	1/30/2021
RL Obtain Regulator Review DOE/RL-2019-37, 224T SAP, Revision 1, Draft	11/3/2020(A)	12/15/2020(A)
RL Obtain Regulator Review DOE/RL-2019-36, 224T RAWP, Revision 1, Draft	11/3/2020(A)	12/15/2020(A)
RL Review DOE/RL-2016-51, B Plant AM, Draft A	12/22/2020	1/14/2021
RL Review DOE/RL-2020-05, PUREX SAP, Draft A	12/29/2020	1/18/2021
RL Obtain Regulator Review DOE/RL-2020-04, PUREX RAWP, Draft A	1/19/2021	3/4/2021

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

December 2020
CHPRC-2020-12, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

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Vice President for
Project Technical Services

PROJECT SUMMARY

K Basin Operations (KBO)

In December, the KBO team began the Operational Acceptance Testing (OAT) for the Garnet Filter Media Retrieval System (GFMRs). A second test for the Vertical Pipe Casing (VPC) grouting mockup commenced. Data from both tests will be analyzed for lessons learned and will be used to perform the actual grouting of the VPCs at the 100K Area. A Notice to Proceed was issued to the VPC contractor to support installation of the VPC components. A ramp-up period will be required in order for the contractor to hire additional personnel and complete training and orientation before mobilizing to the Maintenance and Storage Facility (MASF) to practice the installation of the VPC components.

The 105K West Facility teams completed a replacement of the basin water treatment system IXM-4 ion exchange (IX) module, which has been staged for disposal, and completed the disassembly of the Integrated Water Treatment System strainer in the west bay, which was a crucial step in creating the necessary basin open footprint for installation of VPCs.

The team completed the electrical engineering documentation for the support trailer for the 105K East Reactor Interim Safe Storage (ISS). The baseline change request for road modifications to support work at the 105K East-ISS site was approved and implemented into the performance measurement baseline.

The Deactivation, Decommission, Decontamination, and Demolition team completed demolition of the 166K East structure, and loadout of the resulting debris will continue during the second quarter of fiscal year (FY) 2021. Demolition is underway with heavy equipment staging at 165K East, while the remaining repackaged mercury-tainted equipment continues to be removed.

The soil remediation team performed re-sloping of the 100-K-47:1 dig site, which is expected to complete in January and continued with the overburden removal at the 100-K-96, 100-K-56:3 and the 100-K-55:2 waste sites. The team received comments back from the U.S. Environmental Protection Agency (EPA) on the verification sample instruction (VSI), and began incorporating the comments into the VSI.

River Risk Management Project (RRMP)

The project continued performing essential mission-critical operations. The construction forces core teams for the general contamination area (CA)/high contamination area (HCA)/airborne radiation areas (ARAs) have completed eighteen of the 20 corrective actions for the 324 Facility Contamination Event Phase 1.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
21-EMS-KBO-OBJ1-P1	Evaluate 100K Area work activities to ensure there are no excessive water discharges to the ground and appropriate actions are being taken to minimize fugitive dust generation.	On a quarterly basis, evaluate upcoming work from the Hanford Fire Department, 100K Area decontamination and decommissioning (D&D) and soil remediation activities. Ensure the water discharge to ground requirements found in DOE/RL-97-67, <i>Pollution Prevention and Best Management Practices Plan for State Waste Discharge Permits ST 0004511, ST 4509, and ST 4510, Revision 3, and 100K-STD-OP-52370, Discharges to Ground</i> , are followed.	9/30/2021	25%
21-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.	9/30/2021	24%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Months	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	1	9	12/17/2020 – Employee slipped and fell on slippery walkway. Employee was taken to HPM Corporation, examined and released to work with no restrictions. (25622)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

100K Basin Operations

- 100K Closure Project
 - 105K West Basin Deactivation
 - Project personnel reviewed data and lessons learned from the initial VPC augering mockup test and applied the new information to the second mockup test in Conroe, Texas. The grout will cure for a month before augering for the second test.
 - Began the GFMRS OAT on December 2, 2020.
 - Completed a nondestructive assay (NDA) of Transfer Cask Assembly (TCA)-2, using data from radiological measurements of TCA-1

- o 100K Demolition
 - Completed demolition of 166K East. Debris loadout will continue into the second quarter of FY2021.
- Soil Remediation Project
 - o The soil remediation team completed re-sloping at the 100-K-47:1 waste site.
 - o Received comments from the EPA for the 116-KE-2 waste site excavation and began incorporating the comments into the VSI.

RRMP, 324 Building Disposition Project

- Continued equipment procurements for the following:
 - o Cell dams for the 324 Building in fabrication, while A Cell dams (i.e., inflation system, hoses, headers, hose assemblies/umbilicals) were delivered.
 - o Delivered Remote Excavator Arm (REA) demolition tool.
 - o Completed factory acceptance test (FAT) for water delivery system for the airlock.
 - o Modified airlock rail; fabrication awaiting CA/HCA resumption.
 - o Delivered upper REA replacement.
 - o Bin offset recovery tool, at acquisition verification services (AVS).
- Continued training of the essential mission-critical operations and construction forces core teams for work in CA/HCA/ARAs using the new work-resumption training classes.

Project Technical Services

- Training and Procedures
 - o Published a change to procedure 324-PRO-OP-53962, *Hot Cell Operations*, to add updates to the hydraulic pressure unit pre-use inspection checklist.
 - o Completed a training needs analysis for airlock work at 324 Facility for fieldwork supervisors, radiological control and subcontract personnel. The analysis confirmed that there is a need for training, and course development is under way.

MAJOR ISSUES

Issue

TCA-1 is staged outside of the 105K West Facility and is awaiting disposition, and TCA-2 is staged inside the Fuel Transfer System (FTS) annex attached to the north side of the 105K West Basin. Both 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 some unknown amount of 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. 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 VPC (if not grouted yet) or pumped into a separately approved container for disposition. If this condition does not exist, then the residual water and material can be solidified and the TCA transferred to the Environmental Restoration Disposal Facility 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 an NDA performed on a shielded IX module staged west of 105K West in December 2019 through January 2020 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 IX module was not deemed successful due to the complex configuration of the shielded module, actinide peaks were identified through the heavy shielding, indicating the NDA is a viable method for determining if residual solids/sludge contained within TCA-1 need to be removed versus solidified without performing intrusive characterization. The NDA commenced at the support trailer and the area around TCA-1. Initial measurements have been taken for TCA-1, and the results are being compiled and reviewed. Following review of the results, NDA personnel performed NDA on TCA-2. A final report on the effectiveness and findings of this NDA effort is expected in January. Results of the NDA will be used to support FY2022 planning and engineering activities for dispositioning the contents of both TCAs.

Issue

Review of CHPRC compliance with DOE Order 460.1D (see Operational Awareness report DOE-ASMT-2020-5110) identified noncompliance in the application of DOE/RL-2001-36, Revision 2, *Hanford Sitewide Transportation Safety Document*, (TSD) to Hazard Category (HC)-2 and HC-3 facilities. The current revision of DOE/RL-2001-36 does not provide direction to conduct hazard categorization for shipments. At this time, only shipments categorized as less than HC-3 may be shipped under the TSD. The planned shipments of GFMRS are expected to be above HC-3 categorization.

Corrective Action

Implement updated TSDs that ensure compliance with DOE O 460.1D nuclear safety requirements for shipment of retrieved GFMRS.

Status

CHPRC and RL are evaluating approaches to develop appropriate safety basis documentation for resumption of HC-3 and HC-2 onsite shipments. Different approaches are being considered, and a consensus is building in support of updating the TSD and individual facility/activity requirements documents such as Special Packaging Authorizations or One Time Requests for Shipment to incorporate the DOE O 460.1D requirements. At this time, schedule impact cannot be known with certainty until the path forward is completed and schedule committed. However, schedule impact of three to six months is considered likely. The KBO project has evaluated this transportation safety concern as it applies to KBO and determined that this does not present a Potential Inadequacy to the Safety Analysis (PISA) for the 100K Area. An evaluation of a PISA applicable to central site Transportation Safety is underway as of this fiscal month closing.

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 Building practices as documented in the Root Cause Analysis and associated Corrective Action Plan 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 activities and Post-Start corrective actions.

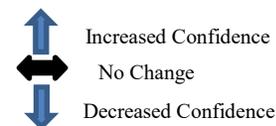
Status

Eighteen of the 20 Phase 1 prestart corrective actions have been completed, with the general HCA/ARA activities anticipated to start on January 8, 2021.

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 spotlight chart: Changes to the monthly report are as follows: Risk RL41 KWB-0008-T, <i>105KW Basin – Failure of Critical VPC Components During Operations</i> , was added to the FY2021 Key Risk section, as identified by the FY2021 Risk Analysis results.																						
Realized Risks (Risks that are currently impacting project cost/schedule)																						
RL41 RCC-0008-T: 300-296 Failure of a Radiochemical Engineering Cells (REC) Cranes (B Cell, A Cell, A/D & Airlock, and/or Cask Handling Area [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: Mitigate Probability: Somewhat likely (26% to 74 %) Worst Case Impacts: \$3,000K, 96 days			Risk Event: In August 2019, the REC A/D Crane failed during operations. <table border="1" style="width: 100%; border-collapse: collapse;"> <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>Vendor delivery to AVS – B Cell 10-ton crane.</td> <td style="text-align: center;">3/31/2021</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Perform remote survey and radiological characterization of A/D Crane.</td> <td style="text-align: center;">7/28/2021</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Perform follow-up A/D Crane mechanical investigation.</td> <td style="text-align: center;">9/1/2021</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Perform follow-up A/D Crane mechanical Repairs.</td> <td style="text-align: center;">10/28/2021</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Perform A/D Crane characterization.</td> <td style="text-align: center;">11/4/2021</td> <td style="text-align: center;">0</td> </tr> </tbody> </table> Recovery Assessment: No significant changes in December. Additional radiological characterization/investigation, surveys and decontamination efforts will be performed on the A/D Crane to verify mechanical and electrical components necessary to perform repairs. Procurement and fabrication of decontamination equipment has been initiated to decrease further impacts to the project. The vendor is also in the process of fabricating the B Cell Crane bridge to assist with installation. An integrated FAT of the crane components will precede delivery. As a result, the current forecast date for delivery to AVS is March 31, 2021.	Recovery Action(s)	FC Date	%	Vendor delivery to AVS – B Cell 10-ton crane.	3/31/2021	0	Perform remote survey and radiological characterization of A/D Crane.	7/28/2021	0	Perform follow-up A/D Crane mechanical investigation.	9/1/2021	0	Perform follow-up A/D Crane mechanical Repairs.	10/28/2021	0	Perform A/D Crane characterization.	11/4/2021	0
Recovery Action(s)	FC Date	%																				
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RL41 RCC-0027-T: 300-296 Radiation & Contamination Experienced During REC Cell Operations	During REC cell cleanout (e.g., soil/debris removal, waste handling and facility modifications), the 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: Mitigate Probability: Likely (75% to 90%) Worst Case Impacts: \$400K, 70 days			Risk Event: On November 14, 2019, low-level contamination was detected on an individual after exiting a radiological step-off pad. <table border="1" style="width: 100%; border-collapse: collapse;"> <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 project resumption activities – general CA/CHA.</td> <td style="text-align: center;">1/8/2021</td> <td style="text-align: center;">92</td> </tr> <tr> <td>Return to Room 18 work – resumption actions.</td> <td style="text-align: center;">2/9/2020</td> <td style="text-align: center;">15</td> </tr> <tr> <td>Return to airlock work – resumption actions.</td> <td style="text-align: center;">4/13/2021</td> <td style="text-align: center;">15</td> </tr> </tbody> </table> Recovery Assessment: Resuming work scope in radiologically controlled areas (RCAs) within the building is pending resolution of mitigation actions performed under three distinct group sets: general controlled area, Room 18 and the Airlock. In addition to COVID-19 resource impacts/availability of remaining resources, acquisition of personal protective equipment (PPE) for Room 18 (vendor priority) delayed performing resumption activities. Upon successful completion of resumption actions and training, each group set will resume fieldwork scope.	Recovery Action(s)	FC Date	%	Perform project resumption activities – general CA/CHA.	1/8/2021	92	Return to Room 18 work – resumption actions.	2/9/2020	15	Return to airlock work – resumption actions.	4/13/2021	15						
Recovery Action(s)	FC Date	%																				
Perform project resumption activities – general CA/CHA.	1/8/2021	92																				
Return to Room 18 work – resumption actions.	2/9/2020	15																				
Return to airlock work – resumption actions.	4/13/2021	15																				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																						
No critical risks are identified in <u>December</u> .																						

