

Monthly Performance Report

January 2021

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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APPROVED
By Janis Aardal at 2:35 pm, Feb 22, 2021

Release Approval

Date

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CH2MHILL
Plateau Remediation Company
a Jacobs company



L. Ty Blackford
President and
Chief Executive Officer

Monthly Performance Report

U.S. Department of Energy Contract
DE-AC06-08RL14788
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January 2021
CHPRC-2021-01, Revision 0

CONTENTS

EXECUTIVE SUMMARY2

KEY ACCOMPLISHMENTS3

MAJOR ISSUES.....3

EARNED VALUE MANAGEMENT5

FUNDING ANALYSIS.....6

BASELINE CHANGE REQUESTS6

SELF-PERFORMED WORK.....7

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)8

DOE ACTIONS/DECISIONS8

PROJECT BASELINE SUMMARY SECTIONS

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

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

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

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

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

Section G – FFTF Closure (RL-0042).....G

APPENDICES

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

EXECUTIVE SUMMARY

CH2M HILL Plateau Remediation Company (CHPRC) advanced cleanup throughout the Hanford Site during the January reporting period. 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 reasonable actions to protect and provide support to the workforce.

Major accomplishments included:

- Plutonium Finishing Plant (PFP) Closure Project:** The PFP Closure Project team began the demolition and loadout of the remaining ancillary PFP structures, including six laundry Conex containers. PFP crews also performed work that included surveying PFP radiological boundaries and performing equipment maintenance.
- Waste and Fuels Management Project:** Continued fabrication of the Cask Storage System equipment at offsite machine shops.
- Soil and Groundwater Remediation Project (S&GRP):** The S&GRP team continued progress on decision documents, routine sampling analysis and well drilling. Pump and treat operations are ahead of schedule in the treatment goal of 2.2 billion gallons for fiscal year (FY) 2021.
- K Basins Operations (KBO):** KBO completed the augering and retrieval for the first Vertical Pipe Casing (VPC) mockup loading and grouting test. The team disconnected and relocated the integrated water treatment system strainer to support clearing of the VPC footprint. The Soil Remediation team completed the re-sloping of the 100-K-47:1 dig site and removed 17,450 m³ of overburden material from the 100-K-96, 100-K-56, 100-K-55:2 and the 100 K-79:7 waste sites. 1,677 tons of contaminated soil and debris were loaded out to the Environmental Restoration Disposal Facility (ERDF).
- River Risk Management Project:** The project continued training construction force core teams for the general contamination area/high contamination area/airborne radiation areas. All 20 corrective actions for the 324 Building Contamination Event Phase 1 have been completed.
- Central Plateau Risk Management (CPRM) Project:** CPRM continued essential mission-critical operations. The Aging Structures team completed stabilization of the 216-Z-9 Crib and 241-Z-361 Tank. At the Reduction-Oxidation (REDOX) facility, crews completed installation of 202S northeast ground rod to complete placement and configuration of temporary power. Crews at the 224B Facility are near completion for the construction of the containment structures in order to make personnel entries into the hot cells. The Plutonium Uranium Extraction Plant North team completed hazardous waste removal for the 2701AB, 2714A and 214A buildings. In addition, the crew completed characterization inside 211A and received sampling results that reported that the materials were within regulatory thresholds.



A new ion exchange unit arrived at the 200 West Pump and Treat facility. The unit is a key part of a planned expansion of the Hanford Site's groundwater treatment capacity. When installed, the expanded system will remove more radioactive constituents, technetium-99 and uranium from groundwater on the Central Plateau.

- **West Area Remediation Project (WARP):** The team completed the hazardous waste removal, demolition and debris loadout of five former mobile office trailers (MO015, MO016, MO017, MO032 and MO0939) in the South Trailer Village. Crews completed the 231-Z Facility characterization site walk down, initial entry into 224T and ground scanning at 224T. Crews also completed the electrical and mechanical isolations to the remainder of the South Trailer Village, as well as the mechanical isolations to 216-ZP-1.

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 partial stop work order (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. 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 was 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. CHPRC submitted to RL on December 29, 2020, two requests for equitable adjustments. One for COVID-19 pandemic impacts and another for the PSWO impacts.

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 January, CHPRC received Contract Modification 766 extending the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) through CHPRC's period of performance. This extension allows 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 ERDF as well as Garnet Filter Media Retrieval removal and shipment to T Plant into Phase 2. 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		BAC	EAC	Variance	
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost				
RL-0011 - Nuclear Materials Stab & Disp PFP	2.7	0.6	1.2	(2.1)	(0.6)	1,147.9	1,133.6	1,245.5	(14.3)	(111.8)	1,152.8	1,263.8	(111.1)	
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	12.8	12.9	17.0	0.1	(4.1)	1,726.2	1,706.3	1,623.4	(19.8)	83.0	1,860.3	1,776.4	83.9	
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	8.0	7.7	8.3	(0.3)	(0.5)	1,783.8	1,768.9	1,709.7	(15.0)	59.1	1,861.9	1,801.8	60.0	
RL-0040 - Nuc Fac D&D - Remainder	5.3	8.0	14.0	2.7	(6.0)	664.8	645.3	662.6	(19.4)	(17.2)	728.3	749.9	(21.6)	
RL-0041 - Nuc Fac D&D - RC Closure Project	9.0	8.8	11.5	(0.2)	(2.7)	839.9	813.7	819.9	(26.2)	(6.2)	919.8	931.5	(11.7)	
RL-0042 - Nuc Fac D&D - FTF Project	0.2	0.2	0.2	(0.0)	(0.1)	33.0	32.8	27.7	(0.2)	5.0	35.5	30.3	5.2	
(Values are rounded to the nearest \$0.1M) Total	38.0	38.2	52.1	0.2	(13.9)	6,955.1	6,860.2	6,818.6	(94.9)	41.6	7,318.1	7,283.5	34.5	

Performance Summary

CHPRC continues to track completion of the contract within budget. Currently, a variance at completion of \$34.5 million is projected, with an additional \$42.8 million of management reserve, for a total positive variance of \$77.3 million. For January, the project was 0.4 percent ahead of schedule and 36.5 percent over planned cost. Contract to date, the project was 1.4 percent behind schedule and 0.6 percent under planned cost.

The current month (CM) positive schedule variance is primarily the result of schedule recovery at WARP for remediation on the PFP North footprint. This schedule variance was partially offset by demolition delay at PFP. Due to the worldwide response to COVID-19, the reliability of personal protective equipment (PPE) supply is uncertain, and high-risk activities requiring significant use of PPE like PFP were delayed.

The CM negative cost variance was primarily impacted by W-135 Management of Cesium and Strontium Capsules (MCSC), WARP, CPRM and RRMP. MCSC had higher material cost for the VCC liner as well as an accrual correction. At WARP and CPRM, there were higher-than-planned costs for the structure investigation for the 216-Z-2 Crib stabilization resulting from an obstruction in the void space to be grouted. REDOX experienced negative cost variance on corrective actions during the Phase 2 addressing of work conditions due to more conservative work controls. Finally, at RRMP, the cost of PPE and other materials along with the continued corrective actions in the 300 Area increased the negative cost variance.

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	23.0	21.3	1.7
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	0.0	0.0	0.0
RL-0013	Waste and Fuels Management Project	205.3	207.6	(2.3)
RL-0013	Management of Cesium and Strontium Capsules	28.1	13.1	0.0
RL-0030	Soil, Groundwater and Vadose Zone Remediation	124.7	124.8	3.1
RL-0021	B Reactor	8.1	0.0	8.1
RL-0040	Nuclear Facility D&D, Remainder of Hanford	107.2	117.6	(10.5)
RL-0041	Nuclear Facility D&D, River Corridor	137.9	143.1	(5.1)
RL-0042	Fast Flux Test Facility Closure	4.4	3.5	0.9
Total Fiscal Year Spending Forecast		638.6	630.0	8.6

Funds/Variance Analysis

FY2021 projected funding of \$636.6 million increased \$2.0 million from last month due to the passage of the FY2021 appropriations bill in Congress, which included scope for the B Reactor. The spending forecast of \$630 million leaves a variance of \$8.6 million. Variances by project breakdown structure are being addressed.

BASELINE CHANGE REQUESTS

In January, CHPRC had no baseline change requests.

For a list of changes that have impacted the performance measurement baseline budget by FY, see the Format 3 Report in Appendix A.

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 - 1/31/2021					
Reporting Category					
	\$ Value	%	Goal %		
SB	\$1,793.20	56.89%	49.3%	PRC clause H.20b small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
SDB	\$345.50	10.94%	8.2%		
SWOB	\$316.44	10.05%	7.5%	CHPRC Contract Value:	\$7,326.94
HUB	\$106.07	3.35%	2.2%	SB actual:	\$1,793.20
VOSB	\$277.14	8.80%	3.5%	SB Performed %:	24.47%
SDVO	\$182.92	5.80%	1.3%	PRC clause H.20a max self performed requirement ≤ 65% of Contract Price Self Performed	
NAB	\$120.47	3.79%	N/A		
Large	\$860.31	27.14%	N/A	CHPRC Contract Value:	\$7,326.94
GOVT	\$6.14	0.19%	N/A	CHPRC Self Performed:	\$4,464.53
GOVT CONT	\$483.32	15.34%	N/A	CHPRC Self Performed %:	60.93%
EDUCATION	\$0.18	0.01%	N/A		
NONPROFIT_	\$4.53	0.14%	N/A		
FOREIGN	\$8.98	0.29%	N/A		
Total	\$3,156.67	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 7.0 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

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PROJECT SUMMARY

In January, the Plutonium Finishing Plant (PFP) Closure Project team began the demolition and loadout of remaining ancillary PFP structures, including six laundry Conex containers. Crews also surveyed PFP radiological boundaries and performed equipment maintenance.

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

Plutonium Finishing Plant (PFP) Accomplishments:

- Crews began the demolition and loadout of remaining ancillary PFP structures, including six laundry Conex containers.
- Operations in January also 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 and performing equipment maintenance.