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0041/WBS-041																
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
RL41 RCC-0024-T: 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 show that 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: Mitigate Probability: Somewhat likely (24% to 50%) Worst Case Impacts: \$3,318K, 128 days	●	↔	Risk Event: Unexpected contamination is found while performing structural modification activities. <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Continued resumption/proficiency training for Room 18.</td> <td>6/8/2021</td> <td>0</td> </tr> </tbody> </table> Mitigation Assessment: No significant changes in December. The project continues to work resumption training and anticipates further reducing the probability of this risk once proficiency training is complete. Increased PPE and additional control measures were successfully implemented.	Mitigation Action(s)	FC Date	%	Continued resumption/proficiency training for Room 18.	6/8/2021	0						
Mitigation Action(s)	FC Date	%														
Continued resumption/proficiency training for Room 18.	6/8/2021	0														
RL41 RCC-0001-T: 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/RCA), resulting in unplanned work and subsequently, cost and schedule impacts. Risk Handling Strategy: Mitigate Probability: Medium (26% to 74%) Worst Case Impacts: \$1,116.5K, 128 days	●	↔	Risk Trigger Metric: The 324 Building and REC cells have been used for numerous missions since 1965. Available drawings may not reflect the actual conditions in the building or REC cells. Additionally, debris may obscure in-cell features making removal more complex than planned. Radiological control hazards may be more extensive than assumed, increasing the complexity of facility modifications necessary for soil removal activities. <table border="1"> <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 December. 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														
RL41 RCC-0014-T: 300-296 Cell Sealing, Micropile Installation, Interference Removal, Core Drilling and Soil Stabilization Takes Longer Than Planned	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. Risk Handling Strategy: Mitigate Probability: Somewhat likely (26% to 74%) Worst Case Impacts: \$3,317.6K, 96 days	●	↔	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. <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>12/19/2019</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 micropile foundation load testing.</td> <td>2/16/2021</td> <td>0</td> </tr> </tbody> </table> Mitigation Assessment: Additional testing to verify compatibility with grouting material will aid in mitigating this risk from occurring. The FC date for performing micropile foundation load testing was delayed to support revised work instructions that are pending results from adjacent potholing work scope.	Mitigation Action(s)	FC Date	%	Mobilize and train a second soil stabilization crew.	12/19/2019	100	Perform pilot-hole drilling to aid as a mitigation action for micropile installation.	Ongoing	N/A	Perform micropile foundation load testing.	2/16/2021	0
Mitigation Action(s)	FC Date	%														
Mobilize and train a second soil stabilization crew.	12/19/2019	100														
Perform pilot-hole drilling to aid as a mitigation action for micropile installation.	Ongoing	N/A														
Perform micropile foundation load testing.	2/16/2021	0														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0041/WBS-041																
FY2021 Key Risks																
RL41 RCC-0009-T: 300-296 Failure of Cell Shield Door	<p>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.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Unlikely (10% to 25%) Worst Case Impacts: \$460K, 96 days</p>	●	↔	<p>Risk Trigger Metric: The 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.</p> <table border="1"> <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>6/9/2021</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in December. To maintain REC shield door operability, engineering evaluations were conducted, resulting in the implementation of monthly PMs and the procurement of spare parts. These mitigation efforts will reduce the likelihood of cost and schedule consequences, as applicable.</p>	Mitigation Action(s)	FC Date	%	Perform B Cell and D Cell door pin isolations.	6/9/2021	0						
Mitigation Action(s)	FC Date	%														
Perform B Cell and D Cell door pin isolations.	6/9/2021	0														
RL41 RCC-0007-T: 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, REAs, through supports, cell dams, transfer mechanism and cameras and lights.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Unlikely (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 MSMs and storage carts.</td> <td>12/30/2019</td> <td>100</td> </tr> <tr> <td>Procure spare upper REA.</td> <td>12/10/2020</td> <td>100</td> </tr> <tr> <td>Procure universal cutting tool.</td> <td>1/21/2021</td> <td>95</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. While the spare upper REA was delivered, the slight delay in the FC finish date for receipt of the Universal Cutting Tool was requested by the vendor and does not impact critical path.</p>	Mitigation Action(s)	FC Date	%	Procure MSMs and storage carts.	12/30/2019	100	Procure spare upper REA.	12/10/2020	100	Procure universal cutting tool.	1/21/2021	95
Mitigation Action(s)	FC Date	%														
Procure MSMs and storage carts.	12/30/2019	100														
Procure spare upper REA.	12/10/2020	100														
Procure universal cutting tool.	1/21/2021	95														
RL41 RCC-0029-T: Increased Radiation 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: Mitigate</p> <p>Probability: Somewhat likely (25% to 74%) Worst Case Impacts: \$400K, 72 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 as low as reasonably achievable controls.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Procurement of specialized containers – GC/44-inch bins.</td> <td>1/25/2021</td> <td>92</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in December. 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 as low as reasonably achievable controls.	Ongoing	N/A	Procurement of specialized containers – GC/44-inch bins.	1/25/2021	92			
Mitigation Action(s)	FC Date	%														
Continue the use of increased shielding and as low as reasonably achievable controls.	Ongoing	N/A														
Procurement of specialized containers – GC/44-inch bins.	1/25/2021	92														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
RL-0041/WBS-041																			
RL41 KWB-0008-T: 105KW Basin – Failure of Critical VPC Components During Operations	<p>Failure of critical components or equipment associated with the operation of the VPC sparging station, tipping assemblies and/or water sampler results in schedule delays and additional costs to correct.</p> <p>Risk Handling Strategy: Mitigate</p> <p>Probability: Unlikely (10% to 25%)</p> <p>Worst Case Impacts: \$105K, 40 days</p>	●	↔	<p>Risk Trigger Metric: The project experiences a mechanical issue associated with the VPC debris washing, loading and sampling operations that results in downtime and additional costs to plan and replace broken parts, or sparge-sampling NDA is inconclusive or inoperable, triggering a need for additional offsite sample analysis. Any repairs or modifications would require a new work package to be developed and off-the-shelf replacement parts to be ordered and received or custom parts to be manufactured, tested and delivered.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Subcontractor fabrication and testing.</td> <td>3/19/2020</td> <td>100</td> </tr> <tr> <td>CHPRC Quality Assurance review and acceptance of VPC components.</td> <td>7/9/2020</td> <td>100</td> </tr> <tr> <td>Underwater fit-up testing at the Maintenance and Storage Facility (MASF).</td> <td>TBD</td> <td>N/A</td> </tr> <tr> <td>Project Technical Services to perform Construction Acceptance Testing (CAT) of full system before turnover to operations.</td> <td>TBD</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: Fabrication and testing of the VPC components have been completed by the fabrication subcontractor and reviewed by CHPRC Quality Assurance. Testing of the loading, grouting and augering is being conducted to verify if the VPC will function as intended during retrieval, which will allow any modifications needed to be identified. The next phase will be to complete underwater fit-up testing at MASF and CAT of the fully assembled system in the 105K West Area Basin to verify proper operation at turnover. Mitigation actions will continue to be reviewed and updated, as appropriate.</p>	Mitigation Action(s)	FC Date	%	Subcontractor fabrication and testing.	3/19/2020	100	CHPRC Quality Assurance review and acceptance of VPC components.	7/9/2020	100	Underwater fit-up testing at the Maintenance and Storage Facility (MASF).	TBD	N/A	Project Technical Services to perform Construction Acceptance Testing (CAT) of full system before turnover to operations.	TBD	N/A
Mitigation Action(s)	FC Date	%																	
Subcontractor fabrication and testing.	3/19/2020	100																	
CHPRC Quality Assurance review and acceptance of VPC components.	7/9/2020	100																	
Underwater fit-up testing at the Maintenance and Storage Facility (MASF).	TBD	N/A																	
Project Technical Services to perform Construction Acceptance Testing (CAT) of full system before turnover to operations.	TBD	N/A																	
RL41 SR-0004-T: 100K 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: Mitigate</p> <p>Probability: Somewhat likely (26% to 74%)</p> <p>Worst Case Impacts: \$1,007K, 32 days</p>	●	↔	<p>Risk Trigger Metric: During soil excavation activities, different site conditions including underground utilities (i.e., wiring, fiber cable, pipes, asbestos), 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 December. 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 December .																			

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	7.4	9.4	9.5	2.0	27.1%	(0.1)	-1.5%

Numbers rounded to the nearest \$0.1 million.

CM Schedule Performance (+2.0M/+27.1%)

The CM positive schedule variance for RRRMP is due to the progression of the resumption training for general CAs and the start of the micropile foundation load testing that were planned to be completed in prior periods.

The positive schedule variance of \$0.4 million for the River Zone (100K Area) is due to recovery of waste site overburden removal and completion of demolition of 166K East. Debris loadout will continue into second quarter FY2021.

CM Cost Performance (-\$0.1M/-1.5%)

The CM cost variance is within reporting thresholds

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	830.9	804.9	808.5	(26.0)	-3.1%	(3.6)	-0.4%	919.8	931.6	123.2	(11.8)

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$26.0/-3.1%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance (-\$3.6/-0.4%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (-\$11.8/-1.3%)

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	FY2021		Variance
	Projected Funding	Spending Forecast	
RL-0041 Spending Forecast	146.1	143.4	2.7
Numbers are rounded to the nearest \$0.1 million.			

Funds/Variance Analysis

The FY2021 variance of \$2.7 million reflects projected funding of \$146.1 million and a spending forecast of \$143.4 million.

Critical Path Analysis

Critical path analysis can be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of PBS 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-093-27-T01	Initiate Earthwork for the Construction of the 105-KE Safe Storage Enclosure	9/30/2021		To be determined (TBD)	At risk
M-016-85A	Complete Remote Excavation of 300-296 Waste Site	9/30/2021		11/10/2023	At risk
M-016-86	Complete Remedial Actions for 618-11 Burial Ground in accordance with DOE/RL-2014-13-ADD1	9/30/2021		TBD	At risk

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

December 2020
CHPRC-2020-12, 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 December reporting period, FFTF continued to maintain essential mission-critical operations.

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

- Neared completion of regulator comment incorporation and public distribution for the Argon System *Resource Conservation and Recovery Act of 1976* addendum.
- Completed 50 percent of the 480D/P-16 pump circuitry modification.

MAJOR ISSUES

None currently identified

RISK MANAGEMENT STATUS

None currently identified.

PROJECT BASELINE PERFORMANCE

Current Month (CM)

(\$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 (%)
Total	0.2	0.2	0.2	(0.0)	-11.0%	(0.0)	-9.0%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance: (-\$0.0M/-11.0%)

The CM schedule variance is within reporting thresholds.

CM Cost Performance: (-\$0.0M/-9.0%)

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	32.8	32.6	27.5	(0.2)	-0.7%	5.1	15.7%	35.5	30.2	2.7	5.3

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance: (-\$0.2M/-0.7%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (+\$5.1M/+15.7%)

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

Variance at Completion: (+\$5.3M/+14.8%)

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	FY2021		Variance
	Projected Funding	Spend Forecast	
Spending Forecast	4.4	3.4	0.9
Numbers are rounded to the nearest \$0.1 million.			

Funds Analysis

The fiscal year (FY) 2021 variance of \$0.9 million reflects funding of \$4.4 million and a spending forecast of \$3.4 million.

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



December 2020
CHPRC-2020-12, 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**

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 / 11 / 23										
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020 / 12 / 20										
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 7,020,614	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 340,301	d. TARGET PROFIT/FEE 306,330	e. TARGET PRICE 7,326,944	f. ESTIMATED PRICE 7,623,246	g. CONTRACT CEILING 7,326,944	h. ESTIMATED CONTRACT CEILING 7,623,246									
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. WORST CASE 7,339,216		7,357,915		41,000		b. TITLE Prime Contract Compliance Manager										
a. BEST CASE 7,274,089						c. SIGNATURE										
c. MOST LIKELY 7,316,916						d. DATE SIGNED (YYYYMMDD)										
8. PERFORMANCE DATA																
CAPN.PBS ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	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)		SCHEDULE (10)	COST (11)						
RL-0011 Nuclear Mat Stab & Disp PFP	3,008	828	593	-2,181	234	1,145,202	1,133,071	1,244,315	-12,131	-111,244	0	0	0	1,152,752	1,264,732	-111,979
RL-0012 SNF Stabilization & Disp	0	0	0	0	0	759,593	759,593	729,813	0	29,780	0	0	0	759,593	729,813	29,780
RL-0013 Solid Waste Stab & Disp	11,299	11,761	12,626	462	-865	1,713,434	1,693,440	1,606,400	-19,993	87,040	0	0	0	1,860,289	1,773,436	86,852
RL-0030 Soil &Water Rem-Grndwtr/Vadose	6,925	10,421	7,597	3,496	2,824	1,775,765	1,761,111	1,701,434	-14,654	59,677	0	0	0	1,861,850	1,802,748	59,103
RL-0040 Nuc Fac D&D - Remainder Hanfrd	4,990	5,938	11,361	948	-5,422	659,435	637,338	648,570	-22,098	-11,233	0	0	0	728,300	741,517	-13,217
RL-0041 Nuc Fac D&D - RC Closure Proj	7,391	9,397	9,535	2,006	-138	830,855	804,884	808,461	-25,970	-3,577	0	0	0	919,789	931,618	-11,830
RL-0042 Nuc Fac D&D - FFTF Proj	170	151	165	-19	-14	32,824	32,582	27,481	-241	5,101	0	0	0	35,484	30,226	5,258
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	33,783	38,496	41,877	4,714	-3,380	6,917,108	6,822,020	6,766,475	-95,088	55,545	0	0	0	7,318,056	7,274,089	43,967
f. MANAGEMENT RESERVE														42,827		
g. TOTAL	33,783	38,496	41,877	4,714	-3,380	6,917,108	6,822,020	6,766,475	-95,088	55,545	0	0	0	7,360,883		
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 / 11 / 23	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020 / 12 / 20	
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 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	975	864	916	-112	-53	115,917	115,848	107,081	-69	8,767	0	0	0	126,693	118,915	7,778		
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	266	0	-266	1,111	1,111	78,135	0	-77,024	0	0	0	1,111	78,135	-77,024		
37 - Resource Mgmt & Strategic Intg	90	90	59	0	31	10,210	10,210	6,759	0	3,451	0	0	0	11,223	7,774	3,449		
3B - PPF Closure Project	4,994	4,116	5,297	-878	-1,181	1,084,876	1,064,598	1,182,477	-20,278	-117,880	0	0	0	1,112,935	1,233,474	-120,539		
3C - Waste & Fuels Management Project	8,489	8,587	8,959	98	-372	1,486,138	1,468,342	1,373,021	-17,797	95,320	0	0	0	1,605,837	1,508,554	97,283		
3D - Soil & Groundwater Remediation	5,926	9,534	6,644	3,608	2,890	1,557,741	1,543,156	1,474,991	-14,585	68,165	0	0	0	1,632,787	1,564,207	68,581		
3G - K Basin Oper & Plateau Remediation Project	4,035	4,419	5,605	384	-1,186	1,178,738	1,169,440	1,113,762	-9,298	55,678	0	0	0	1,228,925	1,175,745	53,180		
3H - River Risk Management Project	6,120	8,107	7,462	1,987	645	386,164	367,295	371,108	-18,869	-3,814	0	0	0	451,552	463,269	-11,717		
3K - Central Plateau Risk Reduction	3,153	2,780	6,668	-373	-3,889	619,335	605,143	605,546	-14,192	-403	0	0	0	670,114	670,420	-306		
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)	33,783	38,496	41,877	4,714	-3,380	6,917,108	6,822,020	6,766,476	-95,087	55,544	0	0	0	7,318,056	7,274,089	43,967		
f. MANAGEMENT RESERVE														42,827				
g. TOTAL	33,783	38,496	41,877	4,714	-3,380	6,917,108	6,822,020	6,766,476	-95,087	55,544	0	0	0	7,360,883				

CONTRACT PERFORMANCE REPORT													Form Approved						
FORMAT 3 - BASELINE													OMB No. 0704-0188						
DOLLARS IN THOUSANDS													4. REPORT PERIOD						
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 NO YES X 9/18/2009			a. FROM: 2020/11/23 b. TO: 2020/12/20									
5. CONTRACT DATA																			
a. ORIGINAL NEGOTIATED COST \$4,312,366			b. NEGOTIATED CONTRACT CHANGE \$2,708,247		c. CURRENT NEGOTIATED COST (A + B) \$7,020,614		d. ESTIMATED COST AUTH UNPRICED WORK \$340,301		e. CONTRACT BUDGET BASE (C + D) \$7,360,915		f. TOTAL ALLOCATED BUDGET \$7,360,883		g. DIFFERENCE (E - F) \$32						
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2021		k. CONT COMPLETION DATE 9/30/2021				l. EST COMPLETION DATE 9/30/2021								
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)	FY21 (18)	UNDISTRIB BUDGET (19)	TOTAL BUDGET (20)
			+1 Jan-21 (4)	+2 Feb-21 (5)	+3 Mar-21 (6)	+4 Apr-21 (7)	+5 May-21 (8)	+6 Jun-21 (9)											
a. PM BASELINE (BEGIN OF PERIOD)	6,883,325	41,517	37,512	39,236	38,847	53,161	44,013	40,429	3,391,477	391,653	471,323	504,826	485,028	470,649	563,065	531,205	505,352	0	7,314,577
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																			
BCR-013-21-002R0 - W-135 MCSC Project Cask Storage System Fabrication Schedule																	0	0	
BCR-030-21-003R0 - Incorporate Opportunistic SAP for M24 Wells																	196	196	
BCR-030-21-004R0 - MR Draw for ZP1 Well Drilling Change in Conditions																	222	222	
BCR-040-21-002R0 - 200-MG-1 Waste Sites in Support of TPA M-016-257																	1,809	1,809	
BCR-040-21-003R0 - MR Draw for Custom Tools for Stabilization of 216-Z-2 Crib																	259	259	
BCR-041-21-002R0 - Add FY2021 100-KE Reactor ISS Scope																	995	995	
BCR-PRC-21-005R0 - FY2021 Realignment of Management Reserve - OA																	0	0	
BCRA-PRC-21-007R0, HPIC Updates December 2020																	0	0	
c. PM BASELINE (END OF PERIOD)	6,917,108	33,783	38,026	39,387	39,016	53,720	44,734	40,924	3,391,477	391,653	471,323	504,826	485,028	470,649	563,065	531,205	508,831	0	7,318,056
7. MANAGEMENT RESERVE																42,827			
8. TOTAL																7,360,883			

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) 2020 / 11 / 23	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020 / 12 / 20	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <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)												AT COMPLETION (15)	
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS							
			+1 JAN 2021 (4)	+2 FEB 2021 (5)	+3 MAR 2021 (6)	+4 APR 2021 (7)	+5 MAY 2021 (8)	+6 JUN 2021 (9)	JUL 2021 (10)	AUG 2021 (11)	SEP 2021 (12)	OCT 2021 (13)	ATCOMPLETE (14)			
300 - Office of the President	25	2,377	16	13	13	13	13	13	13	13	13	13	13	-	-	2,495
303 - Internal Audit	4	655	4	4	5	5	5	5	5	5	5	5	5	-	-	697
304 - General Counsel	4	604	4	4	4	4	4	4	4	4	4	4	4	-	-	640
32 - Safety Health Security & Quality	64	9,359	64	68	68	68	68	68	68	68	68	68	68	-	-	9,968
34 - Env Program & Strategic Plng	42	6,385	48	50	48	44	43	45	43	46	45	45	45	-	-	6,795
35 - Business Services	53	8,855	54	55	61	61	65	66	66	66	65	65	65	-	-	9,414
36 - Prime Contract & Proj Integr	95	8,913	37	39	40	41	41	41	41	41	41	41	41	-	-	9,277
37 - Resource Mgmt & Strategic Intg	42	3,930	45	45	45	45	45	45	45	45	45	45	45	-	-	4,332
38 - Project Technical Services	38	6,953	41	42	42	42	42	42	42	42	42	42	42	-	-	7,327
38 - PFP Closure Project	196	55,954	208	192	181	192	195	182	177	208	185	83	55	55	57,813	
3C - Waste & Fuels Management Project	394	63,383	394	423	418	409	415	411	415	413	401	9	25	9	67,117	
3D - Soil & Groundwater Remediation	233	45,953	233	247	250	245	252	258	256	254	226	64	67	64	48,306	
3G - K Basin Oper & Plateau Remediation Project	188	39,223	206	204	201	210	203	207	201	215	208	39	116	39	41,233	
3H - River Risk Management Project	201	10,235	210	220	216	219	221	219	217	214	215	3	2	3	12,191	
3K - Central Plateau Risk Reduction	233	24,223	240	216	216	239	228	224	218	222	220	134	485	134	26,866	
g. TOTAL DIRECT	1,813	287,003	1,804	1,823	1,807	1,836	1,839	1,829	1,810	1,856	1,781	331	751	331	304,470	

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

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT

FORMAT 5 - Explanations and Problem Analysis

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) 2020/11/23			
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER DE-AC06-08RL14788		b. PHASE		b. TO (YYYYMMDD) 2020/12/20			
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE 2009/09/18 NO YES X					

	BCWS	BCWP	ACWP	SV in \$	SV in %	CV in \$	CV %	SPI	CPI
Current:	33,783	38,496	41,877	4,714	14.0%	(3,380)	-8.8%	1.14	0.92
Cumulative:	6,917,108	6,822,020	6,766,476	(95,088)	-1.4%	55,545	0.8%	0.99	1.01
	BAC	EAC	VAC in \$	VAC in %	TCPI				
At Complete:	7,318,056	7,274,089	43,967	0.6%	0.98				

Explanation of Variance/Description of Problem:

Current Period Schedule and Cost Variance:

The current month (CM) positive schedule variance is primarily the result of schedule recovery at S&GRP for the delivery and placement of the IX train and recovery in sampling that was a result from a reduction in requirements. Additionally, there was significant schedule recovery for the resumption of training for general contaminated areas in preparation for readiness in the 300 Area. These schedule variances were partially offset by demolition delay at PFP. Due to the worldwide response to COVID-19 the reliability of PPE supply is uncertain, high-risk activities requiring significant use of PPE like PFP have not resumed as planned.