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 stoplight chart: <i>No major changes in January.</i>										
Realized Risks (Risks that are currently impacting project cost/schedule)										
No realized risks identified in <i>January</i> .										
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)										
No critical risks identified in <i>January</i> .										
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: 5px;"> <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: <i>No major changes in January.</i> This risk was identified as a key risk for fiscal year (FY) 2021. 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: 5px;"> <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: <i>No major changes in January.</i> 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"> <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 or weather event impacts in January .	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"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Communicate PRF loadout options with the U.S. Department of Energy (DOE), Richland Operations Office, (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 January . PRF debris loadout has not resumed due to the phased return to work due to personal protective equipment (PPE) availability.	Risk Recovery Action(s)	FC Date	%	Communicate PRF loadout options with the U.S. Department of Energy (DOE), Richland Operations Office, (RL).	Ongoing	N/A	Encourage additional worker involvement.	Ongoing	N/A
Risk Recovery Action(s)	FC Date	%										
Communicate PRF loadout options with the U.S. Department of Energy (DOE), Richland Operations Office, (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 impede the project's ability to maintain planned fieldwork activities. <table border="1"> <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 CH2M HILL Plateau Remediation Company (CHPRC) general industrial hazards analysis.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in January . This risk was identified as a key risk for FY2021. PFP discrete fieldwork activities have not resumed due to the phased return to work due to PPE availability.	Risk Recovery Action(s)	FC Date	%	Maintain the COVID-19 controls as detailed in the CH2M HILL Plateau Remediation Company (CHPRC) general industrial hazards analysis.	Ongoing	N/A			
Risk Recovery Action(s)	FC Date	%										
Maintain the COVID-19 controls as detailed in the CH2M HILL Plateau Remediation Company (CHPRC) general industrial hazards analysis.	Ongoing	N/A										
Unassigned Risks (Pending ownership of identified threats/opportunities)												
No unassigned risks identified in January .												

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	2.7	0.6	1.2	(2.1)	-79.0%	(0.6)	-103.6%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Variance: (-\$2.1M/-79.0%)

The negative CM schedule variance is primarily a result of the delay in PFP demolition resumption efforts due to PPE uncertainty during COVID-19. PFP was scheduled to resume ancillary structure demolition in January 2021. This work did begin in January, but at lower-than-planned levels. Activities on ancillary structures were limited due to the high-risk nature of the work, primarily the demolition of MO605, which is now scheduled to resume in February 2021.

CM Cost Variance: (-\$0.6M/-103.6%)

The negative CM cost variance is primarily a result of required S&M activities at PFP being performed at levels above what was originally planned due to delay in demolition resumption. activities. These continuing activities include surveys of PFP radiological boundaries fixative applications and general site maintenance.

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	1,147.9	1,133.6	1,245.5	(14.3)	-1.2%	(111.8)	-9.9%	1,152.8	1,263.8	18.4	(111.1)

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Variance: (-\$14.3M/-1.2%)

The CTD schedule variance is within threshold.

CTD Cost Variance: (-\$111.8M/-9.9%)

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 partial stop work order (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): (-\$111.1M/-9.6%)

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

Funds/Variance Analysis

Funding information by project breakdown structure is provided in the overview.

Critical Path Analysis

The PFP critical path schedule begins with the completion of PRF loadout, which is forecast to occur by May 11, 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 September 13, 2021.

MILESTONE STATUS

The following table is a look ahead at the FY2021 Tri-Party Agreement-enforceable milestones, non-enforceable target due dates and commitments for RL-0011.

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		5/11/2021	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 date reflects the unanticipated 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

January 2021
CHPRC-2021-01, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In the January reporting period (December 21, 2020 – January 24, 2021), the Waste and Fuels Management Project (W&FMP) and the River Risk Management Project continued essential mission-critical operations.

Major accomplishments in January included:

- The W-135 Management of Cesium and Strontium Capsules (MCSC) Project continued construction of the raw water pipeline in support of fire protection requirements and initiated installation of the perimeter fence at the Capsule Storage Area (CSA). Fabrication of the Cask Storage System (CSS) equipment at offsite machine shops continued to progress. The project received the U.S. Department of Energy (DOE), Richland Operations Office (RL) approval of the consent package for the Waste and Encapsulation Storage Facility (WESF) Modifications construction contract on January 22, 2021. RL approved the Critical Decision (CD)-2 and CD-3 package for the WESF Modifications Line Item on January 8, 2021.
- At the Integrated Disposal Facility (IDF), the Operational Readiness team continued work to commission operational systems and procedures. The project continued development on two Class 3 *Resource Conservation and Recovery Act of 1976* (RCRA) permit modification requests and two air permits and continued construction efforts for plant infrastructure upgrades at IDF.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
21-EMS-WFMP-OBJ1-P1	T Plant Complex will receive three filter media Sludge Transport & Storage Container (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 the transportation organization.	9/30/2021	16%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred (DART)	2	4	1/4/2021 - Employee was walking to a car to retrieve items. It was dark and raining. The employee saw a flash of light and looked to see if a car was coming while still walking. Employee then tripped over a concrete parking curb, falling to the ground. Employee was treated at HPM Corporation (HPMC) and released back to work with restrictions. (25628) 1/12/2021 - While accessing dozer equipment cab via portable bridge, employee fell onto dozer tracks and sprained their lower back. Employee was treated at HPMC and released back to work with restrictions. (25633)
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

- Provided a response to Washington State Department of Ecology (Ecology) on January 7, 2021, to address the November 30, 2020, Trench 94 inspection and subsequent request for information received on December 10, 2020.

13.02 Capsule Storage and Disposition

- Initiated 3-year maintenance/testing of substation circuit breakers.
- Completed replacement of battery in the closed-loop cooling system programmable logical controllers.
- Completed the annual inspection of a 15-ton and 1-ton auxiliary hoist hook wire rope and drum.
- Completed 38 preventative maintenance (PM) packages.

13.03 Canister Storage Building

- Completed enhancement of Acceptable Knowledge for the first TRU waste stream (RLPFP-04NJ) and continued the enhancement of Acceptable Knowledge for three other waste streams (RLBW-03, RLCFF-03 and RLHAN-01B).
- Completed 25 PM packages.

13.07 Waste Receiving and Processing

- Completed 292 surveillances and 16 PM packages.

13.08 T Plant

- Completed 2706T Stack monitoring system annual calibration.
- Completed final documentation for annual weighing of cell 15L STSCs.
- Completed restricted use validation of the STSC Handling Operations procedure.
- Shipped three drums from T Plant to ERDF.
- Completed 507 surveillances and 33 PM packages.
- With the support of Project Technical Services, completed pre-bid walk down for T Plant spalling repairs.

13.09 Central Waste Complex and Low-Level Burial Grounds

- Completed replacement 2403WC Riser 1 air maintenance device and air compressor.
- Completed 302 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

- Completed 150 surveillances.

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

- RL approved the CD-2 and CD-3 package for the WESF Modification Line Item on January 8, 2021.
- Received RL consent for the WESF Modifications construction contract.

13.25 Capsules Interim Storage Operations

- Completed Maintenance and Storage Facility mockup construction and turnover.

River Risk Management Project**13.10 Environmental Restoration Disposal Facility**

- Received 5,184 tons of waste for disposal.
- Received 14,628 tons of waste for disposal fiscal year (FY) to date. Any corrections in previous months are reflected in this total.
- Offloaded the AX Farm spray ring base.
- Completed down posting of 44 Green B (Plutonium Finishing Plant closed loop) roll-on/roll-off containers to general purpose status.

13.12 Integrated Disposal Facility

- Operations and Maintenance
 - Completed monthly inspections.
 - Completed quarterly inspections.
 - Performed two significant storm event inspections.
- IDF Operational Readiness
 - Systems and procedures continued work to commission operational systems and procedures.
 - Permitting continued development on two Class 3 RCRA permit modification requests and two air permits.
 - Infrastructure upgrades continued construction efforts for plant infrastructure upgrades at IDF.

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.

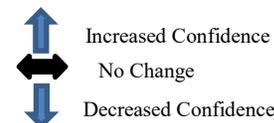
Status

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.



Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0013/WBS-013										
Explanation of major changes to the project monthly stoplight chart:										
Risk RL13 WFM-0037-T, <i>Shipment Delays</i> , was added to the stoplight chart as a realized risk. Risks RL13 CSA-0004-T, <i>Configuration of Existing Facilities and Infrastructure Different from Assumed</i> , RL13 MCSC-0010-T, <i>Maintenance and Storage Facility (MASF) Mockup Construction Subcontractor Performance</i> , and RL13 IDF-0010-T, <i>Discovery of Unplanned Site Conditions</i> , were removed from the stoplight chart, as they are no longer being realized.										
Realized Risks (Risks that are currently impacting project cost/schedule)										
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>Construct new RPBA facility.</td> <td style="text-align: center;">5/20/2021</td> <td style="text-align: center;">15</td> </tr> </tbody> </table> Recovery Action Assessment: No major changes in January. 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. Material procurement and limited construction of the RPBA facility began in December and continued in January without incident.	Risk Recovery Action(s)	FC Date	%	Construct new RPBA facility.	5/20/2021	15
Risk Recovery Action(s)	FC Date	%								
Construct new RPBA facility.	5/20/2021	15								