The CM negative cost variance is primarily due to higher than planned costs for the stabilization of the 216 Z 2 Crib and the 241-Z-361 Tank that was a result from unexpected field conditions including an obstruction in the void space to be grouted. At CPRM, REDOX experienced negative cost variance on corrective actions during the Phase 2 addressing of work conditions due to more conservative work controls. B Plant was impacted by the unplanned procurement of a portable criticality monitor and impacts of COVID-19 on labor resources. These variances were partially offset by the S&GRP positive cost variances for the procurement of the IX train and reduced sampling costs due to reduced requirements.

Cumulative Schedule Variance: The variance is within reporting thresholds.

Cumulative Cost Variance: The variance is within reporting thresholds.

Impact:

Current Period Schedule: The current month schedule variance is not expected to impact the overall contract schedule.

Current Period Cost: Cost impacts are being estimated and will be incorporated in the project estimate to complete (ETC)

Cumulative Schedule: N/A

Cumulative Cost: N/A

Corrective Action:

Current Period Schedule: No corrective actions have been identified.

Current Period Cost: No corrective action necessary.

Cumulative Schedule: N/A

Cumulative Cost: N/A

Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):

CHPRC continues to track completion of the contract within budget. Currently, a variance at completion of \$44.0 million is projected, with an additional \$42.8 million of management reserve (MR), for a total positive variance of \$86.8 million. For December, the project was 14.0 percent ahead of schedule and 8.8 percent over planned cost. Contract to date the project was 1.4 percent behind schedule and 0.8 percent under planned cost.

There was no difference between the Contract Budget Base and the Total Allocated Budget on Format 3 for the month of December. The \$32K delta is a result of rounding over time for implementation of multiple change order definitizations.

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

Eight BCRs were implemented in the current period:

- BCR-013-21-002R0, W-135 MCSC Project Cask Storage System Fabrication Schedule Re-Plan
- BCR-030-21-003R0, Incorporate Opportunistic SAP for M24 Well
- BCR-030-21-004R0, MR Draw for ZP1 Well Drilling Change in Conditions
- BCR-040-21-002R0, 200-MG-1 Waste Sites in Support of TPA M-016-257
- BCR-040-21-003R0, MR Draw for Custom Tools for Stabilization of 216-Z-2 Crib
- BCR-041-21-002R0, Add FY2021 100-KE Reactor ISS Scope
- BCRA-PRC-21-007R0, HPIC Updates December 2020
- BCR-PRC-21-005R0, FY2021 Realignment of Management Reserve - OA

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 +\$44.0million, +.06% and is within reporting thresholds.

Format 1 and 3 Contract Data:

Contract Price Adjustments

CPS - In Process		
	Total Authorized Unpriced Work	\$340,301.0
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	\$340,301.0
Grand Total Adjustments		

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	2021	N/A

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
BCR-030-21-004R0	<i>MR Draw for ZP1 Well Drilling Change in Conditions</i>	RL-0030	2021	(\$221.8K)
BCR-040-21-003R0	<i>MR Draw for Custom Tools for Stabilization of 216-Z-2 Crib</i>	RL-0040	2021	(\$258.7K)
BCR-PRC-21-005R0	<i>FY2021 Realignment of Management Reserve – OA</i>	RL-0011 RL-0013 RL-0030 RL-0040 RL-0041 RL-0042	2021	\$0.00

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2021	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 Controls Staff	Date: 12/16/2020	Approved by:	Date:
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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

December 2020
CHPRC-2020-12, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

J. A. Lerch
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

PROGRAM SUMMARY

Project Services and Support functional activities continue to provide support and technical services to all CH2M HILL Plateau Remediation Company (CHPRC) projects as well as central management of crosscutting services. This section is reported quarterly.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
21-EMS-ADMIN-OBJ1-P1	Reduce energy intensity.	Increase facility occupancy rates to greater than 88 percent by compressing occupancy and vacating underutilized facilities. Occupancy compression to be maintained through disposition of buildings or square footage reduction.	9/30/2021	10%
21-EMS-PTS-OBJ1-P1	Spill prevention/waste minimization/pollution prevention.	Document quarterly surveillances on a work site assessment (WSA).	9/30/2021	25%
21-EMS-PTS-OBJ2-P1	Perform chemical storage inspections on each chemical storage location under Project Technical Services (PTS) control.	Findings and recommendations will be presented to PTS management quarterly.	9/30/2021	25%

TARGET ZERO PERFORMANCE

	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	3	11/17/20 - Employee was completing janitorial duties when they experienced a bug bite. The employee received first aid treatment at HPM Corporation. (25615)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Safety, Health, Security, and Quality (SHS&Q)

- One first aid injury reported during this quarter in the functional groups.
- **Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:**
 - Generated Condition Report (CR-2020-1566) to capture issue in Employee Job Task Analysis help document regarding noise exposure limit and inclusion to Hearing Conservation Program.
 - Performed assessment on Contractor Safety Process, SHS&Q-2021-WSA-24047.
 - Developed a draft standard for Use of Heavy Equipment Safety Requirements for Shearing/Hammering and placed it into the review process.
 - Supported Central Plateau Risk Management (CPRM) project serving as Senior Supervisory Watch.
 - Submitted Statement of Work (SOW) and Acquisition Planning Notice for rebid of IH laboratory contracts.
 - Continued IH program improvements with the first two sessions of revised IH Professional training course with 100 percent of target audience completed.
 - Attended three-part webinar on IH Exposure Assessment Strategies.
 - Completed quarterly assessment of information quality recorded and reported to the Computerized Accident/Incident Reporting System database, SHS&Q-2021-WSA-26278.
 - Completed four Safety Prequalification Determination worksheets for subcontractors.
 - Attended committee and subcommittee meetings for five sitewide programs.
 - Submitted response to the U.S. Department of Energy (DOE), Richland Operations Office (RL) request for a corrective actions plan for CHPRC review in response to the Office of Inspector General report on respiratory protection and prepared initial Condition Response and Resolution System (CRRS) item with corrective actions.
 - Submitted OH Qualification Card proposed revision for OS&IH project review and comment.
 - Participated in the DOE-CAP Accreditation Program and Data Quality Work Group meeting.
 - Completed assessments at two projects on winter safety preparation, 324-2021-WSA-27594, KBO-2021-WSA-26773.
 - Completed an assessment on sanitization and health monitoring stations, 324-2021-WSA-27672.
 - Completed an assessment of implementation of confined space requirements, CPRM-2021-WSA-24726.
 - Coordinated with Radiological Control (RadCon) to resolve questions relating to labeling of IH samples sent to offsite laboratories.
 - Provided status of open Site Wide Industrial Hygiene Database items (e.g., surveys, assessments) in preparation for transition.
- **Radiological Control accomplishments:**
 - Radiological Control Technician (RCT) trainees – continued process to evaluate knowledge and skill retention.
 - Conducted monthly RL ‘Stoplight’ meeting to discuss RadCon performance.
 - Conducted monthly RadCon managers’ presentations to RL.
 - Continued improving, troubleshooting and testing of Sentinel software and personnel access issues.
 - Completed quarterly RadCon Leadership Meeting.
 - Conducted Technical Evaluation Development Briefing with radiological engineers/health physicists.
 - Continued to work with Mission Support Alliance, LLC (MSA) to resolve Survey Simple software issues.

- o Completed evaluation for new sealed-source control database using Sentinel Software.
- o Commenced migration of Radioactive Source information into the Sentinel Source Control Testing and Production Modules.
- o Commenced 2020 update of Radiological Sources into the DOE Radiological Source Registry and Tracking Database.
- o Completed evaluation of the Smear, Air, Lapel Tool revision.
- o Continued to seek qualified candidates to support health physicist and management roles within Radiation Protection at program and project levels, including participation in the Oregon State University Career Fair.
- o Developed and implemented Social Distancing Survey Protocol, as well as personal protective equipment (PPE) minimization and Alternatives Guidelines.
- o Completed evaluation on the use of Centers for Disease Control ultraviolet lights to disinfect radiological instrumentation.
- o Completed National Registry of Radiation Protection Technologists Exam Preparation course for Radiological Staff professional development.
- o Completed revisions to SOW documents for Rad Instruments, Dosimetry, and Radiological Records Services.
- o Completed update to training database, splitting Company Technical Authority and Project Point of Contact course numbers with respective equivalencies.
- o Participated in facility-specific advance radiological practices training needs analysis for all CHPRC projects.
- o Coordinated with projects and senior management regarding RCT assignments to address existing shortages.
- o Radiological WSAs and management observations:
 - Completed SHS&Q-2020-SURV-24452, *CHPRC 10 CFR 835 Occupational Radiation Protection, Subpart E, Monitoring of Individuals and Areas*.
 - Completed SHS&Q-2021 WSA-27117, *Shipment Receipt Survey Processes at the Environmental Restoration Disposal Facility (ERDF)*.
 - Completed SHS&Q-2020-WSA-27210, *Conduct of Work Practices within the CHPRC Radiological Control Program*.
 - Completed SHSQ-2021-MOP-27449, *324 Donning and Doffing Practical Observations*.
- o Technical Evaluation Changes:
 - Completed revision to TE-CPRM-20-002-02, *203A Pre-demolition Activities*.
- **Nuclear Operations Support & Compliance accomplishments:**
 - o Correspondence transmitted to RL:
 - Letter, CHPRC-2003414, *Transmittal of the Final Hazard Categorization for Shipment of Grouted/Debris Containers, CHPRC-04535, Revision 0, for Approval*, dated October 1, 2020.
 - Letter, CHPRC-1905004 R1, *Transmittal of the RL Reviewed and Comment Incorporated Preliminary Documented Safety Analysis for the Capsule Storage Area, CHPRC-03744, Revision 0, for RL Review and Approval*, dated October 6, 2020.
 - Letter, CHPRC-2003590, *Transmittal of the 2020 Annual Update of the 200 Area Interim Storage Area Safety Basis and the Unreviewed Safety Question Determinations Summary for the 200 Area Interim Storage Area*, dated October 8, 2020.
 - Letter, CHPRC-2000793.1, *Transmittal of RL Reviewed and Comment Incorporated Solid Waste Operations Complex Master Documented Safety Analysis, HNF-14741, Revision 12B, and the Technical Safety Requirements for the Solid Waste Operations Complex, HNF-15280, Revision 12B, for Approval*, dated October 27, 2020.