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%)</p> <p>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> <tr> <td>Finalize seismic calculations to confirm gantry anchorage design.</td> <td>1/30/2021</td> <td>80</td> </tr> </tbody> </table> <p>Recovery Action Assessment: A design change for the AWS was proposed and accepted by CH2M HILL Plateau Remediation Company (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. CHPRC provided comments for resolution. 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	Finalize seismic calculations to confirm gantry anchorage design.	1/30/2021	80
Risk Recovery Action(s)	FC Date	%											
Automated Weld System (AWS) vendor to provide portions of design for review as available.	Complete	100											
Finalize seismic calculations to confirm gantry anchorage design.	1/30/2021	80											
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%)</p> <p>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: No significant changes in January. 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%)</p> <p>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 January. 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 MODS-0001-T: Changes to CSS Equipment Impact WESF Modifications	<p>Changes to CSS or other buyer-furnished equipment impact the 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 the WESF Modifications design that, in turn, will drive changes to the WESF Modifications construction. Specific CSS design changes which impact the WESF Modifications include but are not limited to:</p> <ul style="list-style-type: none"> - Changes to the Evacuation and Helium Backfill System (EHBS) 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. In January, a WESF Modifications general design update was completed to respond to the NAC CSS miscellaneous design changes (fourth bullet above).</td> <td>9/30/2021</td> <td>10</td> </tr> <tr> <td>Construct the 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 underway to CSS equipment design by NAC that will impact the 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. In January, a WESF Modifications general design update was completed to respond to the NAC CSS miscellaneous design changes (fourth bullet above). Additional WESF Modifications design changes will be prepared as further NAC CSS equipment design changes are issued (e.g., for EHBS 1 and 2, AWS and truckport floor coating).</p>	Risk Recovery Action(s)	FC Date	%	Revise the WESF Modifications design documents to reflect changes in design inputs from CSS equipment. In January, a WESF Modifications general design update was completed to respond to the NAC CSS miscellaneous design changes (fourth bullet above).	9/30/2021	10	Construct the 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. In January, a WESF Modifications general design update was completed to respond to the NAC CSS miscellaneous design changes (fourth bullet above).	9/30/2021	10											
Construct the 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 January. 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 January. 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											

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0013/WBS-013																
RL13 WFM-0037-T: Shipment Delays	<p>A project discovery or incident leads to shipments of waste being paused, 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, 32 days</p>	●	↓	<p>Risk Event: A stop work was called in October 2020 when a nondestructive assay yielded higher-than-expected results on a CWC waste container. This stop work caused shipments to be paused until recovery actions can be implemented. As the shipment schedule has significant contingency built in for planned FY2021 shipments, the risk was not realized until January 2021, when it became apparent that the planned FY2021 shipments are at risk for completion because the schedule contingency has been exhausted.</p> <table border="1"> <thead> <tr> <th>Risk Recovery Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Evaluation of the Safety of the Situation submitted to DOE for review and approval.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>RL approval of the Evaluation of the Safety of the Situation.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Evaluation of the Safety of the Situation implemented on the project.</td> <td>3/21/2021</td> <td>30</td> </tr> </tbody> </table> <p>Recovery Action Assessment: As of January 2021, the project has been working to implement the risk recovery actions that would allow shipments to resume. An Evaluation of the Safety of the Situation was drafted and submitted to RL in November 2020. RL approved the Evaluation of the Safety of the Situation, and the project is working on implementation of revised controls and compensatory measures. Implementation is expected to be completed in March, with shipments resuming shortly thereafter.</p>	Risk Recovery Action(s)	FC Date	%	Evaluation of the Safety of the Situation submitted to DOE for review and approval.	Complete	100	RL approval of the Evaluation of the Safety of the Situation.	Complete	100	Evaluation of the Safety of the Situation implemented on the project.	3/21/2021	30
Risk Recovery Action(s)	FC Date	%														
Evaluation of the Safety of the Situation submitted to DOE for review and approval.	Complete	100														
RL approval of the Evaluation of the Safety of the Situation.	Complete	100														
Evaluation of the Safety of the Situation implemented on the project.	3/21/2021	30														
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																
No critical risks identified in January.																
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 the 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: No significant changes in January. 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 the fabricator and vice versa. The status meetings enables quicker resolution of problems and questions.</p>	Mitigation Action(s)	FC Date	%	Review scope of each task prior to initiation to ensure the 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 the 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.</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>Complete</td> <td>100</td> </tr> <tr> <td>Assess and procure additional spare parts as necessary.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in January. 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.	Complete	100	Assess and procure additional spare parts as necessary.	Ongoing	N/A			
Mitigation Action(s)	FC Date	%														
Procure and receive crane trolley motor parts.	Complete	100														
Assess and procure additional spare parts as necessary.	Ongoing	N/A														

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0013/WBS-013																
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 January. 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, 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-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 the DWMU, resulting in cost and schedule delays.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Unlikely (10% to 24%)</p> <p>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.</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 Leachate Collection Tank (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 January. 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 Leachate Collection Tank (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 Leachate Collection Tank (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%)</p> <p>Worst Case Impacts: \$300K, 96 days</p>	●	↔	<p>Risk Trigger Metric: The canyon crane fails during use or cannot be returned to service after maintenance.</p> <table border="1"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform preventative/corrective maintenance procedures on the crane to facilitate reliability.</td> <td>Complete</td> <td>100</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 occurred on January 7, 2021. Critical spares will be evaluated and procured prior to the end of FY2021. This risk is no longer considered a key risk for FY2021 and will be removed from the stoplight chart prior to February reporting.</p>	Mitigation Action(s)	FC Date	%	Perform preventative/corrective maintenance procedures on the crane to facilitate reliability.	Complete	100	Procure critical spares.	Ongoing	N/A			
Mitigation Action(s)	FC Date	%														
Perform preventative/corrective maintenance procedures on the crane to facilitate reliability.	Complete	100														
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%)</p> <p>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 Perma-Fix Northwest for treatment.</td> <td>9/30/2021</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in January. This risk was identified as a key project risk. 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 Perma-Fix Northwest 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 Perma-Fix Northwest for treatment.	9/30/2021	0														
Unassigned Risks (Pending ownership of identified risks/opportunities)																
No unassigned risks identified in January .																

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	12.8	12.9	17.0	0.1	1.1%	(4.1)	-31.6%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (+\$0.1M/+1.1%)

The CM schedule variance is within threshold.

CM Cost Performance (-\$4.1M/-31.6%)

The CM negative cost variance is due to an inadvertently transposing numbers in the CACN for the Universal Capsule Sleeve (UCS) fabrication/delivery when correcting a manual accrual error, resulting in a (\$1,478.3K) variance. The correcting entry was applied to an account in RL-30 instead of RL-13, causing variances in both project breakdown structures. Storage system fabrication/delivery also contributed to the negative cost variance due to the Vertical Concrete Cask (VCC) liners material sourcing values were based on estimated values provided by the subcontractor. This pricing expired and was updated and included in contract award for Storage System fabrication, resulting in a difference between values planned in the baseline (VCC liner material sourcing planned value of \$361.9K versus actuals of \$749.6K). Due to these updated pricing values and funding constraints, the VCC liners material sourcing was authorized at the agreed upon value, thus creating the negative cost variance for the current period. T Plant Base Operations CM negative cost variance was a result of increased labor for installation of pre-filters and January PMs. In addition, the negative cost variance included labor and general and administrative variance adjustments from both CHPRC and HMIS.

Also contributing to the CM negative cost variance is ERDF fleet fuel costs not being charged correctly. The first four months cost all charged in January.

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	1,726.2	1,706.3	1,623.4	(19.8)	-1.1%	83.0	4.9%	1,860.3	1,776.4	153.0	83.9

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$19.8M/-1.1%)

The CTD schedule variance is within threshold.

CTD Cost Performance (+\$83.0M/+4.9%)

The CTD cost variance is within threshold.

Variance at Completion (+\$83.9M/+4.5%)

The CTD VAC is within threshold.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST**Funds/Variance Analysis**

Funding information by project breakdown structure is provided in the overview.

Critical Path Analysis

Critical path analysis will be provided upon request.

MILESTONE STATUS

The following table is a look ahead at FY2021 *Hanford Federal Facility Agreement and Consent Order*-enforceable milestones, non-enforceable target due dates and commitments for RL-0013.

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

Contract Section	Project	GFS/I	Status
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)	1/11/2021(A)
RL Approve IDF Final Hazard Categorization	8/3/2020(A)	2/25/2021

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

January 2021
CHPRC-2021-01, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In January, 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 include the following:

Treatment Facility	Million Gallons Treated		Chrome (kg)		Carbon Tet (kg)		Tech-99 (pCi)		Uranium (kg)	
	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD
DX P&T	30.3	122.2	1.5	6.9						
HX P&T	26.0	105.7	4.0	15.4						
KR-4 P&T	13.4	52.3	0.2	0.7						
KW P&T	13.2	52.3	0.53	2.6						
KX P&T	22.2	41.0	1.0	4.4						
200 West P&T	105.3	417.4	0.9	3.4	157.0	630.0	1.8x10 ¹¹	7.78 x10 ¹¹	7.4	31.9
Combined	210.4	843.9	8.14	33.3	157.0	630.0	1.8x10 ¹¹	7.78 x10 ¹¹	7.4	31.9
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	0	5
200-DV-1	2	0	0
200-ZP-1	7	0	0
M-24 Milestone	3	0	3
Total FY2020 Carryover Wells	17	0	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	50%
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	39%

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	4	N/A
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

In January, the Soil and Groundwater Remediation Project continued progress on decision documents, routine sampling analysis, well drilling, and P&T operations. See Well Drilling and P&T Operations tables, above, for additional information.