- Letter, CHPRC-2004036, *Transmittal of the 324 Building Basis for Interim Operation, CHPRC-02979, Revision 5; the Addendum to the 324 Building BIO for Demolition of 324 Building Support Areas, CHPRC-02982, Revision 2; the Remote Soil Excavation Addendum to the 324 Building Basis For Interim Operation, CHPRC-03197, Revision 2; the 324 Building Technical Safety Requirements, CHPRC-02980, Revision 4; and the Fire Hazards Analysis for 324 Building, CHPRC-02984, Revision 3 for RL Review and Approval*, dated November 2, 2020.
- Letter, CHPRC-2003995, *Transmittal of the Annual Update to the 105KW Facility Documented Safety Analysis, PRC-STP-00946, Revision 3, and the Unreviewed Safety Question Determinations Summary*, dated November 9, 2020.
- Letter, CHPRC-2002288.1, *Transmittal of the Evaluation of Safety of the Situation for Operational Awareness DOE ASMT-2020-4142, SWOC MDSA Review, CHPRC-04448, Revision 1, for RL Review and Approval*, dated November 12, 2020.
- o Correspondence received from RL
 - Letter, 20-NSD-0032_RL, *Approval of HNF-63250, Fuel Special Packaging Authorization, Revision 0*, dated October 26, 2020.
 - Letter, 20-NSD-0029_RL, *Approval of the Hanford Sitewide Transportation Safety Document, DOE/RL-36-2001, Revision 3*, dated October 27, 2020.
 - Letter, 20-NSD-0031_RL, *Transmittal of the RL Reviewed and Comment Incorporated Preliminary Documented Safety Analysis for the Capsule Storage Area, CHPRC-03744, Revision 0, for RL Review and Approval*, dated October 30, 2020.
 - Surveillance DOE-ASMT-2020-3887, Functional Area Performance Evaluation of Transportation Safety (FY2020 Q4).
 - Surveillance DOE-ASMT-2021-0052, Functional Area Performance Evaluation of Nuclear Safety (FY2020 Q4).
 - Letter, 21-NSD-0001_RL, *Approval of PRC-NS-00004, CH2M HILL Plateau Remediation Company Criticality Safety Program Description Document, Revision 4*, dated November 20, 2020.
 - Letter, 21-NSD-0004_RL, *Transmittal of the Final Hazard Categorization for Core Barrels in Staging Area DB1 in 218-W-3AE Burial Ground, CHPRC-04398, Revision 0*, dated November 30, 2020.
 - Letter, 21-NSD-0011_RL, *Transmittal of the Documented Safety Analysis for the Canister Storage Building, HNF-52059, Revision 1; the Technical Safety Requirements for the Canister Storage Building, HNF-52060, Revision 1; the Unreviewed Safety Question Determinations Summary; and the Fire Hazards Analysis for the Canister Storage Building, HNF-52062, Revision 2*, dated December 1, 2020.
 - Letter, 21-NSD-0013_RL, *Approval of HNF-14741, Solid Waste Operations Complex Master Documented Safety Analysis, Revision 12B, and HNF-15280, Technical Safety Requirements for the Solid Waste Operations Complex, Revision 12B*, dated December 8, 2020.
- **Contractor Assurance Regulatory Reporting (CARR) accomplishments:**
 - o 563 Condition Reports (CRs) were screened:
 - One significant issue identified.
 - Four adverse issue identified.
 - 260 Track Until Fixed issues identified.
 - 114 Trend Only items identified.
 - 176 Opportunities for Improvement (OFI) items identified.
 - Eight Screened Out.
 - o 586 CRs administratively closed.

- o 909 CR actions administratively closed.
- o Provided Occurrence Reporting support to the River Risk Management Project (RRMP), West Area Remediation Project, and PTS.
- o Submitted Occurrence Reporting and Processing System final report EM-RL--CPRC-324FAC-2020-0004, *The Insulation On An Energized 120 Volt Heat Trace Wire Was Nicked While Cutting Into a Wall Resulting In An Arc.*
- o Provided support and coordination for Part 1 of a DNFSB Program Review of the Central Waste Complex (CWC) Safety Basis and Hazard Controls.
- o Provided support for the bi-monthly DNFSB Resident Inspector teleconference.
- o 61 documents were provided in response to DNFSB requests for information (RFI).
- o Provided support to the DNFSB Hanford Site Resident Inspectors.
- o Reviewed, commented and processed 14 assignments via DOE's online review, comment and approval system for draft DOE Directives.
- o Coordinated the DNFSB and Requirements Management databases.
- o Two internal Lessons Learned Report was submitted in OPEXShare: 2020-KBO-0002, *Excavator with a Metal Shear Attached Sustained a Broken Lower Windshield; 2020-RRMP-0005, A Deactivated Light Fixture Fell From Its Wall Mount Location.*
- o One internal Just-In-Time Report was submitted in OPEXShare: 2020-RRMP-0004, *Improper Installation of Locking Device Results in an Unsecured High Radiation Area.*
- o Provided OPEXShare User Briefing to RRMP project engineering personnel as well as the November Issues Management Forum/Trend Working Group.
- o Published the monthly Contractor Assurance System Summary Reports for September, October and November.
- o Completed development of Computer-Based Training for Course Number 080983, *DOE Enforcement Program (PAAA/WSH) Overview Training.*
- o Provided leadership and technical support to the development of the CHPRC Integrated Contractor Assurance System (iCAS), including assessments, issues management and nonconformance reporting.
- o Conducted onsite workshops to further refine and develop iCAS workflows.
- o Attended "Train the Trainer" workshop for iCAS administrators.
- **Performance Oversight, Assessment, and Quality Assurance accomplishments:**
 - o Completed fiscal year (FY) 2021-2023 10 CFR 835 Triennial Assessment Technical Basis document.
 - o Developed the QA Program 2021-2023 Triennial Independent Assessment Schedule.
 - o Published Triennial Assessment report for 10 CFR 835, Subpart L, *Contamination control.*
 - o Completed SHS&Q-2020-MA-24049, *Management Assessment for Fiscal Year 2020, ISMS Effectiveness Declaration.*
 - o Published surveillance WFMP-2021-SURV-26691, *W-135 Operating Pad (OP) – Concrete Placement.*
 - o Completed surveillance SHS&Q-2021-SURV-26384, *PRC-MP-QA-599 Section 8.3.7 Alignment with NQA-1 Requirement 12 – Calibration and Control of Measuring & Test Equipment.*
 - o Completed SHS&Q-2021-SURV-26354, *Coverage and Compliance with PRC-PRO-WKM-12115.*
 - o Completed SHS&Q-2021-SURV-27378, *PRC-QA-599 Sect 10, Independent Assessment.*
 - o Completed SHS&Q-2021-SURV-27388, *PRC-MP-QA-599, Mission Support Alliance (MSA) Annual Evaluated Supplier List (ESL) Assessment for the period FY2021.*
 - o Initiated planning for surveillance SHS&Q-2020-SURV-27380, *PRC-MP-QA-599 Alignment with EM-QA-001.*

- o Provided specific mentoring and feedback to assessors and responsible managers that conducted management assessments. Feedback was provided to help improve the quality, including clarity and readability of future reports. Provided specific assessment mentoring to K Basin Operations (KBO), CPRM, Soil and Groundwater Remediation Project (S&GRP), Resource Management and Strategic Integration (RM&SI), and SHS&Q organizations.
- o Developed assessment performance workshops for Radiological Protection organization staff.
- o Provided ongoing support in the development of iCAS Assessment module and advanced testing of the iCAS Nonconforming Items modules.
- **Fire Protection (FP) accomplishments:**
 - o FP Program graded “Green Light” for 33 consecutive months.
 - o Successfully completed 10 additional FP Engineering Training Academy programs in Microsoft Teams.
 - o Resolved Plutonium Finishing Plant (PFP) South Trailer Village combustible loading issues to support deconstruction.
 - o Submitted SHS&Q-2020-WSA-24141, *Fire Permit System Assessment*.
 - o Resolved lock out/tag out (LOTO) issues related to Fire Department Connections inspection, testing and maintenance (ITM).
 - o Amended Appendix D of *PRC-PRO-FP-40426, Fire Protection System Discrepancies*, to include a simplified flowchart for easier application by projects.
 - o Assisted outside consultants in assessing the path moving forward for the 400 Area water system.
 - o Assisted CWC and Nuclear Safety in resolving lines of inquiry posed by the DNFSB.
 - o Completed the 224B Fire Hazard Analysis (FHA).
 - o Worked with MSA along with RL to resolve ongoing issues with ITM due to the novel coronavirus (COVID-19) delays.
 - o Submitted SGRP-2021-WSA-27062, *Implementation of Fire Protection System Discrepancies*.
 - o Submitted SHS&Q-2021-WSA-27385, *REDOX TSR Assessment*.
 - o Completed EDC-20-000882, *Transitional Fire Hazards Analysis for the Concentration Facility (Building 224B)*.
 - o Completed gap analysis between the 2012 and 2016 versions of DOE STD 1066, including trial implementation for the 224B FHA.

Environmental Program and Strategic Planning (EP&SP)

- **Environmental Protection**
 - o Received approval from the U.S. Environmental Protection Agency (EPA) for continued operation of the ERDF Staging Area for the treatment of wastes outside the ERDF trenches.
 - o Updated and approved site training Course Number 600211, *Management of Universal Waste Collection Areas*, to capture recent changes to the management of universal wastes on the Hanford Site identified by the RL and EPA.
 - o Completed Class 1 Permit Modifications to transfer the co-operator assignment from CHPRC to Central Plateau Cleanup Company (CPCCo) in preparation for contract transition. The revised Part A Permit Applications for CHPRC waste management units were provided to the Washington State Department of Ecology (Ecology) for review on December 14, 2020.
- **Environmental Compliance and Quality Assurance**
 - o Assessment status
 - Completed surveillance of groundwater modeling subcontract requirements on November 19, 2020, that resulted in no findings or opportunities for improvement (OFIs).
 - Completed surveillance of environmental reporting on December 15, 2020, that resulted in no findings or OFIs.

- Completed surveillance of state water programs on December 28, 2020, that resulted in one finding and four OFIs
- **Demonstrate active leadership and progress toward obtaining new *Resource Conservation and Recovery Act of 1976 (RCRA)* permit for the Hanford Site**
 - o Facilitated and participated in the following meetings:
 - Weekly permit project management team meetings.
 - Weekly permit meeting for Hanford Site contractors.
 - Weekly schedule strategy discussions with Ecology.
 - Bi-weekly schedule status meetings with RL, Office of River Protection (ORP), Ecology and contractors.
 - Monthly Tier 2 meeting with RL, ORP and Ecology senior management.
 - o Maintained the Hanford Site RCRA permit schedule to reflect progress against the baseline schedule plan:
 - Provided a detailed monthly schedule report and analysis for progress on the permit to Ecology, RL, ORP and the Hanford Site contractors.
 - Provided tracking and status of open issues that are preventing progression of the permit.
 - o Provided full-time regulatory expertise and project management support.
- **Quality and timeliness of key documents submitted**
 - o From October through December 2020, 66 environmental documents supporting various CHPRC projects were completed through EP&SP Publication Services, established to provide a systematic process for performing technical editing and formatting of environmental documents.

Business Services

- **Supply Chain/Acquisitions:**
 - o Issued the request for consent package to RL for award of the \$10.3 million Waste Encapsulation Storage Facility (WESF) construction services contract.
 - o Submitted the Supply Chain Performance Assessment Report to RL.
 - o Submitted the Supply Chain System Performance Plan for FY2021 to RL.
 - o Provided responses to RL audit RFI on invoicing received from corporate affiliates.
 - o Completed a quarterly review of rental equipment with project field points of contact and transmitted to Facility and Property Management for follow-on actions.
 - o Completed periodic inventory with subcontractors on subcontractor-controlled/held government-furnished property.
 - o Developed and distributed communication to purchasing cardholders and their managers on the planned protocols for purchasing card use as transition from CHPRC nears.
 - o Participated in a briefing with MSA on the subcontractor cost collection process and the Vendor Accrual Integration Module that will be used in lieu of the Contracted Labor Time Recording system.
 - o Completed review of a new Strategic Partnership Program Agreement from the Pacific Northwest National Laboratory. The process will follow a more conventional bid/proposal/award process with a requirement for an advance payment. This change is being mandated by DOE through a change in the DOE Accounting Handbook.
 - o Met with members of the S&GRP to discuss well drilling plans/demands for FY2021, including determination if other service providers performing work at other DOE sites would be available to perform work at the Hanford Site.
 - o Met with members of KBO to discuss contracting options with regards to performing alternate waste site remediation activities near the K East Basin currently included in the request for proposal for the civil earthwork and foundation for the 105K East Safe Storage Enclosure.

- o Developed a Coronavirus Aid, Relief, and Economic Security (CARES) Act closeout plan and commenced with reviewing final invoices and costs from subcontractors who were recipients of funds under the CARES Act.
- o Awarded five analytical laboratory service contracts that will permit the continuation of analytical services in support primarily for S&GRP.
- o Transition support, including the preliminary development of an assignment letter and associated database fields in anticipation of received specific subcontract/purchase order assignment guidance from CPCCo.
- o Reviewed ongoing cost incurred audits and provided progress on FY2019 audits to RL.
- o Developed the acquisition strategy and planning for award of an indefinite delivery/indefinite quantity technical support contract for health physicist personnel.
- o Developed the acquisition strategy and plan for the procurement of Industrial Hygiene Analytical Laboratory Services.
- o Completed final invoicing and payment to lower-tier subcontractors of an insolvent CHPRC subcontractor. CHPRC received an approved assignment of claims.
- o Worked with Federal Services to estimate indirect rate impacts from the previous FY as CHPRC nears completion of its contract.
- o Completed an independent audit of building trades construction services to establish FY2021 labor rates.
- o Attended a briefing with DOE-Headquarters on accessing General Services Administration's One Acquisition System for Integrated Services (OASIS) platform for use at the Hanford Site. CHPRC has been accessing the OASIS small business platform and is contemplating different methods to implement best-in-class contracts for category management purposes.
- o Participated in the Energy Facility Contractor Group Supply Chain Initiative conference call to discuss upcoming challenges within the DOE contractor supply chain network for nuclear-quality suppliers.
- o Developed an acquisition strategy for replenishing the ion exchange modules. These will be the final eight units needed prior to decommissioning of the K Basin.
- **Procurement:**
 - o During the first quarter of FY2021, awarded/amended 683 contracts with a total value of \$23.4 million. Additionally, 639 new material purchase orders (PO) valued at \$1.9 million were awarded to support ongoing project objectives.
 - o At the end of 147 months of the CHPRC project, procurement volume has been significant: \$3.15 billion in contract activity has been recorded with approximately 56.9 percent, or \$1.79 billion, in awards to small businesses. These awards include 9,211 contract releases, 32,381 POs and 359,067 PCard transactions.

- o Major contract awards/modifications:

Contract/Release	Award Date	Awarded To	Title	Contract Type	Value (\$M)
74406	10/15/2020	Hiline Engineering & Fabrication Inc	4 Inch Shielded Waste Box	FFP	\$0.20
74776	10/21/2020	American Crane & Equipment Corporation	WTP Grapples for IDF	FFP	\$0.42
56189-18	11/5/2020	Holt Services, Inc.	Installation of 4 Monitoring Wells in the 200-BP-5 and 200-UP-1	FFP	\$0.90
61401-14	11/9/2020	VNS Federal Services	Wastren Stoller Disposal Operations (modification)	T&M	\$2.95
72435	11/30/2020	DGR Grant Construction, Inc.	IDF Infrastructure Upgrades (modification)	FFP	\$0.20
55705-8	12/2/2020	Intermech	Capsule Storage Area Construction (Project W-135) (modification)	FFP	\$0.34

- **Facilities & Property Management:**

- o All five COVID-19 trailers have been procured and assembled onsite to support social distancing and enable projects to establish more reasonable space conditions due to COVID-19. The trailers are currently being configured internally to support the project needs and activities, and occupancy permits are in the process of being obtained.
- o Support for the CPCCo transition team continues to be provided. The CPCCo has validated the CHPRC property system/program and has received RL acceptance authorization. Property transfer from CHPRC to CPCCo in the Sunflower tracking system remains to be completed in January 2021.
- o Worked with MSA to coordinate support services logistics for bulk water distribution and sanitary system services.
- o Worked in coordination with MSA/Electrical Utilities to schedule multiple, planned electrical outage activities to ensure that system upgrades, inspections and maintenance are performed.

- **Finance:**

- o Continued with the series of RL Finance/contracting officer meetings to discuss and align topics identified in various CHPRC Incurred Cost Audits and RL Finance surveillances.
- o October through December month ends were completed with no suspended costs.
- o Continued providing support for the Incurred Cost Report audit for FY2019.
- o Continued providing support for the FY2019/2020 Invoice Assessments.
- o Completed FY2018 Incurred Cost Audit pending final report.
- o Submitted the fourth quarter International Transaction Report.
- o Submitted the FY2020 fourth quarter reconciliation of RL's Accounts Payable – Accrued Liabilities account (#2110).

- **Information Management:**

- o Processed 222,340 electronic records during the first quarter of FY2021 into the Integrated Document Management System.

Prime Contract and Project Integration (PC&PI)

- **Project Management/Compliance Assessments (PM/CA):**

- o Supported the finalization of a major update to the project execution plan required for the Project W-135, *Waste Encapsulation and Storage Facility*, Line Item Project, DOE Order 413.3B Critical Decision (CD)-2, *Approve Performance Baseline*, and CD-3, *Approve Start of Construction/Execution*, review.

- o Lead the implementation of the PC&PI FY2021 integrated evaluation plan (IEP) and completion of open actions in the CRRS assigned to PC&PI. During the reporting period, PC&PI completed one of the 12 self-assessments identified in the FY2021 IEP.
- o Continued to contribute performance measure baseline (PMB) change control by supporting the development of baseline change requests (BCRs), providing review and input on proposed BCRs, and serving on the CHPRC Change Control Board when required.
- o PM/CA coordinated presentations to CPCCo on PC&PI functions, responsibilities and issues and providing responses to CPCCo information requests.
- **Prime Contract Compliance (PCC):**
 - o October through December, PCC received and processed eight contract modifications (757 and 759-765) from RL.
 - o The Correspondence Review Team received and determined the distribution and assignment for 177 incoming letters/documents. PCC reviewed 125 outgoing correspondence packages.
- **Project Integration:**
 - o Project Support and Systems Integration (PS&SI) and Schedule Integration
 - PS&SI and Schedule Integration completed work site assessment PC&PI-2021-WSA-27026, Evaluate FY2021 PMB Baseline for Alignment of High Dollar Value Activities
 - Implemented baseline change requests to incorporate authorized FY2021 planning into the PMB.
 - Supported issuance of FY2021 work authorization documents and work charging authorizations
 - Compiled Financial Briefing packages for September, October, and November and briefed RL Budget and Finance representatives
 - o 000 Project Earned Value Management Support and Reporting:
 - Issued September, October and November CHPRC Monthly Performance Reports and Gold Metrics to RL.
 - Completed safety hour reporting each month.
 - Compiled integrated project team packages for September, October and November and Monthly Project review packages for October and November.

Project Support Services

- **Risk Management:**
 - o Conducted first quarter Risk Register reviews and updates.
 - o Supported the submittal of Project W-135, *Waste Encapsulation and Storage Facility*, Line Item Project, DOE Order 413.3B CD-2, *Approve Performance Baseline*, and CD-3, *Approve Start of Construction/Execution*, to RL, including risk analysis. Participated in the EIR in October.
 - o Completed FY2021 Annual Risk Analysis and Report, and it was submitted to RL on November 23, 2020.
 - o Completed the transition to sitewide Risk Register database. Developed a training presentation for project users.
 - o Conducted monthly assessments of the status of key project risks and risk impacts associated with BCRs.
- **Estimating and Program Support:**
 - Reviewed 14 BCRs prior to implementation into the PMB during October, November and December.
 - Provided estimating review and concurrence on the cost estimates of four Plant Force Work Reviews.
 - Provided estimating support to develop four FY2021 estimates.

- Created five Fair Cost estimates.
- Supported two Inter-Entity Work Orders.
- Reviewed and updated all Estimating desktop desk instructions and templates as needed to prepare for transition.
- Continued to work on closing out Corrective Actions.

Resource Management and Strategic Integration RM&SI

- All contractual actions were completed on or ahead of schedule.
- **Human Resources:**
 - o Continued COVID-19 response and CARES Act planning, response and monitoring.
 - o Coordinated “Conducting an Effective Internal Investigation” training to stay current and maintain investigation proficiency that included the following teams: Employee Relations, Labor Relations, Internal Audit, Employee Concerns, and Equal Employment Officer.
 - o Coordinated Human Resources activities in support of CHPRC contract closeout.
 - o Coordinated 1095 tax form processing for calendar year 2020.
- **Staffing and Development:**
 - o Negotiated and finalized settlement agreement with the Office of Federal Contract Compliance Programs.
 - o Managed and implemented Business Analyst and exempt to nonexempt Computer Systems Analyst job reclassification project to comply with Washington State Department of Labor regulations.
 - o Conducted Facility Stipend program assessment.
 - o Created market survey database tool to support offer development and DOE reporting.
 - o Developed and implemented Virtual New Hire Orientation for all new hires since March 2020.
 - o Conducted Virtual Resume Writing Workshops for multiple projects.
 - o Participated in WorkSource Veteran’s Resume Class.
 - o Participated in Columbia Basin College Nuclear Technology Program to include meet and greet panel discussion, resume review class and mock interviews
 - o CHPRC was selected as a finalist, out of more than 1,000 applications, by the Washington State Employment Security Department for the Hire a Vet Employee of the Year award.
 - o Completed in-person I-9 verifications for all new hires since March 2020.
 - o Supported onboarding of new contract RCTs.
- **Labor Relations (LR):**
 - o LR worked with the union to close one arbitration:
 - PRC-020-011 – Discipline
 - o LR is working with the union to close two arbitrations but is waiting on a settlement:
 - PRC-019-003 – Discipline
 - PRC-019-004 – Discipline
 - o Awaiting arbitration decision:
 - PRC-017-042 – Closure of the Plastic Shop (October 7, 2020)
- **Interface Management:**
 - o Issued HNF-58686, *AIA between CHPRC, BNI, HPMC, WRPS, and MSA for Dangerous Waste Counting activities and Acquisition of RCRA Site ID Numbers, Revision 2.*
 - o Issued HNF-64857, *AIA between BNI, CHPRC, HPMC, PNNL, WRPS, and MSA for Reportable Quantity Determinations for Hazardous Substance Releases, Revision 0.*
 - o Issued TOC-AIA-PRC-00087, *AIA between CHPRC and WRPS for ERDF Long Length Item Disposal Roles and Responsibilities, Revision 0.*