100 Area P&Ts

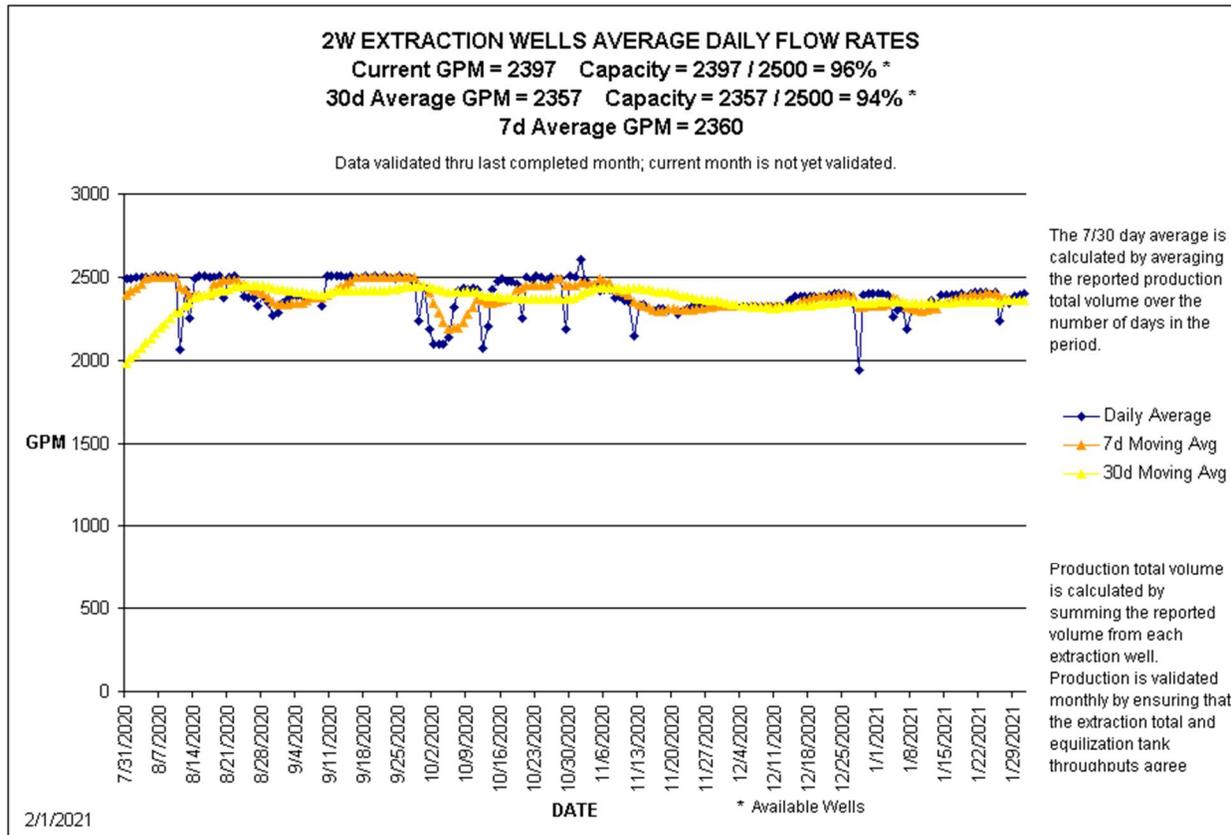
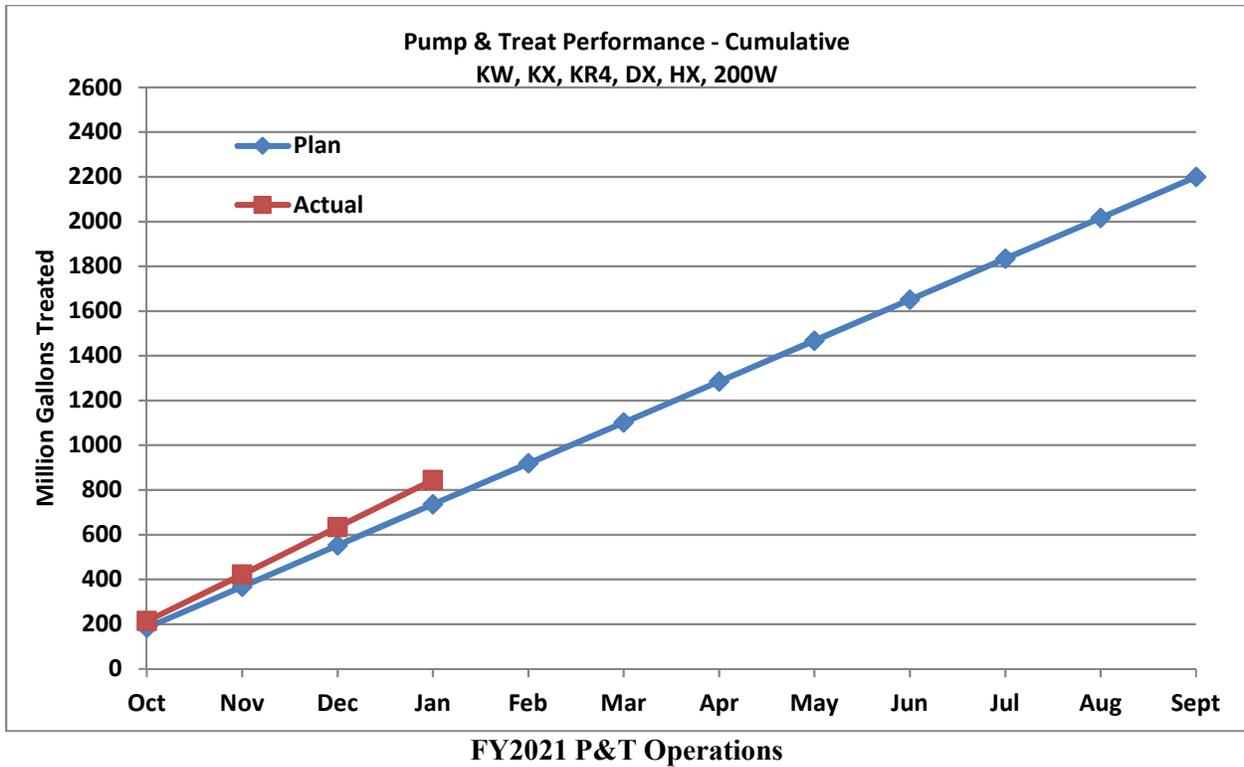
- Operated the DX P&T at 722 gallons per minute (gpm), below the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 300 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 309 gpm, below the facility capacity of 330 gpm.
- Operated the KX P&T at 493 gpm, below the facility capacity of 900 gpm.
- Operated the HX P&T at 502 gpm, below the facility capacity of 900 gpm.

200-CP-1 Operable Unit (OU)

- Completed preparation and internal review of the scoping summaries for the 35 additional waste sites to be added to the remedial investigation/feasibility study (FS) work plan.

200-ZP-1 OU

- Total and free cyanide at the 200 West P&T is below detection limits; Waste Management Area (WMA) B-BX/BY cyanide concentrations are either stable or trending downward and the plume is smaller since 2015 when extraction began in the 200-BP-5 OU; and in WMA T-TX/TY, one well continues to trend upward for total and free cyanide. Monitoring for total and free cyanide will continue in these areas and total and free cyanide will be evaluated under the Central Plateau Comprehensive Plume Evaluation Plan currently underway.
- The injection capacity has continued to improve without intensive rehabilitation since the active biological treatment system was suspended in October 2019 as a major component of the 200-ZP-1 Optimization Study Plan implementation. The U.S. Department of Energy (DOE), Richland Operations Office (RL) will be briefed in February 2021 on the first quarter FY2021 200 West P&T injection well performance.



MAJOR ISSUES

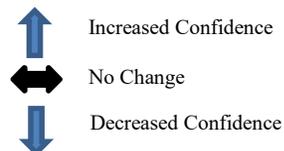
Issue

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 spotlight chart: The January risks assessment has concluded no significant changes.										
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 U.S. Environmental Protection Agency (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> <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 January. 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> <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 January. 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 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 the aerated sludge holding tank layout and 200-DV-1 drilling has been delayed as a result of key team members required to quarantine. In addition, the delivery of the ion exchange (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 January. The scope 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 January .										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
No High Risks identified in January .										
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>The 100 Area P&T operations has incorporated weekly, monthly and annual preventative maintenance (PM) 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: No significant change in January. The 100K 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	%	The 100 Area P&T operations has incorporated weekly, monthly and annual preventative maintenance (PM) activities in the baseline to assure reliability of equipment within the P&T facilities.	Ongoing	N/A
Mitigation Action(s)	FC Date	%								
The 100 Area P&T operations has incorporated weekly, monthly and annual preventative maintenance (PM) 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>The 200 Area P&T operations has incorporated weekly, monthly and annual PM 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: No significant change in January. 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	%	The 200 Area P&T operations has incorporated weekly, monthly and annual PM activities in the baseline to assure reliability of equipment within the P&T facilities.	Ongoing	N/A
Mitigation Action(s)	FC Date	%								
The 200 Area P&T operations has incorporated weekly, monthly and annual PM 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	<p>Availability of qualified drilling bidders to perform the FY2021 drilling scope becomes hindered, resulting in cost and schedule impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Unlikely (10% to 25%) Worst Case Impacts: \$1,510.0K, 0 days</p>	●	↔	<p>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.</p> <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>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant change in January. 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.</p>	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 January .										

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	8.0	7.7	8.3	(0.3)	-3.8%	(0.5)	-6.9%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (-\$0.3M/-3.8%)

The CM negative schedule variance is within reporting thresholds.

CM Cost Performance (-\$0.5M/-6.9%)

The CM negative cost variance is due to a combination of 200-ZP-1 air stripper installation costs and delays to some 200-ZP-1 well drilling work. Pumps and accompanying inspections for the air stripper were more expensive than planned. Review of slug testing technical requirement caused 200-ZP-1 drilling field work delays. The 200-ZP-1 monitoring well campaign and extraction well campaigns have progressed at a very slow pace, due to difficult geological conditions.

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	1,783.8	1,768.9	1,709.7	(15.0)	-0.8%	59.1	3.3%	1,861.9	1,801.8	92.1	60.0

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$15.0M/-0.8%)

The CTD negative schedule variance is within reporting thresholds.

CTD Cost Performance (+\$59.1M/+3.3%)

The CTD positive cost variance is within reporting thresholds.

Variance at Completion (+\$60.0M/+3.2%)

The variance at completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST

Funds/Variance Analysis

Funding information by project breakdown structure is provided in the overview.

Critical Path Analysis

Critical path analysis will be provided upon request.

MILESTONE STATUS

The following table is a look ahead at the FY2021 *Hanford Federal Facility Agreement and Consent Order*-enforceable milestones, non-enforceable target due dates and commitments for RL-0030.