- o Issued HNF-48239, *Roles and Responsibilities for the Safeguards and Security Program, Administrative Interface Agreement between CHPRC and MSA for Safeguards and Security Services*, Revision 9.
- o Issued PRC-MOA-CPCC-20201, *MEMORANDUM OF AGREEMENT CH2M HILL PLATEAU REMEDIATION COMPANY SUPPORT TO CENTRAL PLATEAU CLEANUP COMPANY DURING CENTRAL PLATEAU CLEANUP CONTRACT TRANSITION between CH2M HILL Plateau Remediation Company (CHPRC) CHPRC Contract Number DE-AC06-08RL14788 and Central Plateau Cleanup Company, LLC (CPCCo) CPCC Contract Number 89303320DEM000030*, Revision 0.
- o Provided support to WTP/DPLAW as the PRC Mission Integration Manager, including review and approval of ICD-003, *Radioactive Solid Waste and ICD-009, Land for Siting, Interface Readiness Plans*.
- o Negotiated Agreement in Principle with Washington River Protection Solutions (WRPS) to allow ERDF spoils to be used as backfill at the WRPS Central Maintenance Facility Complex near 2704HV.
- o Issued the FY2021 Service Level Agreement for the 222S Lab support.
- o Provided FY2021 Electrical Utilities support service forecast to MSA.
- o Assisted with CPCCo transition-related items (i.e., facility/waste site transfer lists and updated crosswalk table).
- o Completed review of HMESC J.3a (Mod P00008) against PRC J.3 (Mod 749) to determine service impacts to the PRC/Central Plateau Cleanup Contract (CPCC).
- o Facilitated resolution of FY2021 MSA Resource Issues –
 - Sign painters – Worked with MSA and projects on priority work due to address resource shortage.
 - Teamsters – Assisted projects with teamster needs prior to Plutonium Reclamation Facility scheduled start up.
 - Crane operators – Continued working with MSA to ensure adequate support for upcoming critical work.
 - Heavy equipment operators – Working with MSA to ensure adequate support for upcoming critical work.
- **Strategic Management:**
 - o Continued implementation of the CHPRC Integrated Work Resumption Plan, including tracking onsite presence to ensure compliance with authorized staffing levels.
 - o Maintained PPE inventory/usage tracking, as well as projections tied to upcoming scope authorizations and potential scope shifts.
 - o Finalized FY2021 Assistant Manager for River and Plateau (AMRP) Integrated Priority List (IPL), Revision 0. Final AMRP IPL includes updated line items and prioritization of below the line scope.
 - o Transmitted the Hanford Project Evaluation Matrix to RL.
 - o Provided the lead for RM&SI transition support for the incoming CPCC. This included responsibility for coordinating presentations to the CPCCo on RM&SI functions, responsibilities and issues, as well as providing responses to numerous CPCCo information requests.
 - Strategic Management provided presentations to the CPCCo on the AMRP IPL, the Project Evaluation Matrix- and the productivity-tracking program.

Project Technical Services (PTS):

- **Training and Procedures**

- o Issued a revision to the Staffing and Development Core Qualification Card, adding Behavior Based Interviewing and Teleworking to the evaluation criteria, and updating the list of current medical surveillance programs.
- o Issued a revision to procedure PRC-MD-HR-54592, *COVID-19 Time Recording and Reporting to Work*, to limit the use of COV absence code on employee timecards to quarantine/isolation purposes only.
- o Assisted Learning Management System Programmers with the design and testing of a Crystal Report that will assist the contractors with the planned exit of the 120-day extension of training due dates for locally mandated courses.
- o Resumed the scheduling of the Course Number 027200, *Do Work Safe*, training class, which is required to be taken by all new CHPRC fieldworkers. No sessions have been conducted since the Hanford site COVID-19 controls were initiated in March. Six sessions were conducted in November to eliminate the waitlist.
- o Issued a revision to Course Number 600211, *Management of Universal Waste Collection Areas*, computer-based training course. This revision completed a periodic review of the course material, updated the length of time allowed for accumulation of materials on site and incorporated a more interactive and graphically engaging format.
- o Supplemented facility-training resources at the 324 Project to help them conduct facility-specific Advanced Radiological Practices training.
- o Enrolled students into an offsite vendor 8-hour HAZWOPER for a supervisors course. Students, who complete the course and receive site-specific training on the use of the Hanford Site Worker Eligibility Test training status-reporting tool, will be granted equivalency to the Hanford-Site course. Volpentest HAMMER Federal Training Center (HAMMER) has been unable to provide onsite training sessions for several months, which is preventing the completion of qualifications for several project maintenance and operations managers.
- o Drafted two new Human Resources qualification cards, Return to Work Coordinator and Leave of Absence Coordinator. These documents will ensure employees receive adequate and consistent training prior to performing these roles.
- o Identified and scheduled students for the new “Hood Only” powered air purifying respirator respiratory protection training courses that HAMMER will begin to provide once per month, beginning in January. The new course will allow these students to attend a 4-hour custom training course instead of a full-day course, and allow HAMMER to conduct two sessions in one day.
- o Provided a session of Course Number 600900, *Integrated Hazards Analysis*, for the KBO management team to evaluate for potential application for all employees on this project.
- o Supported managers with the task of removing the 120-day training extensions granted during the COVID-19 work interruptions that began in March 2020. This consisted of providing them with a database report used to identify employees needing to update their training and training specialist support to help track the task to completion.
- o The Conduct of Operation improvement initiative that was began over a year ago was brought to a close this month after several training sessions were conducted in November and December. The initiative provided CHPRC employees with conceptual-level training, fieldworkers with an 8-hour comprehensive training course and functional program workers with training tailored to their application.
- o Issued a change to procedure PRC-PRO-TQ-40171, *Training Review Board*, to provide additional clarity for the time limit for passing an exam after failing, and to better align the procedure process to its associated Site Form, Training Review Board Record (A-6005-179).
- o Issued a revision to procedure PRC-PRO-OP-52525, *Universal Waste/Recycle Material Handling and Packaging*, to make the Pre-Use Container Inspection Checklist Form a Site Form. Also

- added database user steps for container management in Solid Waste Information and Tracking System and made minor editorial and format changes throughout the procedure.
- o Issued a change to procedure PRC-MD-HR-54502, *Temporary Alternative Work Locations*, to extend the expiration date to May 1, 2021, due to the continued need for alternative work locations.
 - **Operations Program**
 - o Conducted PTS COVID-19 Working Group Meeting in support of a social distancing plan and controls.
 - o Participated in a special sitewide LOTO committee meetings to develop a Clarification, Interpretation, and Guidance form for the Fire Department Connections.
 - o Completed work package development for October and November PTS Preventative Maintenance (PM).
 - o Completed WSA for the triennial Nuclear Maintenance Management Program.
 - o Worked with Engineering to complete the Technical Evaluation to support modification of a LOTO bag for Fire Department Connections.
 - o Supported Maintenance and Work Control Transition meetings with the CPCCo management team.
 - o Provided input to CPCCo management on the Transition Item Checklist for the Conduct of Operations program.
 - o Supported the CPCCo management team by providing Fire Systems Maintenance backlog information.
 - o Participated in Kaizen Blitz for site LOTO of vehicle-mounted generators in support of the Hanford Site LOTO Committee.
 - o Completed PTS-MA-2020-24949 for the work management program.
 - o Conducted PTS senior management review of LOTO and associated work documents for the breaker PMs at 2610E.
 - **Readiness and Preparedness**
 - o The Emergency Preparedness Organization supported one limited scope drill at CPRM and five table-top drills (PFP, 100K, WESF, CWC and T Plant).
 - o Issued the Corrective Action Plan for the Triennial Assessment addressing the 10 Findings from the March/April 2019 assessment.
 - o The Emergency Preparedness organization supported one Limited Scope Emergency Preparedness drill at PFP, one Limited Scope drill at a S&GRP pump and treat facility, and eight table-top drills (100K, 324, two at CWC, T Plant, sampling groups and two at ERDF).
 - o Provided the status of all outstanding Corrective Actions owed to RL in support of RL closure efforts.
 - o Supported one full-up drill at WESF, three Incident Command Post (ICP) Limited Scope Drills (one at the Canister Storage Building and two at CPRM), and nine table-top drills (five at PFP, two at KBO, one at SGRP and one at ERDF).
 - o Issued evaluation of impact for the Evaluation of Safety of the Situation (ESS) for the Solid Waste Operations Complex (SWOC) positive Unreviewed Safety Question. The evaluation identified non-conservative impacts to three Emergency Preparedness Hazard Analysis (SWOC/Low Level Burial Grounds, Waste Receiving and Processing Facility, and T Plant) warranting updates/revisions prior to implementation of the ESS.
 - **Project Delivery**
 - o COVID-19 trailer installation:
 - Continued installation of the trailers at the MO294 site.
 - Completed electrical distribution installation. Commenced generator startup and trailer commissioning.

- Completed wireless Hanford Local Area Network installation to the three office trailers.
- Performed troubleshooting of electrical systems in the trailers.
- Generator remains to be changed out.
- o Completed assembly and energization of trailer MO2282 at the 200 East Area PTS site.
- o Continued assembly and electrical installation of trailer MO2199 at the Reduction-Oxidation site.

Communications

- Produced 17 posts for DOE social media channels featuring progress on – among other things – Aging Structures stabilization, IDF, WESF capsule transfer preparation, groundwater protection, as well as a Wildlife Wednesday post that “reached” nearly 20,000 on Facebook.
- Produced 35 LinkedIn posts featuring project updates, community involvement, ethics awareness and recruiting.
- Produced three Environmental Management (EM) Newsletter/EM Roundup stories communicating progress on the Aging Structures stabilization project, CSA concrete pour and the W-135 mockup construction.
- Supported EM-1 Site visit on November 3.
- Produced a fact sheet for the 200 West Area Tier 2 Structures/Buildings engineering evaluation/cost analysis comment period to support public involvement efforts.
- Provided content for DOE’s update for the Hanford Advisory Board virtual full board meeting in December.
- Provided content for DOE’s new virtual public tour site to be unveiled in January.
- Produced a Tri-City Herald op-ed and print advertisement highlighting progress over the life of CHPRC’s contract.
- Produced videos capturing 12 years of CHPRC progress for internal/external End of Contract communications.
- Coordinated red kettle bell ringing for Salvation Army, raising more than \$5,000.
- Coordinated the annual United Way campaign, including creating a virtual marketplace to boost donations.
- Supported communications for contract transition.

MAJOR ISSUES

In accordance with performance measure PM-00-1-18, CHPRC reports the below issue could potentially impact the completion of individual outcomes and the overall success of the contract, as well as actions taken or recommended to resolve those issues.

Issue	Recommendation
No business system issues currently identified. Please see the Overview for contract alignment issue status.	N/A

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Perofrmed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Office of the President	0.2	0.2	0.4	0.0	3.3%	(0.2)	-84.9%
Engineering	0.1	0.1	0.1	0.0	0.0%	0.0	20.8%
Internal Audit	0.1	0.1	0.0	0.0	0.0%	0.0	20.9%
General Counsel	0.1	0.1	0.1	0.0	0.0%	(0.0)	-11.8%
Communications & Outreach	0.1	0.1	0.1	0.0	0.0%	0.0	10.5%
Safety Health Security & Quality	1.2	1.2	1.0	0.0	0.0%	0.2	16.9%
Envr Program & Strategic Planning	0.3	0.3	0.3	0.0	0.0%	0.0	10.5%
Business Services	2.6	2.6	3.1	0.0	0.0%	(0.5)	-19.8%
Prime Contract & Project Integration	0.5	0.5	0.5	0.0	0.0%	0.0	7.6%
Resource Mgmt & Strategic Intg	0.5	0.5	0.5	0.0	0.0%	0.0	7.3%
Project Technical Services	0.7	0.7	0.5	0.0	0.0%	0.1	17.3%
Indirect WBS 000 Total	6.4	6.4	6.7	0.0	0.1%	(0.2)	-3.6%
Numbers are rounded to the nearest \$0.1 million							

Indirect WBS 000

CM Schedule Performance: (+\$0.0M/+0.1%)

The variance is within reporting thresholds.

CM Cost Performance: (-\$0.2M/-3.6%)

The variance is within reporting thresholds.