Number	Title	Due Date	Actual Date	Forecast	Status/ Comment
M-015-93C	Initiate Characterization Field Work for 200-SW-2 Operable Unit Landfills	9/30/2018		To be determined (TBD)	In Abeyance
M-015-98	Complete Remedial Investigation of U Plant Related Waste Sites Located in 200-WA-1	6/30/2019		TBD	In Abeyance
M-085-70	Submit to Ecology a Remedial Investigation/Feasibility Study Work Plan for 200-CB-1	9/30/2019		TBD	In Abeyance
M-015-99	Complete Remedial Investigation of 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

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)	1/5/2021(A)
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)	1/7/2021(A)
RL Review of 100-KE Soil Flushing Explanation of Significant Difference	1/12/2021(A)	2/13/2021
RL Review Decisional Draft 200-PO-1 Conceptual Site Model Sampling and Analysis Plan (SAP)	1/27/2021	2/26/2021
RL Review 100-KR-4 FY2021 Parent Rebound KW SAP Addendum	2/17/2021	3/11/2021
RL Transmit 100-KE Soil Flushing Explanation of Significant Difference to EPA	3/3/2021	3/17/2021
RL Review 100-KR-4 FY2021 KE Soil Flushing SAP	4/6/2021	5/5/2021
RL Submit 200-BP-5/200-PO-1 Draft A IA RD/RAWP to Regulators	4/8/2021	6/7/2021
RL Review Decisional Draft 100-HR-3 Groundwater Rebound SAP	5/6/2021	5/26/2021

*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

January 2021
CHPRC-2021-01, 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 January, the Central Plateau Risk Management (CPRM) organization continued essential mission-critical operations. The Aging Structures team completed stabilization of the 216-Z-9 Crib and the 241-Z-361 Tank. At the Reduction-Oxidation (REDOX) facility, crews completed installation of the 202S northeast ground rod to complete placement and configuration of temporary power. Crews at the 224B Facility are near completion for the construction of the containment structures in order to make personnel entries into the hot cells. The Plutonium Uranium Extraction Plant (PUREX) North team completed hazardous waste removal for the 2701AB, 2714A and 214A Buildings. In addition, the crew completed characterization inside 211A and received sampling results that reported that the materials were within regulatory thresholds. The West Area Remediation Project (WARP) team completed the hazardous waste removal, demolition and debris loadout of five former mobile office trailers (MO015, MO016, MO017, MO032 and MO939) in the South Trailer Village. Crews completed the 231-Z Facility characterization site walk down, initial entry into 224T and ground scanning at 224T. Crews also completed the electrical and mechanical isolations to the remainder of the South Trailer Village as well as the mechanical isolations to 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	32%

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	2	16	1/6/2021 - Employee tripped and fell over a railroad tie. Employee was treated at HPM Corporation (HPMC) and released back to work with no restrictions. (25631) 1/13/2021 - While closing a lift gate at a work site, employee pinched their finger in the lift gate chain. Employee was treated at HPMC and released back to work with no restrictions. (25634)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Central Plateau Risk Management Surveillance and Maintenance (S&M)

- Completed quarterly surveillance of the temporary storage and disposal waste sites at the 400, 600 and 1100 Areas.

REDOX Canyon Risk Mitigation

- Completed factory acceptance testing for equipment procurement supporting the REDOX ventilation system.
- Completed installation of THE 202S northeast ground rod to complete placement and configuration of temporary power.

Aging Structures Stabilization

- Completed stabilization of the 216-Z-9 Crib and the 241-Z-361 Tank.

224B Facility Demolition Prep

- Completed the Class 2 asbestos removal on the first floor of 224B.

PUREX North Risk Mitigation

- Completed hazardous waste removal in 2714A, 214A and 2701AB.
- Completed 211A interior characterization and received sample results. After data analysis, results concluded that the material does not exceed regulatory thresholds.

West Area Remediation Project

- Completed hazardous waste removal, demolition and debris loadout of five former mobile office trailers (MO015, MO016, MO017, MO032 and MO939) in the South Trailer Village.
- Completed the 231-Z Facility characterization site walk down, initial entry into 224T and ground scanning at 224T.
- Completed the electrical and mechanical isolations to the remainder of the South Trailer Village as well as the mechanical isolations to 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 May 2021.

RISK MANAGEMENT STATUS

- Unassigned Risk**
- Risk Passed**
- New Risk**
- Change**

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
Richland Operations Office (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%; border-collapse: collapse;"> <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>Create and implement a phased approach to address identified concerns.</td> <td style="text-align: center;">April 2021</td> <td style="text-align: center;">89</td> </tr> <tr> <td>Upgrade temporary power/lighting and localized ventilation.</td> <td style="text-align: center;">February 2021</td> <td style="text-align: center;">65</td> </tr> </tbody> </table> <p>Recovery Action Assessment: <i>No significant changes in January.</i> 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	89	Upgrade temporary power/lighting and localized ventilation.	February 2021	65
Risk Recovery Action(s)	FC Date	%											
Create and implement a phased approach to address identified concerns.	April 2021	89											
Upgrade temporary power/lighting and localized ventilation.	February 2021	65											

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
Richland Operations Office (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>52</td> </tr> <tr> <td>Repair minor roof defects.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No significant changes in January. 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. 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	52	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	52														
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>92</td> </tr> </tbody> </table> <p>Recovery Action Assessment: No significant changes in January. 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. Factory acceptance testing for temporary exhauster equipment completed in January; delivery is scheduled to complete in February.</p>	Risk Recovery Action(s)	FC Date	%	Design, fabrication and planning for procurement of the 202S ventilation system.	February 2021	92						
Risk Recovery Action(s)	FC Date	%														
Design, fabrication and planning for procurement of the 202S ventilation system.	February 2021	92														
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>Complete</td> <td>100</td> </tr> <tr> <td>Implement recovery actions for grouting 216-Z-2 Crib void space.</td> <td>Unable to Finish</td> <td>N/A</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 on 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 project attempted to implement Option 1 and Option 6 in January, but recovery actions failed due to existing riser and dry well conditions. The project has suspended 216-Z-2 stabilization efforts and is awaiting direction from the U.S. Department of Energy (DOE), Richland Operations Office (RL) on a path forward.</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.	Complete	100	Implement recovery actions for grouting 216-Z-2 Crib void space.	Unable to Finish	N/A
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.	Complete	100														
Implement recovery actions for grouting 216-Z-2 Crib void space.	Unable to Finish	N/A														
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																
No critical risks identified in January.																

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
Richland Operations Office (RL)-0040/WBS-040										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
No high threat value risks identified in January.										
FY2021 Key Risks										
RL40 WARP-0001-T: Regulatory Documents Delayed	The approvals of regulatory documents are delayed, resulting in schedule impacts to the project. Risk Handling Strategy: Accept Probability: Very likely (>90%) Worst Case Impacts: \$0, 96 days	● ↔	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.	<table border="1"> <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>	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 January.										

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	5.3	8.0	14.0	2.7	50.5%	(6.0)	-75.2%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance: (+\$2.7M/+50.5%)

The CM favorable schedule variance is primarily the result of performing carryover scope from FY2020 associated with demolition of the PFP trailer village. January 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 partial stop work order issued on March 24, 2020, and was extended through September 30, 2020.

WARP completed five 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 deactivation and decommissioning, which has been pushed into the future based on demolition priority.

CM Cost Performance: (-\$6.0M/-75.2%)

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. Additionally, the current month unfavorable cost variance is attributed to in scope, unplanned work supporting the stabilization of the 216-Z-2 Crib. Specifically, labor resources supporting activities associated with structure investigation, project management and stabilization.

Upon opening the single riser to conduct the internal investigation and prepare the 216 Z-2 structure for grouting, the project encountered an obstruction that prevented access to the void space. Engineering subject matter experts developed an Options Analysis for the obstruction that captured seven options for evaluation. After further evaluation, Option 1, which would attempt to dislodge/remove the obstructions and Option 6, which investigates the dry well and perforate/cuts on the wall were determined to be the best options in the future for completing stabilization of 216-Z-2. The project submitted a baseline change request in fiscal December to capture the cost of the design, fabrication and mockup of the unique, one-of-a-kind custom tool(s) to either clear the obstruction or modify the dry well as an alternate path so stabilization can continue.

The project attempted to implement Option 1 and Option 6 in January, but recovery actions failed due to existing riser and dry well conditions. The project has suspended 216-Z-2 stabilization efforts and is awaiting direction from RL on a path forward.

Additionally, subcontractor costs came in higher than planned due to increased standby rates, premium pay for additional mixer trucks dedicated to the project, and project infrastructure needs that were originally going to be provided by the PFP/WARP complex that logistically fell through. Specifically, water for conveyance system priming and flushing (requiring a dedicated rented water truck, operator and part time spotter), generator and light plant fueling (requiring a part time fuel truck and operator), snow removal (requiring a dedicated Bobcat, operator and two laborers), along with two additional part time laborers to manage the SOP, laundry and waste. These adjustments and recovery efforts added significant cost through change orders that resulted in a negative cost variance.

WARP labor and other Hanford contractors support costs exceeded the spend plan due to the delay in PFP restart, which diverted additional resources to support WARP scope including the South Trailer Village, 231-Z and 224-T facilities. Additionally, a year-end accrual for heavy equipment attachments was processed in January but was not originally planned to complete in FY2021.

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	664.8	645.3	662.6	(19.4)	-2.9%	(17.2)	-2.7%	728.3	749.9	87.3	(21.6)

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance: (-\$19.4M/-2.9%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (-\$17.2M/-2.7%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (-\$21.6M/-3.0%)

The VAC is within reporting thresholds.

Contract performance report formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST

Funds/Variance Analysis

Funding information by project breakdown structure is provided in the overview.

Critical Path Analysis

Critical path analysis can be provided upon request.

MILESTONE STATUS

The following table is a look ahead at the FY2021 *Hanford Federal Facility Agreement and Consent Order*-enforceable milestones, non-enforceable target due dates and commitments for RL-0040.

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	At Risk

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-2017-05, REDOX Sampling and Analysis Plan (SAP), Revision 1 Draft	7/23/2020(A)	1/30/2021
RL Review DOE/RL-2016-51, B Plant AM, Draft A	1/6/2021(A)	1/19/2021(A)
RL Review DOE/RL-2020-05, PUREX SAP Draft A	12/29/2020(A)	1/20/2021(A)
RL Obtain Regulator Review DOE/RL-2020-04, PUREX RAWP, Draft A	1/29/2021	3/14/2021

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

January 2021
CHPRC-2021-01, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

M. A. Wright
Vice President for
Project Technical Services

PROJECT SUMMARY

K Basin Operations (KBO)

KBO completed the first Vertical Pipe Casing (VPC) mockup loading and grout tests, and completed the augering and retrieval for the first VPC mockup loading and grouting test. The team disconnected and relocated the integrated water treatment system strainer to support clearing of the VPC footprint. KBO also completed the nondestructive assay (NDA) of Transfer Cask Assembly (TCA)-1 and TCA-2. The Maintenance and Storage Facility (MASF) team supported approval of the final Construction Completion Document for the W-135 mockup structure. The Soil Remediation team completed the re-sloping of the 100-K-47:1 dig site and removed 17,450 m³ of overburden material from the 100-K-96, 100-K-56, 100-K-55:2 and the 100 K-79:7 waste sites. Contaminated soil and debris (1,677 tons) were loaded out to the Environmental Restoration Disposal Facility (ERDF).

River Risk Management Project (RRMP)

The project continued to perform the essential mission-critical operations and training construction force core teams for the general contamination area (CA)/high contamination area (HCA)/airborne radiation areas (ARAs). All 20 of the corrective actions for the 324 Building Contamination Event Phase 1 have been completed.

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 CH2M HILL Plateau Remediation Company (CHPRC) procedures.	9/30/2021	32%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Months	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

100K Basin Operations

- 100K Closure Project
 - o 105K West Basin Deactivation
 - Completed the second VPC mockup augering test. Lessons learned from this test will be applied to the 105K West Basin activities.
- Soil Remediation Project
 - o Initiated excavation and loadout at the 100-K-60 waste site.

RRMP 324 Building Disposition

- Continued equipment procurements for the following:
 - o The Remote Excavator Arm (REA) demolition tool has been delivered.
 - o Contract was awarded for fabrication of the heating, ventilation and air conditioning dam filter frames.
 - o Initiated training at MASF for cell dam installation.
 - o Initiated micropile bond zone testing.
 - o Received irradiated acrylamide/soil cylinder strength results.
- 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 Submitted Course Number 324077, *324 Shift Operations Manager Qualification Card*, for approval through management at the 324 Building. This new qualification card consolidates training for this position into one card and uses the named shift operations manager to standardize this with other facilities.
 - o Provided training instructor and evaluator support for small group sessions of 324 Project advanced radiological training.

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 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 process 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. Due to anticipated levels of contamination and radiation, this work is presumed to pose a high radiological risk that requires mitigation by use of containments, temporary shielding and ventilation, and mockup training to complete the task. Engineering assessments along with advanced worker involvement will be necessary to plan the disposition of the TCA. Radiological engineering dose-to-Curie 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 ERDF for grouting and disposal. This approach will then be used to process TCA-2 after it is removed from the FTS annex.

Status

Results from an NDA performed on a shielded ion exchange (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 support trailer and area around TCA-1 were made ready and NDA commenced. Initial measurements have been taken for TCA-1, and the results are being compiled and reviewed. Following a 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 February 2021. Results of the NDA will be used to support fiscal year (FY) 2022 planning and engineering activities for dispositioning the contents of both TCAs.

Issue

Review of CHPRC compliance with DOE O 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 GFMR 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 garnet filter media.

Status

CHPRC and U.S. Department of Energy, Richland Operations Office (RL) have evaluated the alternatives and determined the appropriate path forward to ensuring compliance with DOE O 460.1D is to develop a revised TSD for the Hanford Site and a One Time Request for Shipping (OTRS) that supports KBO. The TSD draft revision (Revision 3A) has been prepared and submitted to RL for comment, and those comments are being resolved. Official transmittal of the revised TSD to RL was completed January 20, 2021, but the RL approval timeline for the TSD remains to be determined. The OTRS revision (Revision 4A) formal transmittal to RL was not completed prior to January fiscal month closing, and as with the TSD, the timeline for RL approval of the revised OTRS remains to be determined. Last month, the project status for this issue included that KBO had evaluated the nuclear safety aspect associated with these transportation safety concerns and determined that the situation did not represent a Potential Inadequacy in the Safety Analysis (PISA) for the 100K Area. However, CHPRC has declared a PISA for this same issue as it applies to the sitewide transportation program. CHPRC prepared an Unreviewed Safety Question Determination on January 14, 2021. Development of an Evaluation of the Safety of the Situation for use of the TSD is expected to follow in February.

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 and need to be completed prior to resuming General HCA/ARA work: prestart Phase 1 - general CA/HCA activities, prestart Phase 2 – Room 18 activities, prestart Phase 3 - airlock activities and post-start corrective actions.

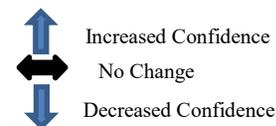
Status

All 20 of the Phase 1 prestart corrective actions have been completed. The General HCA/ARA activities are anticipated to start on January 25, 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: No significant changes in January.																						
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; margin-bottom: 10px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 70%;">Recovery Action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>Vendor delivery to acquisition verification services (AVS) – B Cell 10-ton crane.</td> <td>3/31/2021</td> <td>0</td> </tr> <tr> <td>Perform remote survey and radiological characterization of the A/D Crane.</td> <td>7/28/2021</td> <td>0</td> </tr> <tr> <td>Perform follow-up A/D Crane mechanical investigation.</td> <td>9/1/2021</td> <td>0</td> </tr> <tr> <td>Perform follow-up A/D Crane mechanical repairs.</td> <td>10/28/2021</td> <td>0</td> </tr> <tr> <td>Perform A/D Crane characterization.</td> <td>11/4/2021</td> <td>0</td> </tr> </tbody> </table> Recovery Assessment: No significant changes in January . 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 factory acceptance test 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 acquisition verification services (AVS) – B Cell 10-ton crane.	3/31/2021	0	Perform remote survey and radiological characterization of the 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	%																				
Vendor delivery to acquisition verification services (AVS) – B Cell 10-ton crane.	3/31/2021	0																				
Perform remote survey and radiological characterization of the 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																				
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; margin-bottom: 10px;"> <thead> <tr style="background-color: #e0e0e0;"> <th style="width: 70%;">Recovery Action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>Perform project resumption activities (core team) – general CA/CHA.</td> <td>1/14/2020</td> <td>100</td> </tr> <tr> <td>Return to Room 18 work – resumption actions.</td> <td>2/23/2021</td> <td>15</td> </tr> <tr> <td>Return to airlock work – resumption actions.</td> <td>4/21/2021</td> <td>15</td> </tr> </tbody> </table> Recovery Assessment: Performing resumption activities for general CA/CHA with core team was completed. 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 (CA/HCA), Room 18 and the airlock. Upon successful completion of resumption actions and training, each group set will resume fieldwork scope.	Recovery Action(s)	FC Date	%	Perform project resumption activities (core team) – general CA/CHA.	1/14/2020	100	Return to Room 18 work – resumption actions.	2/23/2021	15	Return to airlock work – resumption actions.	4/21/2021	15						
Recovery Action(s)	FC Date	%																				
Perform project resumption activities (core team) – general CA/CHA.	1/14/2020	100																				
Return to Room 18 work – resumption actions.	2/23/2021	15																				
Return to airlock work – resumption actions.	4/21/2021	15																				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)																						
No critical risks are identified in January .																						

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>6/14/2021</td> <td>0</td> </tr> </tbody> </table> Mitigation Assessment: No significant changes in January . The project continues to work resumption training and anticipates further reducing the probability of this risk once proficiency training is complete. Increased personal protective equipment and additional control measures were successfully implemented.	Mitigation Action(s)	FC Date	%	Continued resumption/proficiency training for Room 18.	6/14/2021	0						
Mitigation Action(s)	FC Date	%														
Continued resumption/proficiency training for Room 18.	6/14/2021	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 January . 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>2/11/2021</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.	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.	2/11/2021	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.	2/11/2021	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>6/17/2021</td> <td>0</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in January. 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.	6/17/2021	0						
Mitigation Action(s)	FC Date	%														
Perform B Cell and D Cell door pin isolations.	6/17/2021	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>1/18/2021</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in January. 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.</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.	1/18/2021	100
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.	1/18/2021	100														
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 – grout container (GC)/44-inch bins.</td> <td>2/18/2021</td> <td>95</td> </tr> </tbody> </table> <p>Mitigation Assessment: 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. The forecast completion date for fabrication of GC/44-inch bins was delayed due to vendor material availability.</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 – grout container (GC)/44-inch bins.	2/18/2021	95			
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 – grout container (GC)/44-inch bins.	2/18/2021	95														

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 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 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 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 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 January. 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 January .																			

PROJECT BASELINE PERFORMANCE

Current Month (CM)

(\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	9.0	8.8	11.5	(0.2)	-2.5%	(2.7)	-30.3%

Numbers rounded to the nearest \$0.1 million.

CM Schedule Performance (-0.2M/-2.5%)

The CM positive schedule variance for RRMP 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.

CM Cost Performance (-\$2.7M/-30.3%)

The CM negative cost variance for RRMP is partially due to a November 14, 2019, project wide stop work, and the follow on corrective actions items that are required to be completed before work can resume. During the stop work, the Structural Modifications account continues to incur costs for subcontractor equipment remaining on site. In addition, there are increased costs for materials being acquired in the current period to support personal protective equipment (PPE) acquisitions for the ramp-up of specialized training for Room 18 and airlock PPE ensembles. In addition, the negative cost variance was the result of G&A and labor variance adjustments from both CHPRC and HMIS, and final accrual adjustments for 100K Area contracts.

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	839.9	813.7	819.9	(26.2)	-3.1%	(6.2)	-0.8%	919.8	931.5	111.6	-11.7

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$26.2/-3.1%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance (-\$6.2/-0.8%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (-\$11.7/-1.3%)

The variance at completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST

Funds/Variance Analysis

Funding information by project breakdown structure is provided in the overview.

Critical Path Analysis

Critical path analysis can be provided upon request.

MILESTONE STATUS

The following table is a look ahead at the FY2021 *Hanford Federal Facility Agreement and Consent Order*-enforceable milestones, non-enforceable target due dates and commitments for RL-0041.

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		12/8/2023	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

January 2021
CHPRC-2021-01, 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 January 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

- Completed the development and internal review of the draft engineering evaluation/cost analysis regulatory document for the 400 Area.
- Near completion of regulator comment incorporation and public distribution for the Argon System *Resource Conservation and Recovery Act of 1976* addendum.

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)	(2.8%)	(0.1)	(40.6%)

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance: (-\$5.1M/-2.8%)

The CM schedule variance is within reporting thresholds.

CM Cost Performance: (-\$0.1M/-40.6%)

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	33.0	32.8	27.7	(0.2)	-0.7%	5.0	15.4%	35.5	30.3	2.5	5.2

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: (+\$5.0M/+15.4%)

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: (+\$5.2M/+14.7%)

The VAC reflects efficient use of resources supporting deactivation activities.

Contract Performance Report Formats are provided in Appendix A.

FUNDS VS. SPEND FORECAST

Funds Analysis

Funding information by project breakdown structure is provided in the overview.

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

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review and Incorporate Comments of Draft EE/CA	1/14/2021 (A)	2/8/2021

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



January 2021 2020
CHPRC-2021-01, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE													FORM APPROVED OMB No. 0704-0188																																		
1. CONTRACTOR			2. CONTRACT				3. PROGRAM			4. REPORT PERIOD																																					
a. NAME CH2M HILL Plateau Remediation Company			a. NAME Plateau Remediation Contract				a. NAME Plateau Remediation Contract			a. FROM (YYYYMMDD) 2020 / 12 / 21																																					
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788				b. PHASE			b. TO (YYYYMMDD) 2021 / 01 / 24																																					
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 7,632,695	g. CONTRACT CEILING 7,326,944	h. ESTIMATED CONTRACT CEILING 7,632,695	i. DATE OF OTB/OTS (YYYYMMDD)																																							
6. ESTIMATED COST AT COMPLETION				7. AUTHORIZED CONTRACTOR REPRESENTATIVE																																											
MANAGEMENT ESTIMATE AT COMPLETION (1)				CONTRACT BUDGET BASE (2)			VARIANCE (3)			a. NAME (Last, First, Middle Initial) Underwood, Teresa			b. TITLE Prime Contract Compliance Manager																																		
a. BEST CASE 7,283,539										c. SIGNATURE			d. DATE SIGNED (YYYYMMDD)																																		
b. WORST CASE 7,348,894																																															
c. MOST LIKELY 7,326,365				7,360,915			34,550																																								
8. PERFORMANCE DATA																																															
CAPN.PBS													CURRENT PERIOD			CUMULATIVE TO DATE				REPROGRAMMING ADJUSTMENTS			AT COMPLETION																								
ITEM (1)													BUDGETED COST		ACTUAL COST WORK PERFORMED		VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED		VARIANCE		COST VARIANCE (12a)			SCHEDULE VARIANCE (12b)			BUDGET (13)			BUDGETED (14)			ESTIMATED (15)			VARIANCE (16)							
													WORK SCHEDULED (2)		WORK PERFORMED (3)		SCHEDULE (5)		COST (6)		WORK SCHEDULED (7)		WORK PERFORMED (8)		COST (9)		SCHEDULE (10)		COST (11)																		
RL-0011 Nuclear Mat Stab & Disp PFP													2,697		567		1,154		-2,130		-587		1,147,899		1,133,638		1,245,470		-14,261		-111,832		0			0			1,152,752			1,263,840			-111,088		
RL-0012 SNF Stabilization & Disp													0		0		0		0		0		759,593		759,593		729,813		0		29,780		0			0			759,593			729,813			29,780		
RL-0013 Solid Waste Stab & Disp													12,759		12,903		16,979		144		-4,077		1,726,192		1,706,343		1,623,379		-19,849		82,964		0			0			1,860,289			1,776,368			83,920		
RL-0030 Soil &Water Rem-Grndwtr/Vadose													8,047		7,742		8,276		-305		-534		1,783,813		1,768,854		1,709,710		-14,959		59,143		0			0			1,861,850			1,801,819			60,031		
RL-0040 Nuc Fac D&D - Remainder Hanfrd													5,318		8,002		14,018		2,683		-6,016		664,754		645,340		662,588		-19,414		-17,249		0			0			728,300			749,909			-21,609		
RL-0041 Nuc Fac D&D - RC Closure Proj													9,024		8,797		11,461		-227		-2,664		839,878		813,681		819,922		-26,197		-6,241		0			0			919,789			931,517			-11,728		
RL-0042 Nuc Fac D&D - FFTF Proj													180		175		246		-5		-71		33,004		32,758		27,728		-247		5,030		0			0			35,484			30,273			5,211		
b. COST OF MONEY													0		0		0		0		0		0		0		0		0		0			0			0			0			0				
c. GENERAL AND ADMINISTRATIVE													0		0		0		0		0		0		0		0		0		0			0			0			0			0				
d. UNDISTRIBUTED BUDGET																															0			0			0			0							
e. SUBTOTAL													38,026		38,186		52,135		160		-13,949		6,955,133		6,860,206		6,818,610		-94,928		41,596		0			0			7,318,056			7,283,539			34,518		
f. MANAGEMENT RESERVE																															0			0			42,827										
g. TOTAL													38,026		38,186		52,135		160		-13,949		6,955,133		6,860,206		6,818,610		-94,928		41,596		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 / 12 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2021 / 01 / 24	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X 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	1,195	970	1,090	-225	-120	117,113	116,818	108,171	-295	8,647	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	824	0	-824	1,111	1,111	78,959	0	-77,848	0	0	0	1,111	78,135	-77,024		
37 - Resource Mgmt & Strategic Intg	97	97	69	0	27	10,306	10,306	6,829	0	3,478	0	0	0	11,223	7,774	3,449		
3B - PFP Closure Project	3,779	4,540	9,731	761	-5,191	1,088,655	1,069,138	1,192,208	-19,517	-123,070	0	0	0	1,112,935	1,233,474	-120,539		
3C - Waste & Fuels Management Project	10,260	9,831	13,253	-429	-3,422	1,496,398	1,478,172	1,386,274	-18,225	91,898	0	0	0	1,605,837	1,508,554	97,283		
3D - Soil & Groundwater Remediation	6,827	6,747	7,054	-80	-307	1,564,568	1,549,903	1,482,045	-14,665	67,858	0	0	0	1,632,787	1,564,207	68,581		
3G - K Basin Oper & Plateau Remediation Project	5,179	4,855	6,571	-323	-1,716	1,183,917	1,174,295	1,120,333	-9,621	53,962	0	0	0	1,228,925	1,175,745	53,180		
3H - River Risk Management Project	6,295	6,964	8,145	669	-1,181	392,459	374,259	379,253	-18,200	-4,994	0	0	0	451,552	463,269	-11,717		
3K - Central Plateau Risk Reduction	4,395	4,182	5,397	-213	-1,215	623,730	609,325	610,944	-14,405	-1,619	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)	38,026	38,186	52,135	160	-13,949	6,955,133	6,860,206	6,818,610	-94,927	41,596	0	0	0	7,318,056	7,274,089	43,967		
f. MANAGEMENT RESERVE														42,827				
g. TOTAL	38,026	38,186	52,135	160	-13,949	6,955,133	6,860,206	6,818,610	-94,927	41,596	0	0	0	7,360,883				

CONTRACT PERFORMANCE REPORT														Form Approved						
FORMAT 3 - BASELINE														OMB No. 0704-0188						
DOLLARS IN THOUSANDS																				
1. CONTRACTOR CH2M HILL Plateau Remediation Company				2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:				3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009				4. REPORT PERIOD a. FROM: 2020/12/21 b. TO: 2021/01/24								
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																				
ITEM (1)	BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)										UNDISTRIB BUDGET (19)	TOTAL BUDGET (20)
			+1 Feb-21 (4)	+2 Mar-21 (5)	+3 Apr-21 (6)	+4 May-21 (7)	+5 Jun-21 (8)	+6 Jul-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)	6,917,108	33,783	39,387	39,016	53,720	44,734	40,924	48,647	3,391,477	391,653	471,323	504,826	485,028	470,649	563,065	531,205	508,831	0	7,318,056	
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																				
BCRA-PRC-21-008R0, HPIC Updates January 2021																		0	0	
c. PM BASELINE (END OF PERIOD)	6,955,133	38,026	39,387	39,016	53,720	44,734	40,924	48,647	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 / 12 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2021 / 01 / 24	
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 FEB 2021 (4)	+2 MAR 2021 (5)	+3 APR 2021 (6)	+4 MAY 2021 (7)	+5 JUN 2021 (8)	+6 JUL 2021 (9)	AUG 2021 (10)	SEP 2021 (11)	OCT 2021 (12)	NOV 2021 (13)	ATCOMPLETE (14)			
300 - Office of the President	-	2,377	13	13	13	13	13	13	13	13	13	13	-	-	-	2,479
303 - Internal Audit	-	655	4	5	5	5	5	5	5	5	5	5	-	-	-	693
304 - General Counsel	-	604	4	4	4	4	4	4	4	4	4	4	-	-	-	636
32 - Safety Health Security & Quality	-	9,359	67	68	68	68	68	68	68	68	68	68	-	-	-	9,901
34 - Env Program & Strategic Plng	-	6,385	52	49	44	43	45	43	46	45	45	45	-	-	-	6,752
35 - Business Services	-	8,855	55	61	61	65	66	66	66	66	66	65	-	-	-	9,360
36 - Prime Contract & Proj Integr	-	8,913	39	40	41	41	41	41	41	41	41	41	-	-	-	9,240
37 - Resource Mgmt & Strategic Intg	-	3,930	45	45	45	45	45	45	45	45	45	45	-	-	-	4,288
38 - Project Technical Services	-	6,953	41	40	40	40	40	40	40	40	40	40	-	-	-	7,276
38 - PFP Closure Project	11	55,964	197	183	190	186	182	177	179	163	163	89	62	93	93	57,665
3C - Waste & Fuels Management Project	-	63,383	409	417	406	408	402	402	402	404	404	14	11	19	19	66,677
3D - Soil & Groundwater Remediation	-	45,953	250	253	243	245	248	256	254	237	237	53	28	43	43	48,063
3G - K Basin Oper & Plateau Remediation Project	-	39,223	216	231	205	194	194	206	200	204	204	40	34	93	93	41,040
3H - River Risk Management Project	-	10,235	205	215	213	217	214	213	214	209	209	12	1	1	1	11,950
3K - Central Plateau Risk Reduction	-	24,223	214	218	234	235	216	201	197	213	213	126	132	468	468	26,678
g. TOTAL DIRECT	11	287,014	1,811	1,841	1,812	1,808	1,783	1,780	1,773	1,756	1,756	334	268	718	718	302,698

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) 2020/12/21			
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER DE-AC06-08RL14788		b. PHASE		b. TO (YYYYMMDD) 2021/01/24			
		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:	38,026	38,186	52,135	160	0.4%	(13,949)	-36.5%	1.00	0.73
Cumulative:	6,955,133	6,860,206	6,818,610	(94,928)	-1.4%	41,596	0.6%	0.99	1.01
	BAC	EAC	VAC in \$	VAC in %	TCPI				
At Complete:	7,318,056	7,283,539	34,518	0.5%	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 WARP for remediation on the north PFP footprint. This schedule variance was 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 were delayed.

The CM negative cost variance was primarily impacted by W-135 Management of Cesium and Strontium Capsules (MCSC), WARP, CPRM and RRMP. MCSC had higher material cost for the VCC liner as well as an accrual correction. At WARP and CPRM there were higher than planned costs for the structure investigation for the 216 Z 2 Crib stabilization resulting from an obstruction in the void space to be grouted. REDOX experienced negative cost variance on corrective actions during the Phase 2 addressing of work conditions due to more conservative work controls. Finally, at RRMP the cost of PPE and other materials along with the continued corrective actions in the 300 area increased the negative cost variance.

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 \$34.5 million is projected, with an additional \$42.8 million of management reserve (MR), for a total positive variance of \$77.3 million. For January, the project was 0.4 percent ahead of schedule and 36.5 percent over planned cost. Contract to date, the project was 1.4 percent behind schedule and 0.6 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 January. The \$32K delta is a result of rounding over time for implementation of multiple change order definitizations.

No BCRs were implemented in the current period.

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

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

Variance in Performance BAC and EAC: The VAC between the BAC and EAC this month is a +\$34.5 million, +.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
N/A	N/A	N/A	2021	N/A

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)



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

M. A. Wright
Vice President for
Project Technical
Services

January 2021
CHPRC-2021-01, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

D. J. Henderson
Director of
Communications

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

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

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

This section is reported quarterly.

Appendix C

Capital Asset Project

CH2MHILL
Plateau Remediation Company

a Jacobs company



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

January 2021
CHPRC-2021-01, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

Appendix C.2

Capital Asset Project

RL-0011.C2 - Demolition of PFP Facilities



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

January 2021
CHPRC-2021-01, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In January, the Plutonium Finishing Plant (PFP) Closure Project team began the demolition and loadout of remaining ancillary PFP structures, including six laundry Conex containers. Crews also surveyed PFP radiological boundaries and performed equipment maintenance.

<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:

- Crews began the demolition and loadout of remaining ancillary PFP structures, including six laundry Conex containers.
- Operations in January also 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 and performing equipment maintenance.

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 spotlight chart: No major changes in January.													
Realized Risks (Risks that are currently impacting project cost/schedule)													
No realized risks identified in January .													
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)													
No critical risks identified in January .													
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: 5px;"> <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 January . This risk was identified as a key risk for fiscal year (FY) 2021. 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: 5px;"> <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 January . 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: 5px;"> <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 January . No weather events impacted the project in January .	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 Plutonium Reclamation Facility (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: 5px;"> <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 January . PRF debris loadout has not resumed due to the availability of personal protective equipment (PPE).	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 coronavirus (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 impede 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 CH2M HILL Plateau Remediation Company general industrial hazards analysis.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in January . This risk was identified as a key risk for FY2021. PFP discrete fieldwork activities have not resumed due to the availability of PPE.	Risk Recovery Action(s)	FC Date	%	Maintain the COVID-19 controls as detailed in the CH2M HILL Plateau Remediation Company general industrial hazards analysis.	Ongoing	N/A
Risk Recovery Action(s)	FC Date	%							
Maintain the COVID-19 controls as detailed in the CH2M HILL Plateau Remediation Company general industrial hazards analysis.	Ongoing	N/A							
Unassigned Risks (Pending ownership of identified threats/opportunities)									
No unassigned risks identified in January .									

CRITICAL PATH ANALYSIS

The PFP critical path schedule begins with the completion of PRF loadout, which is forecast to occur by May 11, 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 September 13, 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	8/30/2021	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 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

January 2021
CHPRC-2021-01, Rev. 0
Contract DE-AC07-08RL14788
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 RL_0011_C2_PFP Demolition Capital Asset Project			a. FROM (YYYYMMDD) 2020 / 12 / 21								
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2021 / 01 / 24								
		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 150,986	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0	d. TARGET PROFIT/FEE 5,000	e. TARGET PRICE 155,986	f. ESTIMATED PRICE 198,940	g. CONTRACT CEILING 155,986	h. ESTIMATED CONTRACT CEILING 198,940	i. DATE OF OTB/OTS (YYYYMMDD)							
6. ESTIMATED COST AT COMPLETION				7. AUTHORIZED CONTRACTOR REPRESENTATIVE											
		MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)	a. NAME (Last, First, Middle Initial) Underwood, Teresa			b. TITLE Prime Contract Compliance Manager							
a. BEST CASE		187,637			c. SIGNATURE			d. DATE SIGNED (YYYYMMDD)							
b. WORST CASE		194,879													
c. MOST LIKELY		193,940	150,986	-42,954											
8. PERFORMANCE DATA															
CAPN.PBS Control Account.PARS 2 WBS (2)		CURRENT PERIOD				CUMULATIVE TO DATE				REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
ITEM (1)		BUDGETED COST	ACTUAL COST WORK PERFORMED	VARIANCE		BUDGETED COST	ACTUAL COST WORK PERFORMED	VARIANCE		COST VARIANCE	SCHEDULE VARIANCE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
		WORK SCHEDULED (2)	WORK PERFORMED (3)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	SCHEDULE (10)	COST (11)	(12a)	(12b)	(13)	(14)	(15)	(16)
RL-0011 Nuclear Mat Stab & Disp PFP															
RL_0011_C2.05 Disposition PFP Facility		2,130	0	-2,130	-621	142,472	128,625	-13,848	-43,826	0	0	0	144,683	187,637	-42,954
b. COST OF MONEY		0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE		0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET															
e. SUBTOTAL		2,130	0	-2,130	-621	142,472	128,625	-13,848	-43,826	0	0	0	144,683	187,637	-42,954
f. MANAGEMENT RESERVE													6,302		
g. TOTAL		2,130	0	-2,130	-621	142,472	128,625	-13,848	-43,826	0	0	0	150,986		
9. RECONCILIATION TO CONTRACT BUDGET BASELINE															
a. VARIANCE ADJUSTMENT															
b. TOTAL CONTRACT VARIANCE															
										-13,848	-43,826	150,986	187,637	-36,652	

**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 / 12 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2021 / 01 / 24	
		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	2,130	0	621	-2,130	-621	142,472	128,625	172,451	-13,846	-43,826	0	0	0	144,683	187,638	-42,954	
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)	2,130	0	621	-2,130	-621	142,472	128,625	172,451	-13,846	-43,826	0	0	0	144,683	187,638	-42,954	
f. MANAGEMENT RESERVE														6,302			
g. TOTAL	2,130	0	621	-2,130	-621	142,472	128,625	172,451	-13,846	-43,826	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			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: 2020/12/21 b. TO: 2021/01/24									
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 Feb-21 (4)	+2 Mar-21 (5)	+3 Apr-21 (6)	+4 May-21 (7)	+5 Jun-21 (8)	+6 Jul-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)	140,342	3,008	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)	142,472	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 / 12 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2021 / 01 / 24	
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 FEB 2021 (4)	+2 MAR 2021 (5)	+3 APR 2021 (6)	+4 MAY 2021 (7)	+5 JUN 2021 (8)	+6 JUL 2021 (9)	AUG 2021 (10)	SEP 2021 (11)	OCT 2021 (12)	NOV 2021 (13)	ATCOMPLETE (14)		
3B - PFP Closure Project	0	4,998	87	92	99	87	67	63	19	0	-	-	-	5,512	
g. TOTAL DIRECT	0	4,998	87	92	99	87	67	63	19	0	-	-	-	5,512	

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 / 12 / 21		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE				b. TO (YYYYMMDD) 2021 / 01 / 24		
		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:		2,130.4	0.0	620.6	-2,130.4	-100.0%	-620.6	0	0.00	0.00
Cumulative:		142,472.4	128,624.9	172,450.8	-13,847.5	-9.7%	-43,825.9	-34.1%	0.90	0.75
		BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:		144,683.3	187,637.5	-42,954.1	-29.7%	0	1.06			
Explanation of Variance/Description of Problem:										
Current Month Schedule Variance:										
The negative CM schedule variance is primarily a result of the delay in PFP demolition resumption efforts. PFP was scheduled to resume demolition in January 2021, beginning on ancillary structures. This work did begin in January, but at lower than planned levels. Activities on ancillary structures were limited due to the high-risk nature of the work, primarily the demolition of MO-605. This demo is now scheduled to resume in February 2021.										
Current Month Cost Variance:										
The negative CM cost variance is primarily a result of required S&M activities at PFP being performed at levels above what was originally planned. These continuing activities include surveys of PFP radiological boundaries, performing equipment maintenance and shipments of previously loaded radioactive waste.										
Cumulative to Date Schedule Variance:										
The cumulative to date schedule variance is within thresholds.										
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 January.										
The following items are addressed, as applicable:										
1. Schedule Margin Analysis: No drawdowns of schedule margin were made in the month of January.										
2. Data dictionary Changes: No change in the month of January.										
3. Forecast Schedule with No Baseline: No change in the month of January.										
4. UB Balance: No change in the month of January.										
5. Negative Actual Cost of Work Performed (ACWP): No change in the month of January.										
6. Earned Actual Cost (EAC) Analysis: Best Case = \$187,637; Most Likely = \$193,940; Worst Case = \$194,879. 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 January.										
8. Management Reserve Transactions: No management reserve transactions were made in the month of January.										
9. Freeze Period Changes: No change in the month of January.										
10. Retroactive Changes: No change in the month of January.										
11. Earned Value Type Changes: No change in the month of January.										
Prepared by: Kerri Scott		Date: 1/18/2021		Approved by:				Date:		