Fiscal Year-to-Date (FYTD) (\$M)

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Perofrmed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion
Office of the President	0.7	0.7	1.2	0.0	0.3%	(0.5)	-78.9%	2.3
Engineering	0.4	0.4	0.5	0.0	0.0%	(0.2)	-41.6%	1.7
Internal Audit	0.2	0.2	0.1	0.0	0.0%	0.0	24.9%	0.9
General Counsel	0.3	0.3	0.5	0.0	0.0%	(0.1)	-41.9%	1.5
Communications & Outreach	0.2	0.2	0.2	0.0	0.0%	0.0	4.7%	1.1
Safety Health Security & Quality	3.8	3.8	3.2	0.0	0.0%	0.6	15.9%	17.5
Envr Program & Strategic Planning	1.0	1.0	1.0	0.0	0.0%	0.1	8.6%	4.8
Business Services	8.2	8.2	8.3	0.0	0.0%	(0.1)	-1.1%	36.4
Prime Contract & Project Integration	1.7	1.7	1.6	0.0	0.0%	0.1	7.8%	7.7
Resource Mgmt & Strategic Intg	1.7	1.7	1.6	0.0	0.0%	0.1	6.2%	7.9
Project Technical Services	2.2	2.2	1.7	0.0	0.0%	0.5	22.9%	8.7
Indirect WBS 000 Total	20.5	20.5	19.9	0.0	0.0%	0.6	2.9%	90.4
Numbers are rounded to the nearest \$0.1 million								

Indirect WBS 000

FYTD Schedule Performance: (+\$0.0M/+0.0%)

The variance is within reporting thresholds.

FYTD Cost Performance: (+0.6M/+2.9%)

The variance is within reporting thresholds.

Appendix C

Capital Asset Project

CH2MHILL
Plateau Remediation Company

a Jacobs company



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

December 2020
CHPRC-2020-12, 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

CH2MHILL
Plateau Remediation Company

a Jacobs company



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

December 2020
CHPRC-2020-12, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In December, the Plutonium Finishing Plant (PFP) Closure Project team performed work included surveying PFP radiological boundaries, re-applying soil fixative to the PFP demolition site and performing equipment maintenance. The PFP senior management team continued preparations and planning to support the resumption of Plutonium Reclamation Facility (PRF) work scope.

<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:

- December operations consisted of the 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, re-applying soil fixative to the PFP demolition site and performing equipment maintenance.
- Crews continued work on the disposition of legacy waste.
- The PFP senior management team continued preparations and planning to support the resumption of PRF work scope.

MAJOR ISSUES

None currently identified.

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.C2													
Explanation of major changes to the project monthly stoplight chart:													
Risk RL11 PFP-0003-T, <i>Stop Work From Concerned Workers</i> , was removed from the stoplight chart as it is no longer considered to be a key risk in fiscal year (FY) 2021.													
Realized Risks (Risks that are currently impacting project cost/schedule)													
No realized risks identified in December .													
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)													
No critical risks identified in December .													
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
RL11 PFP-0001-T: Unavailable Resources	The project lacks adequate resource coverage to complete work package development and fieldwork activities. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$123K, 120 days	●	↔	Risk Trigger: Shortage of resources leads to the project's inability to complete planned fieldwork. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <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>Monitor and maintain adequate staffing levels to completed planned work scope.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in December . This risk was identified as a key risk for FY2021. While no discrete mitigation actions have currently been identified, the project continues to monitor staffing levels closely.	Mitigation Action(s)	FC Date	%	Monitor and maintain adequate staffing levels to completed planned work scope.	Ongoing	N/A			
Mitigation Action(s)	FC Date	%											
Monitor and maintain adequate staffing levels to completed planned work scope.	Ongoing	N/A											
RL11 PFP-00011-T: Bump and Roll, LAMP, or Other Contractor Hiring of Bargaining Unit Employees	Hanford Atomic Metal Trades Council (HAMTC) labor resources are not available or unqualified due to the bump and roll, LAMP (Labor Assets Management Program) or other job postings, resulting in schedule impacts to the project. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 48 days	●	↔	Risk Trigger: Shortage of HAMTC resources leads to project inability to complete planned fieldwork. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <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>Monitor and maintain adequate staffing levels to completed planned work scope.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in December . This risk was identified as a key risk for FY2021. While no discrete mitigation actions have currently been identified, the project continues to monitor staffing levels closely and potential upcoming bump and rolls or LAMPs.	Mitigation Action(s)	FC Date	%	Monitor and maintain adequate staffing levels to completed planned work scope.	Ongoing	N/A			
Mitigation Action(s)	FC Date	%											
Monitor and maintain adequate staffing levels to completed planned work scope.	Ongoing	N/A											
FY2021 Key Risks													
RL11 PFP-0013-T: 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: Accept Probability: Unlikely (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> <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 December . No weather events impacted the project in December .	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											
RL11-PFP-0017-T: Delay of PRF Debris Loadout	The loadout of PRF debris is delayed. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 32 days	●	↔	Risk Trigger: The project experiences delays to PRF debris loadout, impacting project completion. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <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> Mitigation Assessment: No major changes in December . PRF debris loadout has not resumed due to PPE availability.	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											

Unmitigated Risk Impacts	Assessment		Comments						
	Month	Trend							
RL-0011.C2									
RL11-PFP-0018-T: Novel Viral Pandemic (COVID-19) Impacts Project Performance Unprecedented change in work practices/procedures (e.g., social distancing requirements) or lack of resources because of COVID-19 pandemic impact project performance, resulting in schedule impacts. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$0, 32 days			Risk Trigger: Impacts from the COVID-19 pandemic impact the project's ability to maintain planned fieldwork activities. <table border="1" style="width: 100%;"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Maintain the COVID-19 controls as detailed in the CHPRC general industrial hazards analysis.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in December. This risk was identified as a key risk for FY2021. PFP discrete fieldwork activities have not resumed due to PPE availability.	Risk Recovery Action(s)	FC Date	%	Maintain the COVID-19 controls as detailed in the CHPRC general industrial hazards analysis.	Ongoing	N/A
Risk Recovery Action(s)	FC Date	%							
Maintain the COVID-19 controls as detailed in the CHPRC general industrial hazards analysis.	Ongoing	N/A							
Unassigned Risks (Pending ownership of identified threats/opportunities)									
No unassigned risks identified in December.									

CRITICAL PATH ANALYSIS

The PFP critical path schedule begins with the completion of PRF loadout, which is forecast to occur by May 5, 2021, 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 August 24, 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	8/24/2021	Work resumption was planned in the revised DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets, Critical Decision (CD)-2 and CD-3 package 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 precluded work resumption as planned in the CD-2 and CD-3 package.

*Due date reflects 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

December 2020
CHPRC-2020-12, Rev. 0
Contract DE-AC07-08RL14788
Deliverable C.3.1.3.1 - 1

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

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

FORM APPROVED

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 / 11 / 23	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020 / 12 / 20	
		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		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)								
ITEM (1)																		
3B - PFP Closure Project	3,008	827	596	-2,181	231	140,342	128,625	171,830	-11,717	-43,205	0	0	0	144,683	188,536	-43,853		
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)	3,008	827	596	-2,181	231	140,342	128,625	171,830	-11,717	-43,205	0	0	0	144,683	188,536	-43,853		
f. MANAGEMENT RESERVE														6,302				
g. TOTAL	3,008	827	596	-2,181	231	140,342	128,625	171,830	-11,717	-43,205	0	0	0	150,986				

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT										DOLLARS IN THOUSANDS								Form Approved OMB No. 0704-0188	
FORMAT 3 - BASELINE																			
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA			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 d. YES X 9/18/2009				4. REPORT PERIOD a. FROM: 2020/11/23 b. TO: 2020/12/20								
5. CONTRACT DATA																			
a. ORIGINAL NEGOTIATED COST 51,683			b. NEGOTIATED CONTRACT CHANGE \$99,303		c. CURRENT NEGOTIATED COST (A + B) \$150,986		d. ESTIMATED COST AUTH UNPRICED WORK \$0		e. CONTRACT BUDGET BASE (C + D) \$150,986		f. TOTAL ALLOCATED BUDGET \$150,986		g. DIFFERENCE (E - F) \$0						
h. CONTRACT START DATE 6/19/2008			i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2021		k. CONT COMPLETION DATE 9/30/2021				l. EST COMPLETION DATE 9/30/2021								
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														UNDISTRIB BUDGET (19)	TOTAL BUDGET (20)	
			+1 Jan-21 (4)	+2 Feb-21 (5)	+3 Mar-21 (6)	+4 Apr-21 (7)	+5 May-21 (8)	+6 Jun-21 (9)	FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)	FY19 (16)	FY20 (17)			FY21 (18)
a. PM BASELINE (BEGIN OF PERIOD)	137,334	4,305	2,130	2,107	97	7	0	0	0	0	6,090	29,182	19,407	628	66,598	7,519	15,260	0	144,683
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																			
None																	0	0	0
c. PM BASELINE (END OF PERIOD)	140,342	3,008	2,130	2,107	97	7	0	0	0	0	6,090	29,182	19,407	628	66,598	7,519	15,260	0	144,683
7. MANAGEMENT RESERVE																			6,302
8. TOTAL																			150,986

**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 / 11 / 23	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020 / 12 / 20	
		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)											AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS					
			+1 JAN 2021 (4)	+2 FEB 2021 (5)	+3 MAR 2021 (6)	+4 APR 2021 (7)	+5 MAY 2021 (8)	+6 JUN 2021 (9)	JUL 2021 (10)	AUG 2021 (11)	SEP 2021 (12)	OCT 2021 (13)	TCOMPLET (14)	
3B - PFP Closure Project	5	4,998	80	86	90	101	88	67	60	23	0	-	-	5,594
g. TOTAL DIRECT	5	4,998	80	86	90	101	88	67	60	23	0	-	-	5,594

CLASSIFICATION (When Filled In)									
CONTRACT PERFORMANCE REPORT									FORM APPROVED OMB No. 0704-0188
FORMAT 5 - Explanations and Problem Analysis									
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) 2020/11/23	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE				b. TO (YYYYMMDD) 2020/12/20	
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:	3,008.1	827.5	596.1	-2,180.6	-72.5%	231.4	28.0%	0.28	1.39
Cumulative:	140,342.0	128,624.9	171,830.2	-11,717.1	-8.3%	-43,205.3	-33.6%	0.92	0.75
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	144,683.3	188,536.4	-43,853.1	-30.3%	0	0.96			
Explanation of Variance/Description of Problem:									
Current Month Schedule Variance: PFP demolition was scheduled to resume in October, however, due to the COVID 19 pandemic, reliability of PPE is uncertain. Resumption of demolition activities is currently scheduled to begin January 2021 when it is believed a reliable supply of PPE will be available to continue and complete demolition of PFP.									
Current Month Cost Variance: The current month cost variance is within thresholds.									
Cumulative to Date Schedule Variance: The cumulative to date schedule variance is within thresholds.									
Cumulative to Date 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 August 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:									
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 December. The following items are addressed, as applicable: 1. Schedule Margin Analysis: No drawdowns of schedule margin were made in the month of December. 2. Data dictionary Changes: No change in the month of December. 3. Forecast Schedule with No Baseline: No change in the month of December. 4. UB Balance: No change in the month of December. 5. Negative Actual Cost of Work Performed (ACWP): No change in the month of December. 6. Earned Actual Cost (EAC) Analysis: Best Case = \$188,536; Most Likely = \$194,839; Worst Case = \$194,906. 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 December. 8. Management Reserve Transactions: No management reserve transactions were made in the month of December. 9. Freeze Period Changes: No change in the month of December. 10. Retroactive Changes: No change in the month of December. 11. Earned Value Type Changes: No change in the month of December.									
Prepared by: Kerri Scott			Date: 1/7/2021			Approved by:			Date: