CHPRC-2020-11
Revision 0

Monthly Performance Report

November 2020

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

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

CH2MHILL
Plateau Remediation Company

P.O. Box 1600
Richland, Washington 99352

Approved for Public Release;
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APPROVED
By Janis D. Aardal at 2:20 pm, Dec 21, 2020

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CH2MHILL
Plateau Remediation Company

a Jacobs company

Monthly Performance Report

L. Ty Blackford
President and
Chief Executive Officer

U.S. Department of Energy Contract
DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

November 2020

CHPRC-2020-11, Revision 0

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EXECUTIVE SUMMARY

CH2M HILL Plateau Remediation Company (CHPRC) advanced cleanup throughout the Hanford Site during November. CHPRC continued Phase 2 operations in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL)-approved CHPRC resumption of work plan developed in response to the RL-directed March 24, 2020, partial stop work order (PSWO) due to the coronavirus (COVID-19), which ended September 30, 2020. CHPRC implemented plans to mitigate work delays and disruption and address impacts to programmatic work caused by the PSWO and COVID-19. In compliance with state and federal government COVID-19 guidance, and as required by RL, CHPRC has taken and continues to take reasonable actions to protect and provide support to the workforce.

Major accomplishments included:

- **Plutonium Finishing Plant (PFP) Closure Project:** The PFP Closure Project team continued to maintain essential mission-critical operations and a partial, phased resumption of work consistent with the resumption of work plan following the expiration of the RL-directed PSWO on September 30, 2020. The project performed surveys of PFP radiological boundaries, reapplied soil fixative to the PFP demolition site and performed equipment maintenance. The PFP senior management team continued preparations and planning to support the resumption of loadout and shipments of demolition debris.

Crews began filling the first of three aging underground structures on the Hanford Site's Central Plateau with engineered grout. The interim measure will mitigate the risk of collapse and the potential for contamination spread until a remedy to remove, treat and dispose of the material in the structures is implemented. Stabilization is expected to be complete by the end of the year.

- **Waste and Fuels Management Project (W&FMP):** The W&FMP continued to perform essential mission-critical operations and a partial, phased resumption of work consistent with the resumption of work plan following the expiration of the RL-directed PSWO on September 30, 2020. The W-135 Management of Cesium and Strontium Capsules Project continued construction of the raw water pipeline. Completed the following: rough grading around the capsule cask storage pad and installation of area lighting, evaluation of proposals for the Waste and Encapsulation Storage Facility (WESF) Modifications Line Item construction contract and the Waste Receiving and Processing air handler maintenance.

- **Soil and Groundwater Remediation Project (S&GRP):** The S&GRP team continued essential mission-critical operations and a partial, phased resumption of work for high priority, low-risk activities consistent with the resumption of work plan following the expiration of the RL-directed PSWO on September 30, 2020. The S&GRP team continued progress and is ahead of schedule in the treatment goal of 2.2 billion gallons for fiscal year (FY) 2021. Efficiency testing of the 200 West Area air strippers was completed, supporting the optimization of the 200 West Pump and Treat facility. Drilling crews supported recovery of well drilling delayed by the PSWO, with seven drill rigs in the field, completing two wells in November. Operations crews expanded the treatment zone at the 100K West soil flushing area to gain additional contamination data which will help identify additional chromium sources and locations, potentially avoid future fieldwork, and ultimately accelerate cleanup. Regulatory and technical support was provided to

RL's completion of the certification of closure plans for 216-S-10 Pond & Ditch, 216-A-29 Ditch, 216-B-3 Pond and 216-B-63 Trench.

- **K Basins Operations:** The project continued essential mission-critical operations consistent with the resumption of work plan following the expiration of the RL-directed PSWO on September 30, 2020. The soil remediation team completed Phase 1 of overburden removal at the 100-K-79:7 waste site and began overburden removal at the 100-K-96, 100-K-56:3 and the 100-K-55:2 waste sites. The team completed the global positioning environmental radiological survey of the 116-KE-2 waste site and used the data to support the verification sample instruction, which was submitted to the U.S. Environmental Protection Agency for review and approval.

- **River Risk Management Project:** The project continued essential mission-critical operations consistent with the resumption of work plan following the expiration of the RL-directed PSWO on September 30, 2020. Training of essential mission-critical operations and construction forces core teams for the general contamination area (CA)/high contamination area (HCA)/airborne radiation areas (ARAs) continued. Development of the training materials for Room 18 CA/HCA/ARAs continued. Five additional corrective actions for the 324 Facility Contamination Event Phase 1 were completed, increasing the total Phase I corrective actions to 11 of 20. Integrated Disposal Facility (IDF) personnel continue to ramp up procedures and processes necessary to support active disposal operations. Construction of IDF infrastructure upgrades continued with the placement of the final working surfaces in the waste receiving and handling area, continued erection of the inspection buildings, and continued installation of electrical and communication systems. Washington State Department of Ecology (Ecology) submitted a final deficiency report from a *Resource Conservation and Recovery Act of 1976* (RCRA) permit modification request to bring the IDF into active status disposal operations. The permitting team continued efforts to produce another major permit modification request, at Ecology's insistence, to bring the leachate collection tanks into the permit.

- **Central Plateau Risk Management (CPRM) Project:** The project continued essential mission-critical operations and a partial, phased resumption of work consistent with the resumption of work plan following the expiration of the RL-directed PSWO on September 30, 2020. The Aging Structures team constructed a 2-foot thick grout cap over the material at risk in the 241-Z-361 Tank and a 5-foot thick controlled density fill cap over the material at risk in the 216-Z-9 Crib. At the Reduction-Oxidation (REDOX) facility, crews completed electrical investigations to look for any potential legacy hazardous conditions throughout the REDOX silo. Crews staged equipment for temporary power, which included placing two generators on the north side of the facility and stringing lines into the building through existing door penetrations. Crews at the 224B Facility completed final Class 1 asbestos abatement and area cleanup on the first floor, while outside the facility, the grounds were leveled and prepped to allow construction of the cell containments to begin. At U Plant, crews navigated elevated and difficult-to-access locations to abate 255 feet of asbestos-containing pipe insulation. The Plutonium Uranium Extraction Plant (PUREX) North team investigated six chemical tanks in the 211A Facility and found no residual liquids, as well as completed mechanical and electrical isolations on facilities 2701AB, 2714A and 214A. Crews completed removal of white powder within the PUREX Aqueous Makeup Unit and the Piping and Operating gallery.

- **West Area Remediation Project:** The project continued essential mission-critical operations and a partial, phased resumption of work consistent with the resumption of work plan following the expiration of the RL-directed PSWO on September 30, 2020. The team completed the hazardous waste removal, demolition and debris loadout of 10 former mobile office trailers (MO2109, MO2112, MO2113, MO2117, MO2119, MO2120, MO2304, MO2305, MO2306 and MO2307) in the South Trailer Village located south of the former site of the PFP complex. The team also began mechanical isolations for the remaining trailers in that same location. Crews completed the initial entry, beryllium sampling and initial radiological surface surveys for the 231-Z Facility. Crews began the electrical and mechanical isolations to 216-ZP1.

The President's Zero Accident Council (PZAC) meeting for November was hosted by Safety, Health, Security & Quality via Virtual Meeting. The three main ideas were:

- There's no time to chill
- Lights, lights baby
- Preparation allows celebration

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

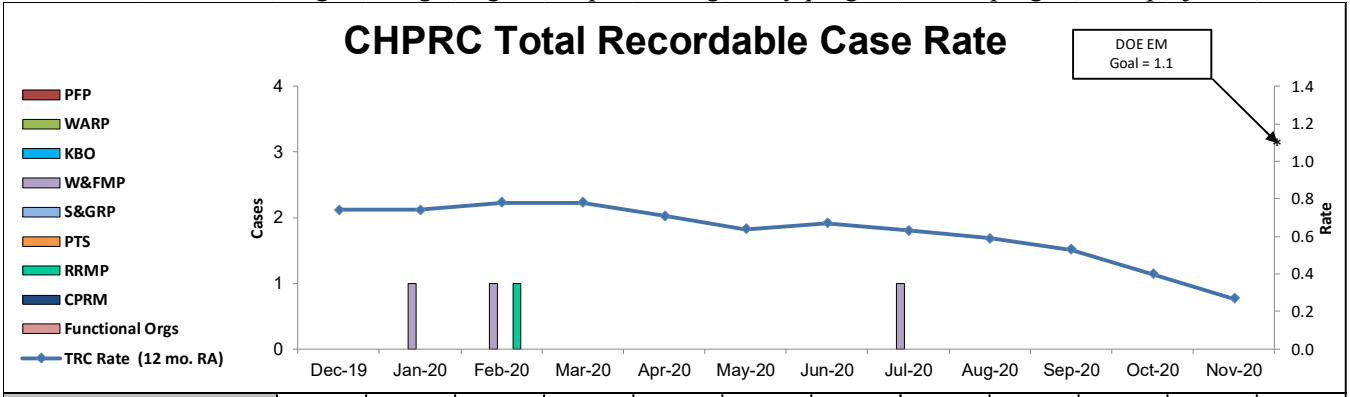
- Seasonal emergencies
- Holiday health & safety
- Universal waste
- VPP transition
- Don't slip this winter

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

- Five lessons learned:
  - OPEXShare: LL-2020-LLNL-10 Be Aware of a Concealed Paper Cutter Hazard (offsite)
  - OPEXShare: 2015-01-26-OPEXShare-Mobile OPEXShare Mobile – Take the Experience with you!
  - OPEXShare: 2020-RL-HNF-65734 How to Handle Stress at Work
  - OPEXShare: 37024-PNNL-09-21-2020 Release of Kinetic Energy Results in Hand Contusion and Laceration
  - OPEXShare: 2020-RL-HNF-65595 Driving in Roundabouts
- Injuries
- Weekly ethics moments
- Vehicle events
- Follow COVID controls
- Stay 6' apart – even at lunch
- Wear masks correctly
- Help fight the spread
- Care for your health
- COVID resources
- Avoiding deer and elk
- Holiday ladder safety
- Safe use of space heaters
- Inclement weather
- Home ergonomics
- Holiday cooking safety
- NEW! Winter poster
- Welcome back! Re-FOCUS
- Practice safety 24/7
- Hanford mobile app changes

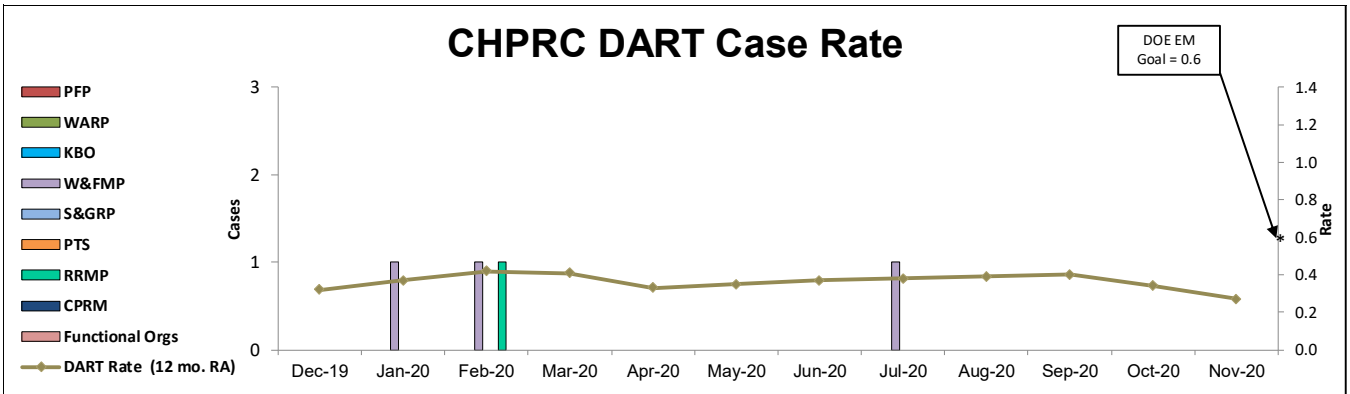
TARGET ZERO PERFORMANCE

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



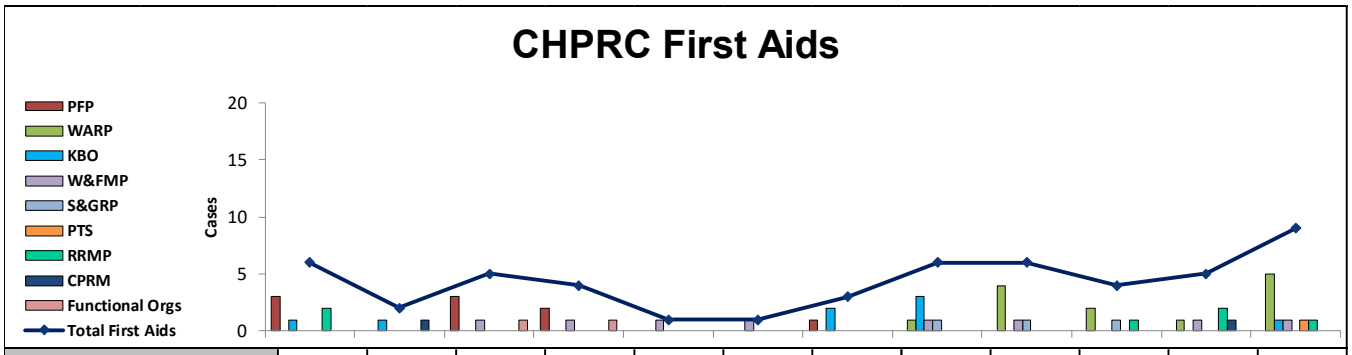
	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PFP	0	0	0	0	0	0	0	0	0	0	0	0
WARP	-	-	-	-	-	-	-	0	0	0	0	0
KBO	0	0	0	0	0	0	0	0	0	0	0	0
W&FMP	0	1	1	0	0	0	0	1	0	0	0	0
S&GRP	0	0	0	0	0	0	0	0	0	0	0	0
PTS	0	0	0	0	0	0	0	0	0	0	0	0
RRMP	0	0	1	0	0	0	0	0	0	0	0	0
CPRM	0	0	0	0	0	0	0	0	0	0	0	0
Functional Orgs	0	0	0	0	0	0	0	0	0	0	0	0
Recordable Cases	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**
TRC Rate (12 mo. RA)	**0.74**	**0.74**	**0.78**	**0.78**	**0.71**	**0.64**	**0.67**	**0.63**	**0.59**	**0.53**	**0.40**	**0.27**

Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.27 is based on four Recordable injuries. November had no reported Occupational Safety and Health Administration Recordable cases.



	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PFP	0	0	0	0	0	0	0	0	0	0	0	0
WARP	-	-	-	-	-	-	-	0	0	0	0	0
KBO	0	0	0	0	0	0	0	0	0	0	0	0
W&FMP	0	1	1	0	0	0	0	1	0	0	0	0
S&GRP	0	0	0	0	0	0	0	0	0	0	0	0
PTS	0	0	0	0	0	0	0	0	0	0	0	0
RRMP	0	0	1	0	0	0	0	0	0	0	0	0
CPRM	0	0	0	0	0	0	0	0	0	0	0	0
Functional Orgs	0	0	0	0	0	0	0	0	0	0	0	0
DART Cases	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**
DART Rate (12 mo. RA)	**0.32**	**0.37**	**0.42**	**0.41**	**0.33**	**0.35**	**0.37**	**0.38**	**0.39**	**0.40**	**0.34**	**0.27**

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



	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20
PFP	3	0	3	2	0	0	1	0	0	0	0	0
WARP	-	-	-	-	-	-	-	1	4	2	1	5
KBO	1	1	0	0	0	0	2	3	0	0	0	1
W&FMP	0	0	1	1	1	1	0	1	1	0	1	1
S&GRP	0	0	0	0	0	0	0	1	1	1	0	0
PTS	0	0	0	0	0	0	0	0	0	0	0	1
RRMP	2	0	0	0	0	0	0	0	0	1	2	1
CPRM	0	1	0	0	0	0	0	0	0	0	1	0
Functional Orgs	0	0	1	1	0	0	0	0	0	0	0	0
Total First Aids	**6**	**2**	**5**	**4**	**1**	**1**	**3**	**6**	**6**	**4**	**5**	**9**

First Aid Case Summary: CHPRC reported nine first aid cases in November. The contributors were three strains/sprains/pains, three miscellaneous (burns, rashes, repetitive motion, etc.), one abrasion/bruise/contusion, one cut/laceration/puncture and one insect bite injury.

KEY ACCOMPLISHMENTS

Projects

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

Project Services and Support

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

MAJOR ISSUES

Projects

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

Project Services and Support

Issue

Due to COVID-19, a national emergency was declared on March 13, 2020. On March 17, 2020, CHPRC senior management issued a companywide stop work on all fieldwork not associated with technical safety requirements, environmental compliance or emergency response. On March 18, 2020, CHPRC submitted letter CHPRC-2001123 to RL identifying that COVID-19 may impact CHPRC's ability to meet contractual requirements. On March 24, 2020, RL issued letter 20-PRO-0139, a PSWO for non-portable work. On May 22, 2020, the RL contracting officer approved CHPRC's request for submission of the request for equitable adjustment 90 days after the end of the PSWO. On July 22, 2020, CHPRC received Contract Modification 747, extending the PSWO through September 30, 2020, unless the contracting officer directs an earlier date. On August 27, 2020, RL authorized CHPRC to implement Phase 2 of the remobilization plan starting August 31,

2020. On September 24, 2020, RL issued letter 20-PRO-0297, informing CHPRC that the PSWO would expire on September 30, 2020. The PSWO noted that CHPRC would have 30 days following termination of the PSWO to assert its rights for an equitable adjustment. On October 26, 2020, CHPRC submitted CHPRC-2003535R1 that discusses assertion of rights to equitable adjustment due to the PSWO, as required per the PSWO to be submitted within 30 days after the PSWO expiration. On October 28, 2020, CHPRC submitted CHPRC-2004023 that discusses potential excusable delays in FY2021 due to COVID-19. CHPRC anticipates that in addition to schedule impacts, the PSWO will result in FY2020 and FY2021 cost impacts under the following clauses:

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

Corrective Action

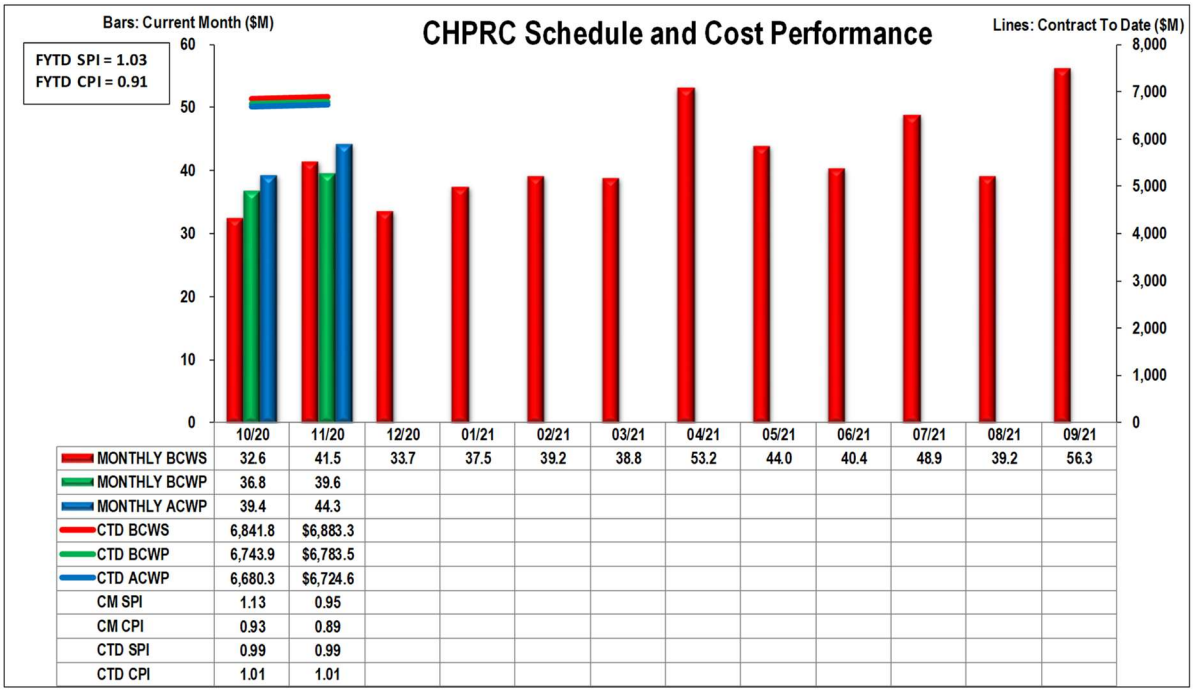
Following receipt of RL's PSWO direction, a PSWO implementation and restart plan were developed. To support workforce stability as directed by RL, CHPRC employees were provided attendance code "COV" to be used for charging hours not worked but in a paid status for time not spent on portable work or for those where performance of meaningful productive work is not practical. CHPRC provided similar guidance to 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.

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. Essential mission-critical operations, low and medium-risk field activities, and base operations are being performed on the Hanford Site. On October 2, CHPRC received Contract Modification 757 extending the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) to December 11, 2020. 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" and 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 work place. RL approved Revision 3D of the resumption plan on November 4, 2020. This moved Plutonium Reclamation Facility rubble removal and shipment to the Environmental Restoration Disposal Facility as well as Garnet Filter Media Retrieval System removal and shipment to T Plant into Phase 2. High-risk field activities that require significant personal protective equipment (PPE) have not resumed due to local COVID-19 impacts and PPE limitations. Portable work continues to be performed via teleworking. In compliance with state and federal government COVID-19 guidance and RL direction, CHPRC has taken and continues to take reasonable actions to protect and provide support to the workforce.

EARNED VALUE MANAGEMENT



	$M Current Period					$M Contract to Date					$M Contract Period		
	Budgeted Cost		Actual Cost	Variance		Budgeted Cost		Actual Cost	Variance				
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost	BAC	EAC	Variance
RL-0011 - Nuclear Materials Stab & Disp PFP	4.3	0.2	0.6	(4.1)	(0.4)	1,142.2	1,132.2	1,243.7	(10.0)	(111.5)	1,152.8	1,265.6	(112.9)
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	14.1	13.5	14.2	(0.5)	(0.7)	1,702.1	1,681.7	1,593.8	(20.5)	87.9	1,860.3	1,774.4	85.9
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	7.7	9.4	9.0	1.7	0.4	1,768.8	1,750.7	1,693.8	(18.2)	56.9	1,861.4	1,801.5	59.9
RL-0040 - Nuc Fac D&D - Remainder	6.7	8.1	10.0	1.4	(1.9)	654.4	631.4	637.2	(23.0)	(5.8)	726.2	734.3	(8.1)
RL-0041 - Nuc Fac D&D - RC Closure Project	8.5	8.1	10.3	(0.4)	(2.2)	823.5	795.5	798.9	(28.0)	(3.4)	918.8	931.2	(12.5)
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.3	0.3	0.1	0.0	32.7	32.4	27.3	(0.2)	5.1	35.5	30.4	5.1
(Values are rounded to the nearest $0.1M) Total	41.5	39.6	44.3	(1.9)	(4.7)	6,883.3	6,783.5	6,724.6	(99.8)	58.9	7,314.6	7,267.3	47.3

Performance Summary

CHPRC continues to track completion of the contract within budget. Currently, a variance at completion of $47.3 million is projected, with an additional $43.3 million of management reserve (MR), for a total positive variance of $90.6 million. For November, the project was 4.6 percent behind schedule and 12.0 percent over planned cost. Contract to date, the project was 1.4 percent behind schedule and 0.9 percent under planned cost.

The current month (CM) negative schedule variance is primarily the result of demolition delay at PFP. Due to the COVID-19 pandemic response, the reliability of PPE supply is uncertain. High-risk activities requiring significant use of PPE like PFP have not resumed as planned. This negative variance is partially offset by the recovery of scope that was planned in FY2020 and delayed due to the PSWO.

The CM negative cost variance is partially due to an error in the processing of October 2020 labor accruals by the Business Management System (BMS), which impacted all of Hanford Site contractors using BMS. The incorrect calculation resulted in labor costs for fiscal month October being understated. The accrual error was reversed and replaced by actuals in November resulting in an overstatement of labor costs by approximately $2.3 million,

which was partially offset by other positive labor cost variances. Additionally, in November, performance was taken on negative budgeted cost of work scheduled (BCWS) activities related to Contract Modification #707, which documented the definitization of the FY2019 performance measurement baseline (PMB). The remaining performance, for these adjustment activities was taken in November to simplify CHPRC performance reporting, resulting in negative baseline cost of work performed (BCWP) and consequently a negative cost variance of approximately $2.0 million. Finally, at CPRM, REDOX continues to experience negative cost variances on corrective actions during the Phase 2 addressing of work conditions. The limited performance is due to COVID-19 impacts on resources as well as more conservative work controls than planned associated with the safe approach to cold and dark work activities.

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

		FY2021		
PBS	Project	Projected Funding	Spending Forecast	Variance
RL-0011	Nuclear Materials Stabilization and Disposition	24.9	23.1	1.9
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	0.0	0.0	0.0
RL-0013	Waste and Fuels Management Project	206.1	205.3	0.7
RL-0013	Management of Cesium and Strontium Capsules	13.1	13.2	(0.1)
RL-0030	Soil, Groundwater and Vadose Zone Remediation	127.9	124.8	3.1
RL-0040	Nuclear Facility D&D, Remainder of Hanford	114.1	112.6	1.5
RL-0041	Nuclear Facility D&D, River Corridor	146.1	143.6	2.5
RL-0042	Fast Flux Test Facility Closure	4.4	3.6	0.7
	Total Fiscal Year Spending Forecast	**636.6**	**626.2**	**10.4**

Funds/Variance Analysis

FY2021 projected funding of $636.6 million remains unchanged from last month. The spending forecast of $626.2 million reflects an overall reduction of $3.1 million from last month. The change in forecast incorporates reductions for labor adjustments in project breakdown structure (PBS) RL-0030 and RL-0041, and reduction in RL-0013 for Cask Storage System fabrication schedule replan, offset by an increase in RL-0041 for additional authorized FY2021 work scope, including RCRA Permit Revision 9 and 200-MG-1 sampling.

BASELINE CHANGE REQUESTS

In November, CHPRC approved and implemented eight BCRs into the PMB. Five of the eight BCRs impacted the PMB budget. The change requests are identified in the following table:

Change Request#	Title	PBS	Summary of Change
BCR-013-21-001R0	*W135 WESF Mods CD 2/3 IPT/IPR RCR Comment Incorporation*	RL-0013	This BCR modified Project W-135, *Waste Encapsulation and Storage Facility (WESF) Modifications*, Capital Line Item 18-D-404, incorporated RL comments received by email on August 27, 2020, as documented by CHPRC letter numbers CHPRC-2004286 and CHPRC-2004290. The comments received through these evaluations included changes to schedule logic, durations, cost estimates, work breakdown structure (WBS) dictionaries and Basis of Estimates. This BCR decreased the PMB $222.6K.
BCR-030-21-001R0	*Incorporate Additional M24 Wells and Associated Opportunistic Sampling*	RL-0030	This BCR added new well drilling and opportunistic sampling activities within WBS elements 030.03.09.01.55 and 030.06.07.01.02.20. This BCR increased the PMB by $2,058.1K.
BCR-030-21-002R0	*Plan for Long Lead IX Train Procurement*	RL-0030	This BCR incorporated a long lead procurement activity to support receipt of an ion exchange train in FY2022. This BCR did not change the PMB value.
BCR-040-21-001R0	*Incorporate RCRA Rev 9 Permit Scope*	RL-0040	This BCR modified the FY2021 PMB to incorporate the RCRA Revision 9 Permit Modification scope, which was not included in the original FY2021 annual PMB but was planned in out years. The scope was determined necessary and pulled into FY2021 to continue the redevelopment of the Hanford Facility Dangerous Waste Permit Revision 9, also known as the Site Wide RCRA Permit. This BCR increased the PMB by $464.3K.
BCR-041-21-001R0	*Perform Additional Structural Modification Prep*	RL-0041	This BCR added structural modification preparation scope and SoiLok testing. This BCR increased the PMB by $792.5K.
BCR-041-21-003R0	*MR Draw for Additional Scope for the 100-K-47:1 Waste Site*	RL-0041	This BCR drew down MR and revised the PMB scope and schedule to address in-scope, unplanned work in FY2021 related to remediating an additional 1,200 bank cubic meters and 40 linear meters of steel piping of the 100-K-47:1 waste site. This BCR increased the PMB value by $180.9K.
BCRA-PRC-21-001R0	*HPIC Updates November 2020*	RL-0030 RL-0040 RL-0041	This administrative BCR incorporated November FY2021 Hanford Programs Integrated Control Module (HPIC) updates. This BCR did not change the PMB value.
BCR-PRC-21-004R0	*Mod 760 Implementation – Fee Adjustment*	RL-0013 RL-0030 RL-0040 RL-0041	This BCR documented the revision of FY2021 available fee established by PRC Modification 760. The FY2021 available fee increased from $4.59 million to $8.16 million, to align to the revised PRC Section B, Clause B.4. This BCR did not change the PMB value.

The allocated (distributed) budget increased $3,273.2K.

Undistributed Budget (UB) Activity

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

There was no change to UB in November.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
BCR-041-21-003R0	*MR Draw for Additional Scope for the 100-K-47:1 Waste Site*	RL-0041	2021	$180.9K

The MR decreased by $180.9K in November.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
BCR-PRC-21-004R0	*Mod 760 Implementation – Fee Adjustment*	RL-0011 RL-0013 RL-0030 RL-0040 RL-0041 RL-0042	2021	$3,570.0K

The Fee increased by $3,570.0K in November.

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

November 2021 Summary of Changes ($M)

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	FY2019	FY2020	FY2021	Contract Period Total	Total PMB
October 2020 Estimate												
PMB	3,391.5	391.7	471.3	504.8	485.0	470.6	2,323.5	563.1	531.2	502.1	7,311.3	7,311.3
MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	35.6	43.5	43.5
Fee	155.5	14.3	14.5	27.8	10.6	18.9	86.1	36.5	20.1	4.6	302.8	302.8
Total	*3,547.0*	*406.0*	*485.8*	*532.6*	*495.6*	*489.5*	*2,409.6*	*599.5*	*559.2*	*542.3*	*7,657.6*	*7,657.6*
November 2020 Change												
PMB												
Change to PMB	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*3.3*	*3.3*	*3.3*
MR												
Change to MR	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*-0.2*	*-0.2*	*-0.2*
Fee												
Change to Fee	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*3.6*	*3.6*	*3.6*
Total Change	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*6.7*	*6.7*	*6.7*
November 2020 Estimate												
PMB	3,391.5	391.7	471.3	504.8	485.0	470.6	2,323.5	563.1	531.2	505.4	7,314.6	7,314.6
MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.9	35.4	43.3	43.3
Fee	155.5	14.3	14.5	27.8	10.6	18.9	86.1	36.5	20.1	8.2	306.3	306.3
Total	*3,547.0*	*406.0*	*485.8*	*532.6*	*495.6*	*489.5*	*2,409.6*	*599.5*	*559.2*	*548.9*	*7,664.2*	*7,664.2*

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

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	FY2019	FY2020	FY2021	Total
October 2020 MR Totals											
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	8.8	11.2
RL-0012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	5.4
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	8.4
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	7.8	7.8
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
Total	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*7.9*	*35.6*	*43.5*
November 2020 MR Changes/Utilization											
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*-0.2*	*-0.2*
November 2020 MR Totals											
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	8.8	11.2
RL-0012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	5.4
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	6.6
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	8.4
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	7.6	7.7
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
Total	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*7.9*	*35.4*	*43.3*

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 - 9/30/2020 Reporting Category			
	$ Value	%	Goal %
SB	$1,790.39	56.90%	49.3%
SDB	$343.60	10.92%	8.2%
SWOB	$315.41	10.02%	7.5%
HUB	$106.26	3.38%	2.2%
VOSB	$277.13	8.81%	3.5%
SDVO	$182.88	5.81%	1.3%
NAB	$119.46	3.80%	N/A
Large	$853.04	27.11%	N/A
GOVT	$6.05	0.19%	N/A
GOVT CONT	$483.23	15.36%	N/A
EDUCATION	$0.18	0.01%	N/A
NONPROFIT_	$4.53	0.14%	N/A
FOREIGN	$8.97	0.29%	N/A
Total	$3,146.40	100.00%	N/A

PRC clause H.20b small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
CHPRC Contract Value:	$7,326.94
SB actual:	$1,790.39
SB Performed %:	24.70%

PRC clause H.20a max self performed requirement ≤ 65% of Contract Price Self Performed	
CHPRC Contract Value:	$7,326.94
CHPRC Self Performed:	$4,397.13
CHPRC Self Performed %:	60.65%

Notes:

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

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
J.12/C.2.2, C.2.3	PBS-11, *Plutonium Finishing Plant Closure Project* PBS-13, *Solid and Liquid Waste Treatment and Disposal*	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, *Transuranic Waste Certification*	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

November 2020
CHPRC-2020-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In November, the Plutonium Finishing Plant (PFP) Closure Project team continued Phase 2 operations in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL)-approved CH2M HILL Plateau Remediation Company (CHPRC) resumption of work plan developed in response to the RL-directed March 24, 2020, partial stop work order (PSWO). The PSWO was issued as part of the Hanford Site response to the novel coronavirus (COVID-19). Work performed included surveying PFP radiological boundaries, re-applying soil fixative to the PFP demolition site and performing equipment maintenance. The PFP senior management team continued preparations and planning to support the resumption of Plutonium Reclamation Facility (PRF) work scope.

Key Metrics

Key Performance Indicators	*Current Month*	*Contract to Date*
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	9	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments:

- Operations in November consisted of the completion of required surveillance and maintenance (S&M) activities to protect government property and maintain safety and environmental compliance. These efforts included surveying PFP radiological boundaries, re-applying soil fixative to the PFP demolition site and performing equipment maintenance.
- Crews continued work on the disposition of legacy waste.
- The PFP senior management team continued preparations and planning to support the resumption of PRF work scope.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.

Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.

Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

Increased Confidence
No Change
Decreased Confidence

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011				
Explanation of major changes to the project monthly stoplight chart: Risks RL11 PFP-0001-T, *Unavailable Resources*, and RL11 PFP-00011-T, *Bump and Roll, LAMP, or Other Contractor Hiring of Bargaining Unit Employees*, were added to the stoplight chart as high-threat value risks. Risk RL11-PFP-0018-T, *Novel Viral Pandemic (COVID-19) Impacts Project Performance*, was added as a fiscal year (FY) 2021 key risk. These risks were identified as key risks during the FY2021 risk analysis.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks identified in November.				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)				
No critical risks identified in November.				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
RL11 PFP-0001-T: Unavailable Resources	The project lacks adequate resource coverage to complete work package development and fieldwork activities. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $123K, 120 days			**Risk Trigger**: Shortage of resources leads to the projects inability to complete planned fieldwork. **Mitigation Action(s)** / **FC Date** / **%** Monitor and maintain adequate staffing levels to completed planned work scope. / Ongoing / N/A **Mitigation Assessment**: 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.
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. **Mitigation Action(s)** / **FC Date** / **%** Monitor and maintain adequate staffing levels to completed planned work scope. / Ongoing / N/A **Mitigation Assessment**: 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.
FY2021 Key Risks				
RL11 PFP-0003-T: Stop Work From Concerned Workers	Concerned workers can implement a stop work to address off-normal or safety issues. The work cannot be restarted until the implementation of corrective actions is completed, resulting in schedule impacts to the project. **Risk Handling Strategy**: Mitigate **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $0, 16 days			**Risk Trigger**: During PFP demolition activities, an increase in stop works could result in delays. **Mitigation Action(s)** / **FC Date** / **%** Update communications as positions change. / Ongoing / N/A Provide new maps with entry/exit instructions when boundaries are revised. / Ongoing / N/A Encourage additional worker involvement. / Ongoing / N/A Increase frequency of post-job reviews. / Ongoing / N/A **Mitigation Assessment**: No major changes in November. Increased communication and worker involvement to avoid confusion and concern to minimize stop works have continued; stop works may impact the project schedule going forward. This risk is no longer considered a key risk in FY2021 and will be removed from the stoplight chart prior to December reporting.

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011				
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. **Mitigation Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment**: No major changes in November. No weather events impacted the project in November.
RL11-PFP-0017-T: Delay of PRF Debris Loadout	The loadout of PRF debris is delayed. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $0, 32 days			**Risk Trigger**: The project experiences delays to PRF debris loadout, impacting project completion. **Risk Recovery Action(s)** / **FC Date** / **%** Communicate PRF loadout options with RL. / Ongoing / N/A Encourage additional worker involvement. / Ongoing / N/A **Mitigation Assessment**: No major changes in November. PRF debris loadout has not resumed due to the phased return to work from the RL-directed response to the coronavirus (COVID-19).
RL11-PFP-0018-T: Novel Viral Pandemic (COVID-19) Impacts Project Performance	Unprecedented change in work practices/procedures (e.g., social distancing requirements) or lack of resources because of COVID-19 pandemic impact project performance, resulting in schedule impacts. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $0, 32 days			**Risk Trigger**: Impacts from the COVID-19 pandemic impact the project's ability to maintain planned fieldwork activities. **Risk Recovery Action(s)** / **FC Date** / **%** Maintain the COVID-19 controls as detailed in the CHPRC general industrial hazards analysis. / Ongoing / N/A **Mitigation Assessment**: This risk was identified as a key risk for FY2021. PFP discrete fieldwork activities have not resumed due to the phased return to work from the RL-directed response to COVID-19.
Unassigned Risks (Pending ownership of identified threats/opportunities)				
No unassigned risks identified in November.				

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	4.3	0.2	0.6	(4.1)	-96.0%	(0.4)	-229.3%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Variance: (-$4.1M/-96.0%)
PFP demolition was scheduled to resume in October, however, due to the continuing impacts of COVID-19, the reliability of the supply chain for personal protective equipment (PPE) required to perform the task is uncertain. Resumption of demolition activities is currently scheduled to begin in January 2021 when it is believed a reliable PPE supply will be available to continue and complete PFP demolition. The variance is partially offset by the completion of monthly site stabilization activities performed in November.

CM Cost Variance: (-$0.4M/-229.3%)
The CM cost variance is within threshold.

Contract to Date (CTD)
($M)

WBS 011/ RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	1,142.2	1,132.2	1,243.7	(10.0)	-0.9%	(111.5)	-9.8%	1,152.8	1,265.6	21.9	(112.9)

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Variance: (-$10.0M/-0.9%)
The CTD schedule variance is within threshold.

CTD Cost Variance: (-$111.5M/-9.8%)
The negative CTD cost variance is primarily a result of unplanned costs to support implementation of PFP schedule efficiency initiatives (i.e., foaming, Perma-Fix Northwest [PFNW] size reduction support, PremAire Breathing System); increased training costs of additional PFP radiation control technicians (RCTs) and deactivation and decommissioning (D&D) workers; additional resources to recover schedule from asbestos-removal activities and support the unplanned asbestos removal (about 10,000 feet); unplanned shipping materials (e.g., waste shipping containers TL-1800s, SLB2s, IP-1 bags) required for TRU waste disposition loadout activities; and unplanned work to reconfigure the high-density polyethylene (HDPE) water loop to support the new radiological boundaries.

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

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

The project was demobilized and placed in a safe configuration in late March 2020 due to the RL-directed PSWO. CHPRC and subcontractor labor assigned to work that could not be performed in a remote manner were charged to control account 011.97.01.04 to collect and segregate unproductive time caused by the PSWO.

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

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

Variance at Completion (VAC): (-$112.9M/-9.8%)
The unfavorable VAC reflects extended hotel load and field resource costs due to delays in demolition-ready and demolition activities, as well as resumption actions associated with the December 2017 contamination event encompassing fixative applications, performing radiological surveys and revising radiological postings, infrastructure modifications and stabilization activities. Reassignment of CHPRC personnel to support the RCA and programmatic assessments also contributed to the variance. Impacts attributable to COVID-19 concerns have pushed project completion, increasing the expected total project cost.

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

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

	FY2021		
RL-0011 Nuclear Matl Stab & Disp PFP	Projected Funding	Spending Forecast	Variance
Spending Forecast	24.9	23.1	1.9
Numbers are rounded to the nearest $0.1 million.			

Funds/Variance Analysis
The FY2021 variance of $1.9 million reflects projected funding of $24.9 million and a spending forecast of $23.1 million.

Critical Path Analysis
The PFP critical path schedule begins with the completion of PRF loadout, which is forecast to occur by May 5, 2021, meeting the requirements for the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-083-00A, "Plutonium Finishing Plant (PFP) Facility Transition and Selected Disposition Activities." Demolition completion will be followed by site stabilization and demobilization, turnover to S&M and project closeout activities, completing by August 24, 2021. The two-month push to the project completion date is due to the continuing impacts of COVID-19, the reliability of the supply chain for PPE.

MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/Comment
M-083-00A	"Plutonium Finishing Plant (PFP) Facility Transition and Selected Disposition Activities"	9/30/2017		5/5/2021	Work resumption was planned in the revised DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, Critical Decision (CD)-2 and CD-3 package for early October based on a phased resumption approach and to conserve PPE in response to COVID-19 impacts. The forecast completion date reflects a delay of 61 calendar days since the March 6, 2021, completion date reported in October 2020 due to the continuing impacts of COVID-19, which precluded work resumption as planned in the CD-2 and CD-3 package.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
J.12/C.2.2, C.2.3	PBS RL-0011, PFP Closure Project	Offsite transportation of radioactive material: RL provides equipment and government drivers to transport TRU materials outbound/inbound between the Hanford Site and PFNW locations. RL is the authorized shipper, acts as signatory on the shipping papers and ensures compliance with DOE Manual 460.2-1A, *Radioactive Material Transportation Practices Manual for Use with DOE O 460.2A*. 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
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November 2020
CHPRC-2020-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In the November reporting period (October 26 – November 22, 2020), the Waste and Fuels Management Project (W&FMP) and the River Risk Management Project continued essential mission-critical operations and a phased return to normal operations in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL)-approved CH2M HILL Plateau Remediation Company (CHPRC) resumption of work plan developed in response to the March 24, 2020, RL-directed partial stop work order issued as a part of the Hanford Site response to the novel coronavirus (COVID-19).

Major accomplishments in November included:

- The Management of Cesium and Strontium Capsule (MCSC) Project, W-135, Capsule Storage Area (CSA) Project, continued construction of the raw water pipeline. Rough grading around the capsule storage pad (CSP) and installation of area lighting were completed. Evaluation of the proposals received for the Waste and Encapsulation Storage Facility (WESF) Modifications Line Item construction contract were completed, and preparation of the consent package for RL approval of the subcontract was initiated.
- WESF crane annual performance maintenance continued along with fabrication of the canyon decontamination sink cover. Offsite fabrication continues for the Cask Storage System (CSS) equipment.
- At the Waste Receiving and Processing facility, maintenance of the air handler, quarterly criticality safety walk down and the annual calibration of the stack monitor isolation modules were completed.
- At the Integrated Disposal Facility (IDF), personnel placed the final working surfaces in the waste receiving and handling area. The Washington State Department of Ecology (Ecology) submitted a final deficiency report from a *Resource Conservation and Recovery Act of 1976* (RCRA) permit modification request to bring IDF into active status disposal operations. The permitting team worked on a major permit modification requested by Ecology to bring the leachate collection tanks into the permit.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
21-EMS-WFMP-OBJ1-P1	T Plant Complex will receive three filter media Sludge Transport and Storage Containers (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 CHPRC transportation organization.	9/30/2021	8%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred (DART)	0	3*	*1 DART, Project Technical Services (PTS) in support of RL-0013. *1 DART, Mission Support Alliance, LLC in support of RL-0013.
Total Recordable Injuries	0	0	N/A
First Aid Cases	2	12	11/4/2020 – Employee struck right elbow on stair landing when the right foot twisted/caught under a step. Employee was taken to HPM Corporation (HPMC), received over-the-counter medicine and returned to work without restrictions. (25604) 11/5/2020 – PTS employee at IDF was exiting the cab of a loader and lost their balance when the wind caught the door. Employee landed on their feet but twisted their ankle and struck the right elbow on part of the loader. Employee was taken to HPMC for examination and returned to work without restrictions. (25608)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Waste and Fuels Management Project

13.01 Project Management

- On October 28, 2020, CHPRC distributed the Consent Agreement and Final Order (CAFO) Closure Plans for the 221-T Tank System, 2706-TB Tank System, and the 221-T Pipe Gallery for initial joint CHPRC/RL review.
- On November 12, 2020, CHPRC sent the Transmittal 3 CAFO Closure Plans to RL. Transmittal 3 includes CWC Outside Storage Area (OSA) A and OSA B, as well as data quality objective information for these dangerous waste management units (DWMUs).

13.02 Capsule Storage and Disposition

- Fabrication of the canyon decontamination sink was continued.
- Completed 34 preventative maintenance (PM) packages.

13.03 Canister Storage Building (CSB)

- Completed 20 PM packages.

13.07 Waste Receiving and Processing

- Air handler maintenance was completed.
- Completed 234 surveillances and 19 PM packages.

13.08 T Plant

- Shipped two buckets from T Plant to the Centralized Consolidation/Recycling Center.
- Canyon lighting upgrade, relamping and recalibration of the 2706-T Kurz record system continued.
- Annual canyon crane mechanical PM activity continued.
- Completed 506 surveillances and 35 PM packages.

13.09 Central Waste Complex and Low-Level Burial Grounds

- Completed 297 surveillances and 15 PM packages.

13.16 Offsite Spent Nuclear Fuel Disposition

- Maintained coordination of offsite spent nuclear fuel disposition.

13.21 Mixed-Waste Disposal Trenches

- Received four boxes and two drums from Perma-Fix Northwest (PFNW) into mixed waste Trench 31 in two shipments.
- Completed 118 surveillances.

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

- Fabrication of Cask Storage System (CSS) equipment continued at offsite vendors.
- Evaluations of proposals have completed for the WESF Modifications construction contract and preparation of the consent package for the award of the subcontract for RL approval was initiated.
- With the support of PTS, the following progress was made on MCSC subproject construction activities:
  - Continued construction of the raw water pipeline.
  - Rough grading around the CSP and installation of area lighting completed.

River Risk Management Project

13.10 Environmental Restoration Disposal Facility

- Received 2,499 tons of waste for disposal.
- Received 5,994 tons of waste for disposal fiscal year-to-date. Any corrections in previous months are incorporated.
- Performed annual inspections on 134 containers and corrective maintenance on 76 containers.

13.12 Integrated Disposal Facility

- Operations and Maintenance
  - Completed monthly inspections.
  - Performed four significant storm event inspections.
- IDF Operational Readiness
  - Construction subcontractors.
    - Infrastructure upgrades continued with placing the final working surfaces in the waste receiving and handling area.
    - Continued to make progress on installation of electrical and communication systems.
    - Continued constructing the inspection buildings.
  - Environmental
    - Completed four Waste Storage Area inspections.

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 fiscal year (FY) 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.

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
Explanation of major changes to the project monthly stoplight chart: Risk RL13 CSS-0013-T, *Novel Viral Pandemic (COVID-19) Impacts CSS Subcontractor Fabrication*, was added to the stoplight chart as a realized risk in November. Risks RL13 CSS-0002-T, *CSS Subcontractor Change Orders & Claims*, RL-13 WFM-0010-T, *Results of External Audits/Assessments Impact Operations at WSD Facilities*, were added as key risks for FY2021. Risk RL-13 WFM-0024-T, *Ecology Delays*, was removed from the stoplight chart, as it is no longer being realized. Risk RL-13 WFM-0014-T, *As-Found-Unknown Conditions - Solid Waste Operations Complex (SWOC) Facilities*, and RL13 WFM-0016-T, *Changes to Ecology Strategy*, were removed from the stoplight chart, as they are not key risks for FY2021. Risk RL13 WFM-0006-T, *Major Equipment Failure – T Plant*, was moved from the critical risk section to the high threat value risk section. Risk RL13 WFM-0009-T, *Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues*, was moved from the key risk section to the high threat value risk section.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
RL13 CSA-0004-T: Configuration of Existing Facilities and Infrastructure Different from Assumed	The CSA construction is impacted by a discovery that configuration of existing facilities and infrastructure differs from that represented in the design documents. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $500K, 32 days			**Risk Event:** The actual elevation of an existing buried sewer line as discovered during pot holing by the contractor was such that the alignment of the new fire protection raw water line in the immediate vicinity will be revised. Risk Recovery Action(s) / FC Date / %: Revise the design to realign the raw water line. — Complete — 100 Construct water line (no rework involved). — 12/24/2020 — 75 **Recovery Action Assessment**: A design revision and a contract change to address the new alignment have been issued. Construction is underway and will be completed by December 24, 2020.

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
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. **Risk Recovery Action(s)** / **FC Date** / **%** Revise the design to include an RPBA facility. / Complete / 100 Construct new RPBA facility. / 05/20/2021 / 0 **Recovery Action Assessment**: The design revision to address the omission (i.e., to include an RPBA facility) was released in September. A contract change has been processed with the CSA contractor, although it was delayed beyond the originally projected November 20, 2020, date due to a combination of limited resources and multiple cycles with the contractor to arrive at a final price for the change. This delay and consideration of winter weather has led to a new 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.
RL13 CSS-0006-T: Fabrication of the Equipment from the Contractor	Fabrication of critical items for the long-term storage of the Cs and Sr capsules does not go exactly as planned, resulting in design changes and rework. **Risk Handling Strategy**: Mitigate **Probability**: Somewhat likely (26% to 74%) **Worst Case Impacts**: $6M, 192 days			**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. **Risk Recovery Action(s)** / **FC Date** / **%** Automated Weld System (AWS) vendor to provide portions of design for review as available. / 12/16/2020 / 65 **Recovery Action Assessment**: A design change for the AWS was proposed and accepted by CHPRC, which would minimize crane movements of the AWS and simplify operation. Implementation of this change requires seismic considerations in the design, which were not recognized by the fabricator/designer, resulting in cost and schedule delays. The contractor has submitted a proposal with a realistic design duration. AWS gantry delivery is not on the project critical path. The preliminary gantry design review has been completed. Preliminary design review for the weld head and alternate motion platform was conducted on October 29, 2020. Preliminary design review for the weld head and remote visual inspection system will be conducted on November 30, 2020. Completion of the seismic analysis is taking longer than planned, extending design duration.
RL13 CSS-0013-T: Novel Viral Pandemic (COVID-19) Impacts CSS Subcontractor Fabrication	Unprecedented change in work practices/procedures (e.g., social distancing requirements) or lack of resources because of COVID-19 impacts CSS project fabrication and/or performance. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $0M, 192 days			**Risk Event**: Subcontractor for CSS equipment fabrication has experienced loss of resources due to positive COVID-19 tests, adversely impacting the schedule to complete fabrication activities. **Risk Recovery Action(s)** / **FC Date** / **%** Subcontractor to manage resources to mitigate impacts for fabrication of critical path equipment / Ongoing / N/A **Recovery Action Assessment**: The fabrication subcontractor for critical path equipment is taking the following actions as necessary when workers are not available due to COVID-19: Adjust assignment of key resources that are available to maintain progress on critical path and near critical path equipment, hire additional temporary resources and schedule overtime to meet key dates.

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
RL13 CSS-0015-T: CSS Design Changes	During fabrication of the CSS equipment, necessary design changes are identified, resulting in cost and schedule impacts to the project. **Risk Handling Strategy**: Mitigate **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $750K, 96 days			**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. **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 **Recovery Action Assessment**: No significant changes in November. 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.
RL13 MCSC-0010-T: Maintenance and Storage Facility (MASF) Mockup Construction Subcontractor Performance	The MASF mockup construction contractor fails to perform per the proposal or fails to meet CHPRC expectations, leading to schedule delays. **Risk Handling Strategy**: Mitigate **Probability**: Somewhat likely (26% to 74%) **Worst Case Impacts**: $350K, 64 days			**Risk Event**: The MASF mockup construction contractor has not managed their subcontractors effectively and has submitted fabrication drawings that cannot be approved by CHPRC. Workmanship in the field is not adequate and has resulted in nonconformance report conditions that require rework. **Risk Recovery Action(s)** / **FC Date** / **%** Provide additional oversight of apprentice employees. / Ongoing / N/A **Recovery Action Assessment**: During November, the construction contractor made substantial progress toward completion of the mockup structure. The forecast is to complete the mockup structure and subsequent acceptance testing in early December.
RL13 WFM-0013-T: Regulatory Document Results in Significant Comments from the Regulator	Significant comments from the regulator on closure plans submitted for approval results in non-approval of the permit or rework, causing schedule impacts to the project. **Risk Handling Strategy**: Accept **Probability**: Somewhat likely (26% to 74%) **Worst Case Impacts**: $10M, 192 days			**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. **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 **Recovery Action Assessment**: No significant changes in November. 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.
RL13 WFM-0022-T: Additional Dangerous Waste Management Units (DWMUs)	Unplanned DWMUs are added to the scope, requiring additional document support, impacting the project in both cost and schedule. **Risk Handling Strategy**: Accept **Probability**: Very likely (>90%) **Worst Case Impacts**: $0, 48 days			**Risk Event**: Ecology provided technical comments on the permit addendum, expanding the number of DWMUs. **Risk Recovery Action(s)** / **FC Date** / **%** Conduct weekly meetings with Ecology and RL. / Ongoing / N/A **Recovery Action Assessment**: No significant changes in November. 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.

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0013/WBS-013</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</td></tr>
<tr><td colspan="5">No critical risks identified in November.</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td>RL13 CSS-0002-T: CSS Subcontractor Change Orders & Claims</td><td>The CSS design/fabrication contractor submits more change orders and more claims than anticipated, resulting in schedule delays and increased subcontractor cost.

Risk Handling Strategy: Mitigate

Probability: Likely (75% to 90%)
Worst Case Impacts: $14.7M, 48 days</td><td>  </td><td></td><td>Risk Trigger Metric: CSS subcontractor issues significant change orders and claims.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Review scope of each task prior to initiation to ensure contractor is in alignment for the upcoming work.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Develop and implement subcontractor oversight plans for fabrication.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Conduct weekly status meeting with fabricators to ensure direct flow of information from CHPRC</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: This risk was identified as a key risk for FY2021. A fabrication kickoff meeting will be held with the Transportable Storage Canister in December. A Subcontractor Oversight Plan was issued (CHPRC-04368) to outline CHPRC engineering and quality assurance oversight during fabrication. Weekly status meetings are held directly with critical path fabricators to ensure direct flow of information from CHPRC to fabricator and vice versa. The enables quicker resolution of problems and questions.</td></tr>
<tr><td>RL13 WFM-0006-T: Major Equipment Failure – T Plant</td><td>T Plant suffers a major equipment failure (e.g., crane, primary power supply), resulting in cost impacts and schedule delays.

Risk Handling Strategy: Mitigate

Probability: Somewhat likely (26% to 74%)
Worst Case Impacts: $3M, 96 days</td><td>  </td><td></td><td>Risk Trigger Metric: During planned facility operation activities, a suspected system component is discovered that requires attention or an unexpected malfunction results in this risk being realized. This risk will continue throughout the CHPRC contract.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Procure and receive crane trolley motor parts.</td><td>12/17/2020</td><td>5</td></tr></table>
Mitigation Assessment: No significant changes in November. 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.</td></tr>
<tr><td>RL13 WFM-0009-T: Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues</td><td>A pause in waste processing results in an unexpected container degradation within the SWOC (excluding TRU retrieval activities) and requires additional resources to respond.

Risk Handling Strategy: Mitigate

Probability: Somewhat likely (26% to 74%)
Worst Case Impacts: $5M, 0 days</td><td>  </td><td></td><td>Risk Trigger Metric: Degraded containers are discovered in CWC.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><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></table>
Mitigation Assessment: No significant changes in November. 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 over packed starting in late spring FY2021, reducing the risk of container integrity issues.</td></tr>
</table>

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
FY2021 Key Risks				
RL13 CSA-0011-T: CSA Site Location Found to Have Extensive Contamination	The CSA location is found to have contaminated soil or volumes of unfavorable (e.g., loose) soils. **Risk Handling Strategy**: Accept **Probability**: Somewhat likely (26% to 74%) **Worst Case Impacts**: $20K, 32 days			**Risk Trigger Metric**: Significant volumes of contaminated or otherwise unsuitable soils are discovered during CSA construction that cause delays and costs, resulting in the required excavation of additional soil and potentially causing the contamination of leased equipment. **Mitigation Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment**: No significant changes in November. As of the end of November, excavation of loose foundation materials continued without encountering contamination. However, significant excavation remains related to the installation of the new fire protection raw water line between WESF and CSB. This risk is not considered a key risk for FY2021 and will be removed from the stoplight chart prior to December reporting.
RL13 IDF-0010-T: Discovery of Unplanned Site Conditions	Unexpected site conditions are encountered during soil excavation activities, resulting in recovery actions. **Risk Handling Strategy**: Accept **Probability**: Unlikely (10% to 24%) **Worst Case Impacts**: $240K, 16 days			**Risk Trigger Metric**: During excavation (i.e., underground trenching for sewer, electrical and potable water), the project encounters unplanned contamination, debris, legacy waste (drums) or utilities. **Mitigation Action(s)** / **FC Date** / **%** Review of historical as-built drawings. / Complete / 100 Site walk downs as needed. / Ongoing / N/A Radiological surveying, as needed. / Ongoing / N/A **Mitigation Assessment**: The project is nearing completion of the excavation activities, showing minimal concern for this risk to be realized. This risk will be reviewed next reporting period for consideration to be removed.
RL13 IDF-0009-T: RCRA Permit Process Impact Final Design to DWMU Components	Changes identified in the RCRA permit process have direct impact to the final design of components identified within Dangerous Waste Management Unit (DWMU), resulting in cost and schedule delays. **Risk Handling Strategy**: Accept **Probability**: Unlikely (10% to 24%) **Worst Case Impacts**: $250K, 16 days			**Risk Trigger Metric**: During review of the RCRA permit documentation, Ecology finds issues to DWMU components, resulting in design changes to DWMU components identified in the RCRA permit. **Mitigation Action(s)** / **FC Date** / **%** Working with state regulators to negotiate the acceptance of the current Leachate Collection Tank design into the RCRA permit, without modifications to the existing tank system. / TBD / N/A **Mitigation Assessment**: This risk has been identified as a key project risk for FY2021. The current Leachate Collection Tank 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.
RL13 MCSC-0003-T: Canyon Crane Non-Functional/ Not Serviceable	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. **Risk Handling Strategy**: Accept **Probability**: Somewhat likely (26% to 74%) **Worst Case Impacts**: $300K, 96 days			**Risk Trigger Metric**: The canyon crane fails during use or cannot be returned to service after maintenance. **Mitigation Action(s)** / **FC Date** / **%** Perform preventative/corrective maintenance procedures on the crane to facilitate reliability. / 12/17/2020 / 90 Procure critical spares. / 9/30/2021 / 0 **Mitigation Assessment**: The completion of the crane PM was delayed 18 days from the November 19, 2020, forecast completion date due to resource constraints primarily associated with COVID-19. Facility personnel will complete crane PMs in December 2020. Critical spares will be evaluated and procured prior to the end of FY2021.

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
RL13 WFM-0011-T: CWC/Waste Receiving and Processing Facility (WRAP) Components Fail	CWC facilities and components may reach their end of life. These items will need to be replaced and/or repaired outside of planned funding profiles, resulting in cost impacts. **Risk Handling Strategy**: Mitigate **Probability**: Somewhat likely (26% to 74%) **Worst Case Impacts**: $2M, 0 days			**Risk Trigger Metric**: Maintenance activities at CWC increase due to aging facilities. **Mitigation Action(s)** / **FC Date** / **%** Conduct doorframe replacements and electrical equipment repairs as necessary. / Ongoing / N/A **Mitigation Assessment**: No significant changes in November. The WRAP roof was analyzed for structural integrity following water intrusion. There was insufficient basis for the roof's integrity, which will lead to an eventual roof replacement. Maintenance work at CWC will be scheduled based on facility work priorities. This risk is not considered a key risk for FY2021 and will be removed from the stoplight chart prior to December reporting.
RL 13 WFM-0012-T: W&FM SWOC Contamination Event	A contamination event at SWOC results in cost and schedule impacts to the project. **Risk Handling Strategy**: Mitigate **Probability**: Unlikely (10% to 25%) **Worst Case Impacts**: $1.1M, 32 days			**Risk Trigger Metric**: A contamination event at SWOC results in cost and schedule impacts to the project. **Mitigation Action(s)** / **FC Date** / **%** Adhere to CHPRC procedures, safety programs and training programs that are designed to minimize the potential of worker injury. / Ongoing / N/A Ship four fiberglass reinforced plywood boxes to PFNW for treatment. / 09/30/2021 / 0 **Mitigation Assessment**: No significant changes in November. This risk was identified as a key project risk for FY2020. The project continued to follow CHPRC procedures and safety programs to minimize any industrial accidents or contamination events
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified in November.				

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	14.1	13.5	14.2	(0.5)	-3.7%	(0.7)	-5.0%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Performance (-$0.5M/-3.7%)

The CM schedule variance is within threshold.

CM Cost Performance (-$0.7M/-5.0%)

The CM cost variance is within threshold.

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	1,702.1	1,681.7	1,593.8	(20.5)	-1.2%	87.9	5.2%	1,860.3	1,774.4	180.6	85.9

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance (-$20.5M/-1.2%)

The CTD schedule variance is within threshold.

CTD Cost Performance (+$87.9M/+5.2%)

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

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

Variance at Completion (+$85.9M/+4.6%)

The CTD VAC is within threshold.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

RL-0013 Solid Waste Stabilization and Disposition	FY2021 Projected Funding	FY2021 Spending Forecast	FY2021 Variance
Waste Stabilization and Disposition	206.1	205.3	0.7
Management of Cesium and Strontium Capsules (Line Item)	13.1	13.2	(0.1)
RL-0013 – Total	219.2	218.5	0.6

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis

The FY2021 variance of $0.6 million reflects projected funding of $219.2 million and a spending forecast of $218.5 million. The spending forecast reduced $1.4 million from last month, primarily to align with the CSS fabrication schedule re-plan.

Critical Path Analysis

Critical path analysis will be provided upon request.

MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-091-53	Submit Milestone Change Request to Replace Target Dates for Capabilities to Process TRUM Waste	9/30/2018			Ecology has not agreed to the change form
M-091-03O	TPA M-091-03O Submit Revision of TRUM Waste and Mixed Low-level Waste to Ecology	6/30/2021		6/30/2021	On schedule
M-091-52-T02	M-091-52-T02 TPA Submit to Ecology an Interim Response Action to meet M-091-49A	9/30/2021		9/30/2021	On schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
J.12/C.2.2, C.2.3	PBS RL-0011, *Plutonium Finishing Plant Closure Project* PBS RL-0013, *Solid and Liquid Waste Treatment and Disposal*	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, *Radioactive Material Transportation Practices Manual for Use with DOE O 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 treatment, storage and disposal requirements.	Ongoing
J.12/C.2.3.6	PBS RL-0013, *Transuranic Waste Certification*	WIPP provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable, and the number of shipments is controlled by DOE-Headquarters on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the Carlsbad Field Office.	No WIPP shipments are planned within the remaining contract period of performance.

DOE ACTIONS/DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review/Approve CSA Preliminary Documented Safety Analysis (first FY)	5/16/2019(A)	11/4/2020(A)
RL Review/Approve Project W-135, WESF Modifications, Critical Decision (CD)-2 and CD-3 Documentation	7/27/2020(A)	12/16/2020
RL Approve IDF Final Hazard Categorization	8/3/2020(A)	11/30/2020

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

CH2MHILL
Plateau Remediation Company

a Jacobs company

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

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

M. A. Wright
Vice President for
Project Technical
Services

November 2020
CHPRC-2020-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In November, 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	30.9	60.8	2.0	3.8						
HX P&T	26.8	52.8	3.4	7.1						
KR-4 P&T	12.9	25.5	0.2	0.4						
KW P&T	13.1	25.5	0.7	1.7						
KX P&T	23.3	49.8	1.0	2.4						
200 West P&T	101.6	207.4	0.8	2.0	155.0	314.0	$1.8x10^{11}$	$4.12 x10^{11}$	9.5	18.6
Combined	208.5	421.7	8.1	17.4	155.0	314.0	$1.8x10^{11}$	$4.12 x10^{11}$	9.5	18.6
FY2021 Gold Metric	**--**	**2,200.0**	**--**	**80.0**	**--**	**1,800.0**	**--**	**2.4Ci**	**--**	**90.00**

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

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

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

EMS Objectives and Target Status

Objective #	Objective	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 treated offgas analytical results from compliance sampling and process sampling each quarter.	7/30/2021	25%
21-EMS-SGRP-OBJ2-P1	Soil and Groundwater Remediation Project (S&GRP) operates six P&T facilities that remove contaminants from groundwater at the Hanford Site. The goal is to treat and remediate a total of 2.2 billion gallons of groundwater.	9/30/2021	19%

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	3	N/A
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Environmental Integration

- Completed disposition of comments from the U.S. Department of Energy (DOE), Richland Operations Office (RL) review of the decision draft updated Hanford Site composite analysis (CA) ahead of schedule through successful collaboration with the RL lead. The Hanford Site CA is maintained to support low-level waste disposal performance assessments and disposal authorizations for facilities at the Hanford Site, including continuing operation of the Environmental Restoration Disposal Facility and the 200 Area Low-level Burial Grounds, construction of the Integrated Disposal Facility and forthcoming closure of tank residual waste systems.

Sampling Status

- Delivered the Unit Manager Meeting and Project Manager Meeting presentations for the November 19, 2020, meetings to RL and the regulatory agencies. These documents included an Appendix A section that documented the March to June missed sample tables, the July and August missed sample tables, the September and October missed sample tables, the sample catch-up tables and the sample priority slides/presentations given to RL and each regulator seeking concurrence on deferral and cancellation of sampling events in calendar year 2020.

Central Plateau *Resource Conservation and Recovery Act of 1976* Closure Plans

- Completed clearance of the 216-A-29, 216-B-3, 216-B-63 and 216-S-10 Closure Plans after receiving RL certifying signatures on November 18, 2020, in preparation for transmittal to the Washington State Department of Ecology (Ecology).

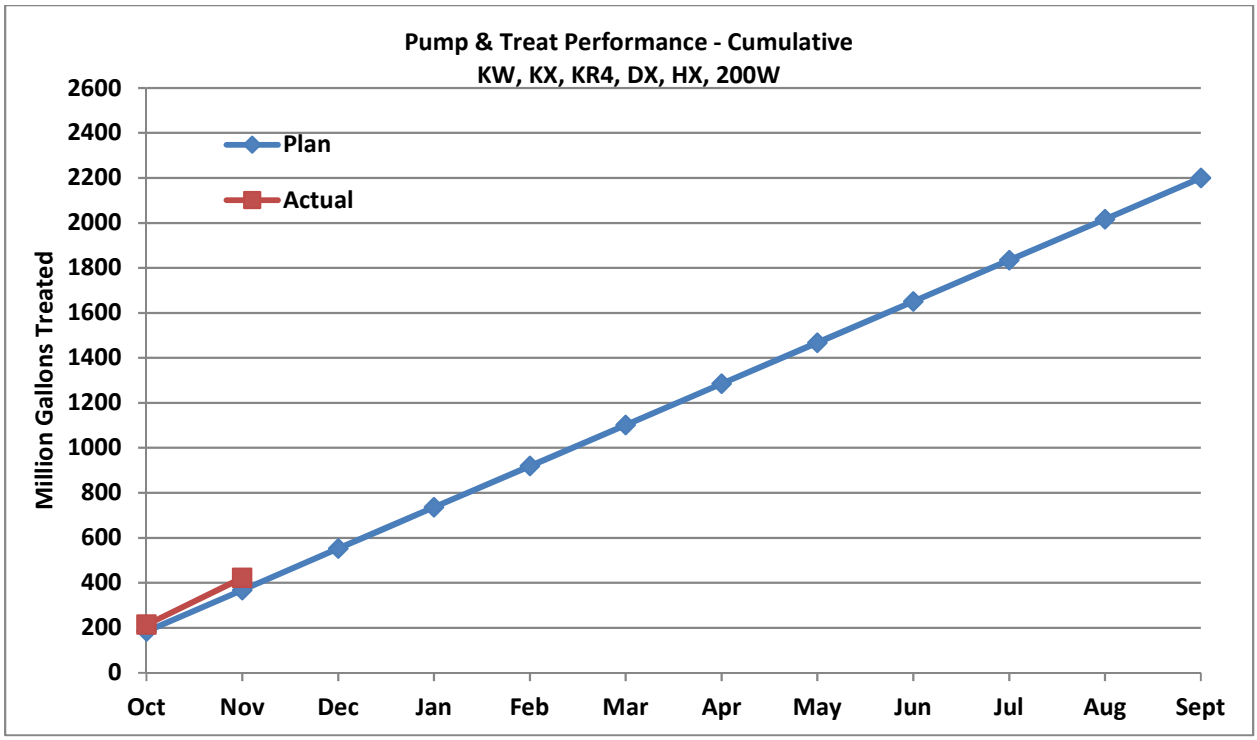
Groundwater P&T Facilities

200 West P&T

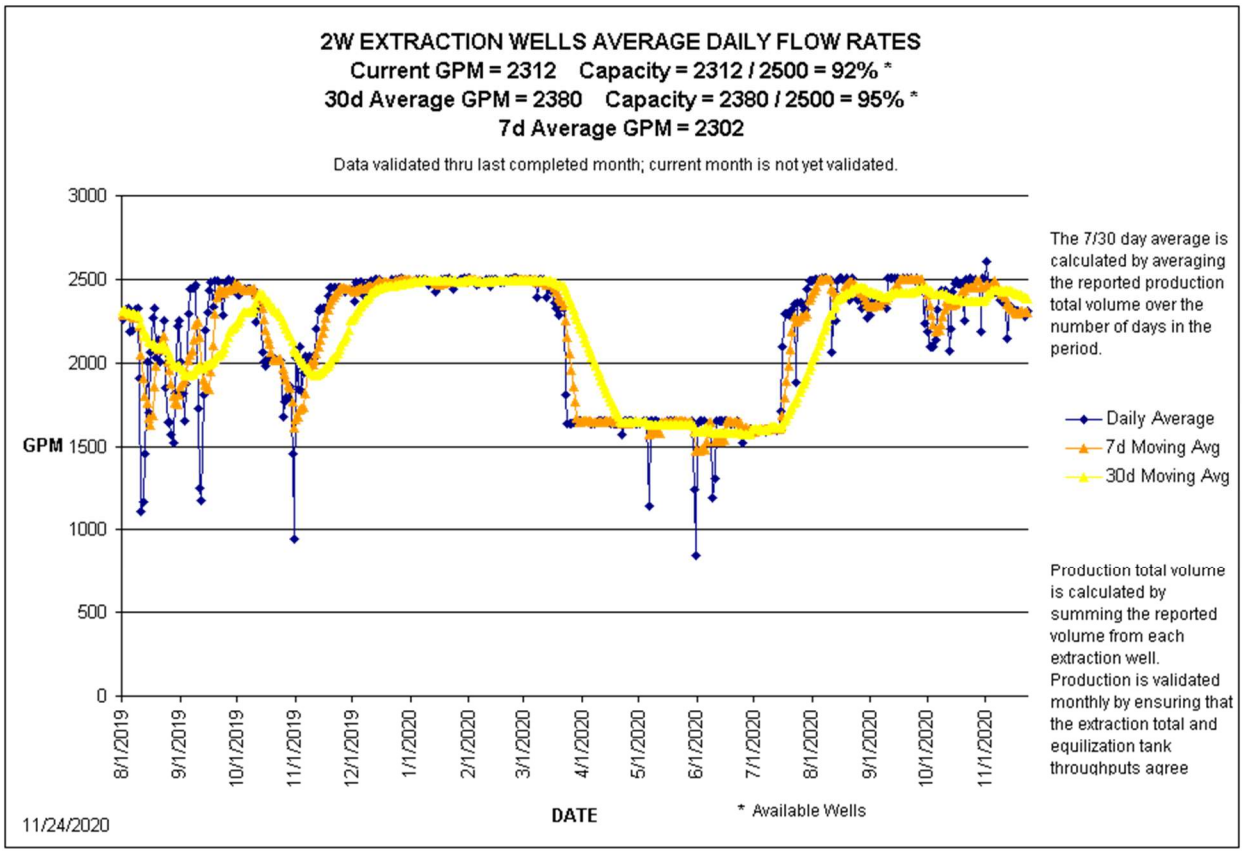
- Operated the 200 West P&T at an average of 2,380 gallons per minute (gpm).

100 Area P&Ts

- Operated the DX P&T at 706 gpm, below the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 296 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 297 gpm, below the facility capacity of 330 gpm.
- Operated the KX P&T at 561 gpm, below the facility capacity of 900 gpm.
- Operated the HX P&T at 618 gpm, below the facility capacity of 900 gpm.
- Commenced well realignment work to convert monitoring well HJ01 (199-H1-3) to injection well.
- Completed well realignment work to convert extraction well ME11 (199-D4-99) to monitoring well.



FY2021 P&T Operations



200 West P&T Operations

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.

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0030/WBS-030				
Explanation of major changes to the project monthly stoplight chart: 1. Realized closure plan risks have been updated to reflect formal certification of the closure plan bulk package by RL. These three risks will be removed from the stoplight chart prior to the next reporting period. 2. Risk *RL30 KR4-0003-T: RI (Remedial Investigation) – Unexpected comments on the RI Rev 0 based on the Regulator Feasibility Study (FS) Review*, was added to the Realized Risk section. 3. Risk *RL30 SGW-0051-T: Novel Viral Pandemic (COVID-19) Impacts Project Performance – Soil and Groundwater (S&GW)*, was added to the Realized Risk section based on impacts currently experienced due to COVID-19. 4. Risk *RL30 TI-0003-T: TI-Key Environmental Modeling Hardware Failure*, has been updated to reflect the reduction in risk posture to mitigate the impacts to modeling by procuring back up front-end node hardware. This risk will be removed from the stoplight chart next reporting period.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
RL30 DOC-0003-T: 216-B-63 Closure Plan Atypical Comments	Atypical 216-B-63 comments result in multiple rounds of comment resolution that require additional effort and duration. **Risk Handling Strategy**: Accept **Probability**: Unlikely (10% to 25%) **Worst Case Impacts**: $174.0K, 32 days			**Risk Event**: RL's 216-B-63 Closure Plan comments provided in June 2019 requested removal of the pipeline for consistency with the 241-CX Tank System Closure Plan and because they were being addressed in the 200-IS-1 Operable Unit. CH2M HILL Plateau Remediation Company (CHPRC) was coordinating with both RL and Ecology to resolve these comments while the review was ongoing. Efforts to resolve the pipeline comment were nearing completion between RL and Ecology in July 2019 when additional Ecology comments and research requests were provided from the new Ecology lead. The issue has grown to include a more global conveyance discussion (based on a December 2019 meeting), and new comments have been received that requested additional historic information (based on a January 2020 meeting). CHPRC continues with efforts to support RL in resolving the original pipeline comments and the new comments. Ecology has expressed the desire to incorporate the resolutions into the two other closure plans currently in process (216-S-10 and 216-B-3), as well as other closure plans already certified or frozen. RL or CHPRC have not acted on this request. The issues will be revisited once resolution is reached within this 216-B-63 Closure Plan. **Recovery Action(s)** / **FC Date** / **%** CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives. / Ongoing / N/A **Recovery Assessment**: CHPRC has formally certified and submitted the 216-A-29, 216-B-3, 216-B-63 and 216-S-10 Closure Plans as a single bulk closure-planning package to RL senior management. RL senior management has certified the closure plans and transmitted them to Ecology for final lockdown. This risk will be removed prior to December reporting.

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0030/WBS-030</td></tr>
<tr><td>RL30 DOC-0004-T: 216-S-10 Closure Plan Atypical Comments</td><td>Atypical 216-S-10 comments result in multiple rounds of comment resolution that require additional effort and duration.

Risk Handling Strategy: Accept

Probability: Unlikely (10% to 25%)
Worst Case Impacts: $174.0K, 32 days</td><td>  </td><td>  </td><td>Risk Event: RL and Ecology comments were originally received in April 2019. Since that date, additional Ecology comments were received in August, November and December 2019 as part of Ecology’s “confirm comment capture” task. Additional comments were received via the 216-B-63 Closure Plan review.
<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.</td><td>Ongoing</td><td>N/A</td></tr></table>Recovery Assessment: CHPRC has formally certified and submitted the 216-A-29, 216-B-3, 216-B-63 and 216-S-10 Closure Plans as a single bulk closure-planning package to RL senior management. RL senior management has certified the closure plans and transmitted them to Ecology for final lockdown. This risk will be removed prior to December reporting.</td></tr>
<tr><td>RL30 DOC-0001-T: 216-A-29 Closure Plan Atypical Comments</td><td>Atypical 216-A-29 comments result in multiple rounds of comment resolution that require additional effort and duration.

Risk Handling Strategy: Accept

Probability: Unlikely (10% to 25%)
Worst Case Impacts: $174.0K, 32 days</td><td>  </td><td>  </td><td>Risk Event: This closure plan was “frozen” by Ecology in April 2019, with the remaining activity of certification and transmittal to occur concurrently with the in-process 216-B-63, 216-B-3 and 216-S-10 Closure Plans. During the 216-B-63 Closure Plan comment resolution meeting held in December 2019, Ecology expressed a desire to update the 216-A-29 Closure Plan upon resolution of the conveyance discussions. During the January 2020 conveyance follow-up meeting with Ecology, new comments were provided regarding a request for additional historical information and an informal statement that the other certified or frozen closure plans may also need to be revised accordingly.
<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>CHPRC includes resources to support timely comment resolution, weekly meetings and, if necessary, development of white papers to provide further clarification to stakeholders. CHPRC considers these handling actions standard business practices to support performance objectives.</td><td>Ongoing</td><td>N/A</td></tr></table>Recovery Assessment: CHPRC has formally certified and submitted the 216-A-29, 216-B-3, 216-B-63 and 216-S-10 Closure Plans as a single bulk closure-planning package to RL senior management. RL senior management has certified the closure plans and transmitted them to Ecology for final lockdown. This risk will be removed prior to December reporting.</td></tr>
<tr><td>RL30 KR4-0004-T: Feasibility Study (FS) – Greater Than Expected Comments from RL or Regulators</td><td>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</td><td>  </td><td>  </td><td>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.
<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><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>Ongoing</td><td>N/A</td></tr></table>Recovery Assessment: No significant change in November. 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.</td></tr>
</table>

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0030/WBS-030</td></tr>
<tr><td>RL30 KR4-0003-T: Remedial Investigation (RI) – Unexpected comments on the RI Rev 0 based from the Regulator FS Review</td><td>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</td><td>  </td><td>  </td><td>Risk Event: Comments received on the FS resulted in changes to the Ecology Risk section of the RI.<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><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>Ongoing</td><td>N/A</td></tr></table>Recovery Assessment: 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.</td></tr>
<tr><td>RL30 SGW-0051-T: Novel Viral Pandemic (COVID-19) Impacts Project Performance – S&GW</td><td>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.

Risk Handling Strategy: Accept

Probability: Very likely (<90%)
Worst Case Impacts: $0K, 48 days</td><td>  </td><td>  </td><td>Risk Event: COVID-19 exposures and quarantine protocol has impacted the availability of key resources for both contract and subcontracted staff. Discrete scope such as ASHT tank layup and 200-DV-1 drilling has been delayed as a result of key team members required to quarantine. In addition, the delivery of the ion exchange train was delayed by COVID-19 at the vendor facility.<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Schedule delays in fieldwork will be recovered by utilization of overtime.</td><td>TBD</td><td>N/A</td></tr></table>Recovery Assessment: 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.</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</td></tr>
<tr><td colspan="5">No Critical Risks identified in November.</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td colspan="5">No High Risks identified in November.</td></tr>
<tr><td colspan="5">FY2021 Key Risks</td></tr>
<tr><td>RL30 TI-0003-T: TI-Key Environmental Modeling Hardware Failure</td><td>Computer hardware components for environmental modeling fail, requiring immediate replacement and resulting in cost and schedule impacts to CHPRC and other Hanford Site contractor's projects.

Risk Handling Strategy: Control

Probability: Somewhat likely (26% to 74%)
Worst Case Impacts: $350K, 24 days</td><td>  </td><td>  </td><td>Risk Event: A primary node of the Gaia Environmental modeling super computer server fails. This failure results in delays to CA and cumulative impact evaluation work activities and requires the purchase and validation of new components.<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Specify and acquire two front-end server nodes to provide primary and redundant secondary front-end nodes for immediate change over in the event of a failure.</td><td>TBD</td><td>0</td></tr></table>Mitigation Assessment: Based on the results of the FY2021 Risk Analysis, in conjunction with the agreed path forward to avoid this risk through the purchase of secondary front-end nodes for immediate change over, the project has elected to remove this risk from the monthly stoplight chart in the next reporting period. This risk is no longer considered a key risk for FY2021. This risk will continue to be monitored until the identified mitigation action is completed and the risk is avoided.</td></tr>
<tr><td colspan="5">Unassigned Risks (Pending ownership of identified risks/opportunities)</td></tr>
<tr><td colspan="5">No unassigned risks identified in November.</td></tr>
</table>

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	7.7	9.4	9.0	1.7	22.1%	0.4	4.3%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Performance (+$1.7M/+22.1%)
The CM positive schedule variance is primarily driven by significant progress on 100-HR-3, 200-ZP-1, *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-024-00 well drilling campaigns and their associated sampling, which were planned in FY2020 but were delayed due to the RL-directed March 24, 2020, partial stop work order (PSWO) for non-portable work. In addition, routine groundwater sampling and lab analysis picked up positive schedule performance as the sampling team experienced favorable field conditions and have become adept at performing work within the new COVID-19 controls. The sampling team has also been able to catch up with some of the FY2020 planned samples that were missed due to the PSWO by running analysis concurrently with the FY2021 sample trips, generating additional positive schedule variance.

CM Cost Performance (+$0.4M/+4.3%)
The CM positive cost variance is within reporting threshold.

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	1,768.8	1,750.7	1,693.8	(18.2)	-1.0%	56.9	3.2%	1,861.4	1,801.5	107.7	59.9

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance (-$18.2M/-1.0%)
The CTD negative schedule variance is within reporting thresholds.

CTD Cost Performance (+$56.9M/+3.2%)
The CTD positive cost variance is within reporting thresholds.

Variance at Completion (+$59.9M/+3.2%)
The variance at completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

RL-0030 Soil and Groundwater Remediation	FY2021 Projected Funding	FY2021 Spending Forecast	FY2021 Variance
Spending Forecast	127.9	124.8	3.1

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis

The FY2021 variance of $3.1 million reflects projected funding of $127.9 million and a spending forecast of $124.8 million. The spending forecast was reduced $3.1 million from last month primarily due to a labor reconciliation and schedule slips into FY2022.

Critical Path Analysis

Critical path analysis will be provided upon request.

MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-015-93C	Initiate Characterization Fieldwork for 200-SW-2 Operable Unit Landfills	9/30/2018		To be determined (TBD)	In abeyance
M-015-98	Complete Remedial Investigation of U Plant Related Waste Sites located in 200-WA-1	6/30/2019		TBD	In abeyance
M-085-70	Submit to Ecology a Remedial Investigation/Feasibility Study Work Plan for 200-CB-1	9/30/2019		2/20/2023	In abeyance
M-015-99	Complete Remedial Investigation of Plutonium Finishing Plant (PFP) Related Waste Sites Located in 200-WA-1	12/31/2019		TBD	In abeyance
M-015-112	Submit Draft B 200-IS-1 RFI/CMS/RI/FS Work Plan to Ecology with Schedule Dates	11/30/2020		3/7/2023	In abeyance
M-024-58N	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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-085-90	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CR-1 to EPA	9/30/2021		5/20/2023	In abeyance

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS*

Description	CHPRC Delivery Date	Expected RL Due Date
RL Approve 100-HR-3 Remedial Design/Remedial Action Work Plan (RD/RAWP) Revision 0	6/18/2020 (A)	12/12/2020
RL Review 100-D-H Waste Site Closeout Package C	11/23/2020	12/8/2020
RL Transmit Final 100-HR-3 RD/RAWP Revision 0 to Ecology	12/3/2020	12/12/2020
RL Review 200-BP-5/200-PO-1 Interim Action (IA) RD/RAWP Decisional Draft	12/8/2020	1/6/2021
RL Review of 100-KE Soil Flushing Explanation of Significant Difference (ESD)	12/16/2020	1/14/2021
RL Review KR-4 FY2021 Parent Rebound KW Sampling and Analysis Plan (SAP) Addendum	1/12/2021	2/10/2021
RL Review 200-PO-1 Decisional Draft CSM SAP	1/14/2021	2/12/2021
RL Transmit ZP-1 Operation and Maintenance Plan Draft A to EPA	1/26/2021	2/9/2021
RL Transmit 100-KE Soil Flushing ESD to EPA	2/2/2021	2/16/2021
RL Transmit 200-BP-5/200-PO-1 IA RD/RAWP Draft A to Regulators	2/25/2021	3/10/2021

*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

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

November 2020
CHPRC-2020-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In November, the Central Plateau Risk Management (CPRM) Aging Structures team established a 2-foot thick grout cap over the material at risk in the 241-Z-361 Tank and a 5-foot thick controlled density fill (CDF) cap over the material at risk in the 216-Z-9 Crib. At the Reduction-Oxidation (REDOX) facility, crews completed electrical investigations to look for any potential legacy hazardous conditions throughout the REDOX silo. Crews staged equipment for temporary power, which included placing two generators on the north side of the facility and stringing lines into the building through existing door penetrations. Crews at the 224B Facility completed the final Class 1 asbestos abatement and area cleanup on the first floor. Outside the 224B Facility, the grounds were leveled and prepped to allow construction of the cell containments to begin. At U Plant, crews navigated elevated and difficult-to-access locations to abate 255 feet of asbestos-containing pipe insulation. The Plutonium Uranium Extraction Plant (PUREX) North team investigated six chemical tanks in the 211A Facility and found no residual liquids, as well as completed mechanical and electrical isolations on facilities 2701AB, 2714A, and 214A. Finally, crews completed removal of white powder within the PUREX Piping and Operating Gallery. The West Area Remediation Project (WARP) team completed the hazardous waste removal, demolition and debris loadout of 10 former mobile office trailers (MO2109, MO2112, MO2113, MO2117, MO2119, MO2120, MO2304, MO2305, MO2306 and MO2307) in the South Trailer Village. Crews completed the initial entry, beryllium sampling and initial radiological surface surveys for the 231-Z Facility. Crews began the electrical and mechanical isolations to 216-ZP-1 and began mechanical isolations to the remainder of the South Trailer Village.

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	16%

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	5	15	11/4/2020 – Employee pushed the door of CC144B closed when a gust of wind caught the door, causing it to close quickly. The employee noted a discomfort in the right shoulder and arm. Employee was taken to HPM Corporation for evaluation and returned to work with no restrictions. (25605) 11/10/2020 – Employee pulled on door handle and while doing so, the handle completely came off the door. The employee twisted at the waist and felt a small twinge and was taken to HPMC for treatment. Employee returned to work with no restrictions. (25611) 11/11/2020 – While placing dunnage under Environmental Restoration Disposal Facility cans, the employee's head made contact with a metal side hook located on the can, causing a small abrasion. Employee was treated for wound skin care and returned to work with no restrictions. (25612) 11/24/2020 –While loading bags of lime into truck bed, employee's face was exposed to plumes of particles. Employee was treated with a hot/cold compress to relieve skin irritation and returned to work with no restrictions. (25617) 11/24/2020 – Employee brushed dirt away to get better access to a pipe and cut a finger on a piece of tin that was covering the insulation on the pipe. The employee was taken to HPMC for wound skin care and returned to work with no restrictions. (25616)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Central Plateau Risk Management
Surveillance and Maintenance (S&M)
- Completed annual surveillance for accessible areas of the PUREX building.
- Performed annual surveillance for the 216-Z-9 Crib and 241-Z-361 Tank.

PUREX White Powder Cleanup
- Completed cleanup of white powder in the Piping and Operations Gallery at PUREX.

REDOX Canyon Risk Mitigation
- Completed ingress path to the REDOX decontamination/hot shop via the south pipe gallery and prepared the area for vent and balance.
- Completed scaffold installation to support nondestructive assay (NDA) characterization. Started NDA shots on the hexone line at 276S.
- Completed installing additional conduit from the electrical panel to the balance of system slab in support of the temporary ventilation system.
- Completed ground scans and survey updates for areas near the power panel of 291S and the 291S stack east of REDOX.
- Completed electrical verification of the west end pipe galleries and annexes.
- Completed placement of generators, electrical carts, string lines and distribution carts to support temporary power efforts.

Aging Structures Stabilization
- Completed investigation of the 216-Z-9 Crib.
- Placed grout in the 241-Z-361 Tank and encapsulated the material at risk (MAR) under a two-foot cap.
- Placed CDF in the 216-Z-9 Crib and encapsulated the MAR under a five-foot cap.

224B Facility Demolition Prep
- Completed hazardous review board for the work package to authorize the initial entries into the 224B hot cells.
- Completed Class 1 asbestos abatement on the first floor of 224B.
- Initiated the construction of containment structures on the south side of 224B in order to gain access to the process cells.

PUREX North Risk Mitigation
- Completed mechanical and electrical isolations of the 2701AB, 2714A and 214A facilities.
- Completed internal investigations on six out of eight tanks located within the 211A Facility in support of characterization efforts. Obtained samples and photos to support characterization prior to starting decontamination and decommissioning.

West Area Remediation Project
- Completed hazardous waste removal and demolition and debris loadout of 10 former mobile office trailers (MO2109, MO2112, MO2113, MO2117, MO2119, MO2120, MO2304, MO2305, MO2306 and MO2307) in the South Trailer Village.

- Crews completed the initial entry, beryllium sampling and initial radiological surface surveys for the 231-Z Facility.
- Crews began the electrical and mechanical isolations to 216-ZP-1 and began mechanical isolations to the remainder of South Trailer Village.

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 and coronavirus (COVID-19) resource impacts have pushed Phase II completion into April 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	
RL-0040/WBS-040				
Explanation of major changes to the project monthly stoplight chart: Risks RL40 BOS-0010-T, *Facility Integrity Outside CHPRC Control*, RL40 REDOX-0016-T, *Ventilation System - Changes to Stack Monitoring Requirements Affect the Project Schedule*, and RL40 WARP-0003-T, *Facility Integrity*, were removed from the stoplight chart in November.				
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			**Risk Event**: A concerned citizen called a stop work, which caused delays and unplanned work necessary to address the required action. Risk Recovery Action(s) / FC Date / %: Create and implement a phased approach to address identified concerns. — April 2021 — 84 Upgrade temporary power/lighting and localized ventilation. — January 2021 — 55 **Recovery Action Assessment**: 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.
RL40 REDOX-0013-T: Facility Integrity	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. **Risk Handling Strategy**: Transfer **Probability**: Somewhat likely (26% to 74%) **Worst Case Impacts**: $0, 0 days			**Risk Event**: A leaking roof results in unsafe working conditions for personnel. Risk Recovery Action(s) / FC Date / %: Perform cold and dark activities to shut off building power. — June 2021 — 46 Repair minor roof defects. — Ongoing — N/A **Recovery Action Assessment**: Integrity failures could lead to water issues within radiologically contaminated areas, causing a hazard to personnel. Going to a cold and dark state will minimize the risk for electrical shock due to water. Electrical cold and dark activities have slowed, with electrical engineers and electricians unable to access specific locations of REDOX to continue building the electrical isolation index. Project workers continue to make minor repairs to reduce water intrusion. Electrical isolation activities have been delayed due to resequencing activities based on a more conservative approach. Work package revisions are in progress; however, delays in required offsite PPE certification due to COVID-19. PPE certification is expected to complete the end of December. Impacts from COVID-19 has negatively impacted resource availability and work progress.

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0040/WBS-040</td></tr>
<tr><td>RL40 REDOX-0018-T: Ventilation System - Unexpected Design Changes</td><td>Unexpected design changes of the ventilation system result in rework of planned scope, resulting in cost and schedule impacts to the project.

Risk Handling Strategy: Mitigate

Probability: Somewhat likely (26% to 74%)
Worst Case Impacts: $100K, 32 days</td><td>  </td><td>  </td><td>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.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Design, fabrication and planning for procurement of the 202S ventilation system.</td><td>February 2021</td><td>85</td></tr></table>
Recovery Action Assessment: The project team continues to integrate CPRM Engineering and Facility Design Authorities with the vendor for the objective of early detection of unexpected or emerging design changes to mitigate schedule and cost impact. Necessary procurement of replacement flexible duct connectors and factory testing has delayed final delivery, with an estimate to complete in February.</td></tr>
<tr><td>RL40 ZSS-0003-T: Latent Condition Impacts</td><td>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.

Risk Handling Strategy: Mitigate

Probability: Somewhat likely (26% to 74%)
Worst Case Impacts: $500K, 16 days</td><td>  </td><td>  </td><td>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.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Review and process change orders as appropriate to mitigate cost and schedule impacts.</td><td>January 2021</td><td>50</td></tr><tr><td>Research potential recovery actions for grouting 216-Z-2 Crib void space.</td><td>January 2021</td><td>35</td></tr></table>
Recovery Action Assessment: Latent conditions regarding environmental compliance, access and riser load limitations have resulted in multiple change orders that are currently under review. Additionally, in October, an unknown obstruction was discovered in the 216-Z-2 Crib that prevented access to the void space to complete investigations and place grout. The project team has completed their assessment and ranked seven options to complete stabilization of 216-Z-2. Option 6, which investigates the dry well and perforate/cuts the wall, along with Option 1, which attempts to dislodges/remove the obstructions, have been determined to be the best options for completion of stabilizing 216-Z-2. The planning team has started to prepare the necessary work package updates to support implementation of these options with the plan to execute in January.</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</td></tr>
<tr><td colspan="5">No critical risks identified in November.</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td colspan="5">No high threat value risks identified in November.</td></tr>
<tr><td colspan="5">FY2021 Key Risks</td></tr>
<tr><td>RL40 REDOX-0005-T: Collapse of Sand Filter</td><td>Due to the close proximity of equipment in operation (e.g., cranes, forklifts used for waste loadout, and steam lines and steam line stanchion removal activities), building age and structural integrity, a collapse of a REDOX ventilation system sand filter is experienced, resulting in cost and schedule impacts to the project.

Risk Handling Strategy: Mitigate

Probability: Very unlikely (<10%)
Worst Case Impacts: $260K, 64 days</td><td>  </td><td>  </td><td>Risk Triggers: Due to the close proximity of equipment in operation (e.g., cranes, forklifts used for waste loadout and steam line stanchion removal activities), building age and structural integrity, a collapse of a REDOX ventilation system sand filter is experienced.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Establish sand filter access boundary.</td><td>March 2021</td><td>55</td></tr><tr><td>Implement a communication plan between OHCs and other CHPRC projects.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: This risk had been identified as a key risk for fiscal year (FY) 2020 but is not a key risk for FY2021. The risk will be removed from the stoplight chart prior to December reporting. Identified mitigation actions will continue to be performed and monitored by the project. Current work scope has not yet impacted this potential risk. Based on the contractor schedule, new temporary exhausters for REDOX are not expected to arrive until February 2021 due to design complications, and ongoing delayed shipping and testing requirements for the high-efficiency particulate air filters. Excavation has been delayed due to an unforeseen obstruction pending removal. Resource availability due to COVID-19 impacts have caused further delays.</td></tr>
</table>

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0040/WBS-040</td></tr>
<tr><td>RL40 WARP-0001-T: Regulatory Documents Delayed</td><td>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</td><td>  </td><td>  </td><td>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><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Maintain close contact with regulators to accelerate document reviews/approvals</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in November. CHPRC has implemented an aggressive schedule to complete the 200 West Area Tier II structures engineering evaluation (EE)/cost analysis, action memorandum (AM), sampling analysis plan (SAP) and RAWP by the end of FY2021. The subcontractor supporting document development has expressed concerns but has developed a schedule to support completion.</td></tr>
<tr><td colspan="5">Unassigned Risks (Pending ownership of identified risks/opportunities)</td></tr>
<tr><td colspan="5">No unassigned risks identified in November.</td></tr>
</table>

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	6.7	8.1	10.0	1.4	20.3%	(1.9)	-23.2%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Performance: ($1.4M/+20.3%)

The CM favorable schedule variance is primarily the result of performing carryover scope from FY2020. November 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 primarily due to the RL-directed partial stop work order (PSWO) issued on March 24, 2020, and was extended through September 30, 2020.

WARP completed 10 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 decommission (D&D), which has been pushed into the future based on demolition priority.

CM Cost Performance: (-$1.9M/-23.2%)

The CM negative variance is attributed to a multitude of factors. An error in the processing of the October 2020 labor accruals resulted in costs for October being understated. Labor accrual costs were incorrectly calculated by the Business Management System (BMS) during cost processing that resulted in the error, which impacted all Hanford contractors using BMS. This error caused a delayed accrual of costs for this account that is now reflected in the CM.

Additionally, 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 personal protection equipment and revising work plans to address new head count restrictions for personnel working in the field together.

Finally, the Aging Structures project continues to realize inefficiencies from the FY2020 COVID-19 PSWO. The stabilization project was not allowed to resume until mid-June 2020, which prevented the project from completing structure investigations as planned in the original baseline (May 2020). Completing the investigation early and with time to make adjustments and develop work arounds before starting stabilization was critical to overall success. As a result, the investigation did not start until August, and the project team had to develop recovery actions from as-found conditions in parallel with the stabilization effort. This impacted the ability to completely grout for both the 216-Z-2 crib and the 241-Z-361 Tank, resulting in multiple remobilization efforts in order to focus on grouting 216-Z-9, while recovery actions are being planned for 216-Z-2 and 241-Z-361.

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	654.4	631.4	637.2	(23.0)	-3.5%	(5.8)	-0.9%	726.2	734.3	97.1	(8.1)

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance: (-$23.0M/-3.5%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (-$5.8M/-0.9%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (-$8.1M/-1.1%)

The VAC is within reporting thresholds.

Contract performance report formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

RL-0040 Nuclear Facility D&D	FY2021 Projected Funding	FY2021 Spending Forecast	FY2021 Variance
Spending Forecast	114.1	112.6	1.5

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis

The FY2021 variance of $1.5 million reflects projected funding of $114.1 million and a spending forecast of $112.6 million. The spending forecast increased $1.0 million from last month, primarily due to adding the *Resource Conservation and Recovery Act of 1976* permit Revision 9 and 200-MG-1 operable unit sampling scope as authorized work to be performed in FY2021.

Critical Path Analysis

Critical path analysis can be provided upon request.

MILESTONE STATUS

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

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

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Obtain Regulator Review of DOE/RL-2017-06, REDOX RAWP, Revision 1 Draft	7/23/2020(A)	12/17/2020
RL Obtain Regulator Review of DOE/RL-2018-46, REDOX Air Monitoring Plan, Revision 1, Draft	7/23/2020(A)	12/17/2020
RL Obtain Regulator Review of DOE/RL-2017-05, REDOX SAP, Revision 1 Draft	7/23/2020(A)	12/30/2020
RL Obtain Regulator Review DOE/RL-2019-37, 224T SAP, Revision 1, Draft	11/3/2020(A)	12/2/2020
RL Obtain Regulator Review DOE/RL-2019-36, 224T RAWP, Revision 1, Draft	11/3/2020(A)	12/2/2020
RL Obtain Regulator Review DOE/RL-2020-39, Tier 2 EE/Cost Analysis, Draft A	11/11/2020(A)	11/20/2020(A)
RL Review DOE/RL-2016-51, B Plant AM, Draft A	12/22/2020	1/7/2021
RL Review DOE/RL-2020-05, PUREX SAP Draft A	12/29/2020	1/18/2021
RL Obtain Regulator Review DOE/RL-2020-04, PUREX RAWP, Draft A	12/29/2020	2/19/2021

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

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November 2020
CHPRC-2020-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

K Basin Operations (KBO)

The KBO team continued Phase 2 resumption of operation activities in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL) partial stop work order (PSWO) issued as part of the Hanford Site response to the novel coronavirus (COVID-19). This included continuing preparations for the Operational Acceptance Testing (OAT) for the 105K West Irradiated Fuel Storage Basin water treatment Garnet Filter Media Retrieval System (GFMRS). Data from the October 7, 2020, test of the105K West Basin vertical pipe casing (VPC) grouting mockup is being reviewed for lessons learned, and changes are being incorporated in preparation for a second test in December.

The engineering change request (ECR) for installation of the skid-mounted substation was approved. Demolition of the 166K East facility continued. The 105K East Reactor Interim Safe Storage (ISS) team received approval to incorporate funding for Excavation/Foundation/Pit 24 road construction bid solicitation.

The soil remediation team completed Phase 1 of overburden removal at the 100-K-79:7 waste site and began overburden removal at 100-K-96, 100-K-56:3, and 100-K-55:2 waste sites. The team completed the global positioning environmental radiological surveyor survey of the 116-KE-2 waste site and used the data obtained to support the verification sample instruction, which was submitted to the U.S Environmental Protection Agency (EPA) for review and approval.

River Risk Management Project (RRMP)

The project continued to perform Phase 2 resumption of work activities. Training of operations consistent with the RL-approved CH2M HILL Plateau Remediation Company (CHPRC) resumption of work plan developed in response to the RL-directed PWSO. This included continuing the essential mission-critical operations and construction forces core teams for the general contamination area (CA)/high contamination area (HCA)/airborne radiation areas (ARAs). Eleven of the 20 corrective actions for the 324 Facility Contamination Event Phase 1 (an increase of five since October reporting) 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, *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*, are followed.	9/30/2021	25%
21-EMS-KBO-OBJ2-P1	Improve compliance/pollution and spill prevention.	Evaluate the status of spill prevention, use of secondary containment, universal waste and other recycling compliance, and waste reduction opportunities for compliance with CHPRC procedures.	9/30/2021	16%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Months	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	1	10	11/4/2020 - While walking on a paved path, employee stepped in a low spot, spraining the lower back. Employee was taken to HPM Corporation, given an ice pack and returned to work with restriction. (25607)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

100K Basin Operations

- 100K Closure Project
  - 105K West Basin Deactivation
    - Completed the augering and retrieval for the first VPC mockup loading and grouting test at an offsite vendor. Project personnel are reviewing data and lessons learned from this initial test to take into the second mockup in December.
    - Completed restricted-use validation and tabletop reviews of Task 1 and walk down of the mechanical lineup in preparation for the GFMRS OAT. The OAT is forecasted to begin in December.

  - Began an nondestructive assay (NDA) of Transfer Cask Assembly (TCA)-2, using data from shots of TCA-1
- Continued demolition of the 166K East facility. Demolition is expected to complete in December, with loadout continuing into the second quarter of fiscal year (FY) 2021.

- Soil Remediation Project
  - The soil remediation team completed Phase 1 of overburden removal at the 100-K-79:7 waste site.
  - Completed the global positioning radiological survey for the 116-KE-2 waste site excavation and have sent the verification sample instructions to EPA for review and approval.

RRMP, 324 Building Disposition Project

- Continued equipment procurements for the following:
  - Cell dams for the 324 Building in fabrication; A Cell dams (bottom section) were delivered.
  - Remote Excavator Arm (REA) demolition tool.
  - Water delivery system for the airlock; preparing for factory acceptance test (FAT).
  - Modified airlock rail; fabrication awaiting CA/HCA resumption.
  - Four-inch steel shield containers in fabrication.
  - B Cell 10-ton crane (in fabrication).
  - Upper REA replacement (in fabrication).
  - Bin offset recovery tool FAT was performed.
  - 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.
  - Revised evaluation criteria for 324 Facility-specific ARA/HCA/CA donning and doffing Practical Evaluations based on lessons learned from the initial sessions.
- Engineering supported engineered equipment procurements.

Project Technical Services

- Training and Procedures
  - Continued sending workers through the new Advance Radiation Work Practices training at the 324 Facility mockup area. Steady progress is being made to train the initial group of 69 identified workers.
- Readiness and Preparedness
  - Conducted tabletop at the 324 Facility on November 12, 2020, for Building Emergency Director (BED) and Command Post (ICP) Communicator (COM) proficiency. The results of the drill were positive, and both the BED and ICPCOM demonstrated proficiency at implementing expected actions resulting in the granting of proficiency with no issues.

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

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

Status
Results from an NDA performed on a shielded 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. After delays due to the PSWO, the support trailer and area around TCA-1 have been set up to facilitate the NDA work. Initial measurements have been taken for TCA-1, and the results are being compiled and reviewed. Following review of the results, NDA personnel will review the feasibility of performing additional NDAs on TCA-2. Results of the NDA will be used to support FY2022 planning and engineering activities for dispositioning the contents of both TCAs.

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

Corrective Action
Implement nuclear safety basis documents that ensure compliance with DOE O 460.1D requirements for shipment of retrieved GFMRS.

Status
CHPRC and RL are evaluating approaches to develop appropriate safety basis documentation for resumption of HC-3 and HC-2 onsite shipments. There are different approaches being considered, with scale of effort varying from revision of the TSD and project-specific One Time Request for Shipment, to development of a full DOE-STD-3009 compliant Documented Safety Analysis at the other end. At this time, schedule impact cannot be known with certainty until the path forward evaluation is completed. However, schedule impact of as much as one year or more is possible.

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

Corrective Action
The evaluation of 324 Building practices as documented in the Root Cause Analysis and associated Corrective Action Plan identified 65 corrective actions. These corrective actions are broken into the following categories: Prestart Phase 1 (general CA/HCA activities), prestart Phase 2 (Room 18 activities), prestart Phase 3 (airlock activates) and post-start corrective actions.

Status
Twenty of these corrective actions are prestarts to general CA/HCA activities (Phase 1). Of these 20 Phase 1 prestart corrective actions, 11 have been completed, with the general HCA/ARA activities anticipated to start on December 16, 2020.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.

Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.

Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0041/WBS-041				
Explanation of major changes to the project monthly stoplight chart: Changes to the monthly report are as follows: 1. Risk RL41 RCC-0027-T, *300-296 Radiation & Contamination Experienced During REC Cell Operations*, was updated to reflect delays in resumption training and return to Room 18 due to delays in the acquisition of personal protection equipment (PPE), because of vendor priority changes (US Navy) and continued COVID impacts. 2. Risk 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)*, was updated to reflect delays to performing electrical and mechanical investigation and characterization of A/D crane, because of delays in completing resumption training in Room 18. 3. Risk RL41 KWB-0008-T, *105KW Basin – Failure of Critical VPC Components During Operations*, was added to the FY2021 Key Risk section, as identified by the FY2021 Risk Analysis results.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
RL41 RCC-0008-T: 300-296 Failure of a Radiochemical Engineering Cells (REC) Cranes (B Cell, A Cell, A/D & Airlock, and/or Cask Handling Area [CHA] Cranes)	Major crane repair must be performed during operations. This in-scope, unplanned work results in cost and schedule impacts to the project. **Risk Handling Strategy**: Mitigate **Probability**: Somewhat likely (26% to 74 %) **Worst Case Impacts**: $3,000K, 96 days		⟷	**Risk Event**: In August 2019, the REC A/D Crane failed during operations. **Recovery Action(s)** / **FC Date** / **%** Vendor delivery to acquisition verification service (AVS) – B Cell 10-ton crane. — 3/31/2021 — 0 Perform remote survey and radiological characterization of A/D Crane. — 7/19/2021 — 0 Perform follow-up A/D Crane mechanical investigation. — 8/23/2021 — 0 Perform follow-up A/D Crane mechanical Repairs. — 10/19/2021 — 0 Perform A/D Crane characterization. — 10/26/2021 — 0 **Recovery Assessment**: Additional radiological characterization/investigation, surveys and decontamination efforts will be performed on the A/D Crane to verify mechanical and electrical components necessary to perform repairs. Procurement and fabrication of decontamination equipment has been initiated to decrease further impacts to the project. The vendor is also in the process of fabricating the B Cell Crane bridge to assist with installation. An integrated FAT of the crane components will precede delivery. As a result, the current forecast date for delivery to AVS is March 31, 2021.

<table>
<tr><th>Risk Title</th><th>Unmitigated Risk Impacts</th><th colspan="2">Assessment
Month | Trend</th><th>Comments</th></tr>
<tr><td colspan="5">RL-0041/WBS-041</td></tr>
<tr><td>RL41 RCC-0027-T: 300-296 Radiation & Contamination Experienced During REC Cell Operations</td><td>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</td><td>●</td><td>⟷</td><td>Risk Event: On November 14, 2019, low-level contamination was detected on an individual after exiting a radiological step-off pad.
<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Perform project resumption activities – general CA/CHA.</td><td>12/15/2020</td><td>33</td></tr><tr><td>Return to Room 18 work – resumption actions.</td><td>1/27/2020</td><td>15</td></tr><tr><td>Return to airlock work – resumption actions.</td><td>3/10/2021</td><td>15</td></tr></table>Recovery Assessment: Resuming work scope in radiologically controlled areas (RCAs) within the building is pending resolution of mitigation actions performed under three distinct group sets: general controlled area, Room 18 and the airlock. In addition to COVID-19 resource impacts, acquisition of PPE for Room 18 (vendor priority) delayed performing resumption activities. Upon successful completion of resumption actions and training, each group set will resume fieldwork scope.</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)</td></tr>
<tr><td colspan="5">No critical risks are identified in November.</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td>RL41 RCC-0024-T: 300-296 Elevated Contamination Encountered While Performing Structural Modifications</td><td>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</td><td>●</td><td>⟷</td><td>Risk Event: Unexpected contamination is found while performing structural modification activities.
<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Continued resumption/proficiency training for Room 18.</td><td>6/3/2021</td><td>0</td></tr></table>Mitigation Assessment: No significant changes in November. The project continues to work resumption training and anticipates further reducing the probability of this risk once proficiency training is complete. Increased PPE and additional control measures were successfully implemented.</td></tr>
<tr><td>RL41 RCC-0001-T: 300-296 Latent Conditions Impact Facility Modification</td><td>Latent conditions, poor visibility in REC cells or drawing omissions, inconsistencies or errors impact facility modifications (e.g., mechanical, electrical industrial hygiene/RCAs), resulting in unplanned work and subsequently, cost and schedule impacts.

Risk Handling Strategy: Mitigate

Probability: Medium (26% to 74%)
Worst Case Impacts: $1,116.5K, 128 days</td><td>●</td><td>⟷</td><td>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><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><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></table>Mitigation Assessment: No significant changes in November. 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.</td></tr>
</table>

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0041/WBS-041				
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. **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 bond zone load testing. / 1/21/2021 / 0 **Mitigation Assessment**: Additional testing to verify compatibility with grouting material will aid in mitigating the risk from occurring. The FC date for performing micropile bond zone load testing was delayed to support revised work instructions with an offsite vendor. In addition, resource availability has been limited due to COVID-19 related impacts.
FY2021 Key Risks				
RL41 RCC-0009-T: 300-296 Failure of Cell Shield Door	Failure of shield door(s) or crane shield door(s) shuts down cleanout of REC cells/airlock, penetration sealing in the airlock and equipment installation, and other activities for remote soil removal. It may not be possible to repair a shield door due to radiation dose rate and location, resulting in cost and schedule delays. **Risk Handling Strategy**: Mitigate **Probability**: Unlikely (10% to 25%) **Worst Case Impacts**: $460K, 96 days			**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. **Mitigation Action(s)** / **FC Date** / **%** Perform B Cell and D Cell door pin isolations. / 6/3/2021 / 0 **Mitigation Assessment**: No significant changes in November. 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.
RL41 RCC-0007-T: 300-296 Remote Equipment Failure During Operations	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. **Risk Handling Strategy**: Mitigate **Probability**: Unlikely (10% to 25%) **Worst Case Impacts**: $1,336K, 90 days			**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. **Mitigation Action(s)** / **FC Date** / **%** Procure MSMs and storage carts. / 12/30/2019 / 100 Procure spare upper REA. / 12/7/2020 / 95 Procure universal cutting tool. / 1/5/2021 / 86 **Mitigation Assessment**: No significant changes in November. Procurement of a spare upper REA and universal cutting tool will mitigate potential impacts to the project in the event of an REA failure. Potential impacts continue to be monitored and assessed for mitigation as project evolutions continue. The delay in the FC finish date does not impact the effectiveness of mitigation actions.
RL41 RCC-0029-T: Increased Radiation Exposure to Workers	High dose in the airlock causes excessive radiation exposure to personnel, resulting in in-scope unplanned work impacts of cost and/or schedule. **Risk Handling Strategy**: Mitigate **Probability**: Somewhat likely (25% to 74%) **Worst Case Impacts**: $400K, 72 days			**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. **Mitigation Action(s)** / **FC Date** / **%** Continue the use of increased shielding and As low as reasonably achievable controls. / Ongoing / N/A Procurement of specialized containers – GC/44-inch bins. / 1/25/2021 / 79 **Mitigation Assessment**: No significant changes in November. 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.

<table>
<tr><th rowspan="2">Risk Title</th><th rowspan="2">Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th rowspan="2">Comments</th></tr>
<tr><th>Month</th><th>Trend</th></tr>
<tr><td colspan="5">RL-0041/WBS-041</td></tr>
<tr><td>RL41 KWB-0008-T: 105KW Basin – Failure of Critical VPC Components During Operations</td><td>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.

Risk Handling Strategy: Mitigate

Probability: Unlikely (10% to 25%)
Worst Case Impacts: $105K, 40 days</td><td>  </td><td>  </td><td>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.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Subcontractor fabrication and testing.</td><td>3/19/2020</td><td>100</td></tr><tr><td>CHPRC Quality Assurance review and acceptance of VPC components.</td><td>7/9/2020</td><td>100</td></tr><tr><td>Underwater fit-up testing at the Maintenance and Storage Facility (MASF).</td><td>TBD</td><td>N/A</td></tr><tr><td>Project Technical Services to perform Construction Acceptance Testing (CAT) of full system before turnover to operations.</td><td>TBD</td><td>N/A</td></tr></table>
Mitigation Assessment: Fabrication and testing of the VPC components have been completed by the fabrication subcontractor and reviewed by CHPRC Quality Assurance. 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.</td></tr>
<tr><td>RL41 SR-0004-T: 100K Unexpected Site Conditions</td><td>Unexpected site conditions are encountered during soil excavation activities, resulting in recovery actions, causing unplanned and project in-scope work and schedule delays.

Risk Handling Strategy: Mitigate

Probability: Somewhat likely (26% to 74%)
Worst Case Impacts: $1,007K, 32 days</td><td>  </td><td>  </td><td>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 contaminates, resulting in the need to create a new clean-fill pit.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Data collection (includes review of the Waste Information Data System information, review of historical drawings, identify contaminates 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></table>
Mitigation Assessment: No significant change in November. 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.</td></tr>
<tr><td colspan="5">Unassigned Risks (Pending ownership of identified risks/opportunities)</td></tr>
<tr><td colspan="5">No unassigned risks identified in November</td></tr>
</table>

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	8.5	8.1	10.3	(0.4)	-5.2%	(2.2)	-27.3%

Numbers rounded to the nearest $0.1 million.

CM Schedule Performance (-0.4M/-5.2%)

The CM schedule variance is within reporting thresholds.

CM Cost Performance (-$2.2M/-27.3%)

The FY2019 performance measurement baseline (PMB) was implemented in October 2018 based on the September 2018 annual PMB update submittal to RL. The contract cost for FY2019 was definitized in fiscal month July 2019 as documented by the Plateau Remediation Contract Modification 707, which included scope and budget changes not reflected in the FY2019 reporting PMB. In August 2019, baseline change request (BCR)-041-19-011R0, *Mod 707 Implementation – RL-0041 324 Project*, was implemented to align project breakdown structure (PBS) RL-041 FY2019 PMB scope and budget with the definitized scope and value of Modification 707. Implementation of the BCR included adjusting activities to align the existing PMB budgets with the definitized contract cost (primarily via use of negative budgeted cost of work scheduled [BCWS] values). Adjusting activities were used instead of re-planning the details of the FY2019 PMB. "Modification 707 Adjustment" activities were created and were not used for forecasting. Upon implementation, limited FY2019 scope was forecast to carry over into FY2020, and the majority of that carryover was forecast to be complete by mid-FY2020. The forecast completion would have allowed the associated adjusting activities to be earned in FY2020. However, since the implementation of BCR-41-19-011R0, the project performance has been delayed due to a contamination event that occurred on November 14, 2019, and the PSWO, which resulted in the forecast completion of some of the original FY2019 carryover activities to slip into FY2021. The RRMP CM negative cost variance is primarily due to the decision to earn the remaining "Modification 707 Adjustment" activities associated with FY2019 carryover scope performance reporting, resulting in negative CM BCWS and schedule variance. The earning of the "Modification 707 Adjustment" activities did not impact the estimate to complete and forecast schedules to complete the associated scope.

The negative CM cost variance for River Zone is due to set up costs and heavy equipment rental in an effort to increase demolition resources and maintain continuity as demolition of the 166K East Facility completes and work crews transition to 165K East Facility demolition. In addition, preparations for the GFMRS OAT have been more complex than planned due to additional unanticipated revisions and refinements to project documents to mitigate risks and minimize potential impacts to project operations.

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	823.5	795.5	798.9	(28.0)	-3.4%	(3.4)	-0.4%	918.8	931.2	132.3	-12.5

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance (-$28.0/-3.4%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance (-$3.4/-0.4%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (-$12.5/-1.4%)

The variance at completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

	FY2021		
RL-0041 Nuclear Facility D&D – River Corridor	Projected Funding	Spending Forecast	Variance
RL-0041 Spending Forecast	146.1	143.6	2.5

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis

The FY2021 variance of $2.5 million reflects projected funding of $146.1 million and a spending forecast of $143.6 million. The spending forecast reduced $0.3 million from last month due to incorporating RRMP attrition impacts. The remainder of the variance is due to funds reserve held for potential future work.

Critical Path Analysis

Critical path analysis can be provided upon request.

MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-093-27-T01	Initiate Earthwork for the Construction of the 105-KE Safe Storage Enclosure	09/30/2021		To be determined (TBD)	At risk
M-016-85A	Complete Remote Excavation of 300-296 Waste Site	9/30/2021		10/31/23	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

November 2020
CHPRC-2020-11, 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 November reporting period, FFTF continued to maintain essential mission-critical operations consistent with the U.S. Department of Energy (DOE), Richland Operations Office (RL)-approved CH2M HILL Plateau Remediation Company (CHPRC) resumption of work plan developed in response to the March 24, 2020, RL-directed partial stop work order (PSWO). The PSWO, which was issued as a part of the Hanford Site response to the novel coronavirus (COVID-19), ended September 30, 2020, and CHPRC is in the process of returning to normal work activities consistent with the resumption of work plan and prudent COVID-19 protections for the CHPRC workforce.

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 draft report and cost/schedule (task 1) for the FFTF compliance upgrades engineering evaluation.
- Completed the contractor mobilization and site preparation for pumps T-58 and T-87 in support of the tank inspections fieldwork.

MAJOR ISSUES

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

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

Status
Development of functional requirements for an engineering evaluation has been completed and the project has received direction to proceed from RL. A request for proposal has been issued to solicit prospective engineering firms for evaluation performance. The contract award was issued August 24, 2020. The draft evaluation report completed as of November.

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	0.3	0.3	0.1	64.9%	0.0	7.3%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Performance: (+$0.1M/+64.9%)
The CM schedule variance is within reporting thresholds.

CM Cost Performance: (+$0.0M/+7.3%)
The CM cost variance is within reporting thresholds.

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

RL-0042 FFTF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	32.7	32.4	27.3	(0.2)	-0.7%	5.1	15.8%	35.5	30.4	3.1	5.1

Numbers are rounded to the nearest $0.1 million.

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

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (+$5.1M/+15.8%)

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

Variance at Completion: (+$5.1M/+14.4%)

The VAC reflects efficient use of resources supporting deactivation activities.

Contract Performance Report Formats are provided in Appendix A.

FUNDS VS. SPEND FORECAST
($M)

	FY2021		
RL-0042 FFTF Closure	Projected Funding	Spend Forecast	Variance
Spending Forecast	4.4	3.6	0.7

Numbers are rounded to the nearest $0.1 million.

Funds Analysis

The fiscal year (FY) 2021 variance of $0.7 million reflects funding of $4.4 million and a spending forecast of $3.6 million. The spending forecast is based on the FY2021 performance measurement baseline implemented in October along with any remaining carryover work scope.

Critical Path Analysis

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

MILESTONE STATUS

None currently identified.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

None currently identified.

Appendix A
Contract Performance
Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis

CH2MHILL
Plateau Remediation Company
a Jacobs company

November 2020
CHPRC-2020-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 1 - WORK BREAKDOWN STRUCTURE

DOLLARS IN: Thousands of $

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT	3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract	a. NAME Plateau Remediation Contract	a. FROM (YYYYMMDD) 2020 / 10 / 26
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE	b. TO (YYYYMMDD) 2020 / 11 / 22
	c. TYPE CPAF / d. SHARE RATIO	c. EVMS ACCEPTANCE NO: X YES (YYYYMMDD) 2009 / 09 / 18	

5. CONTRACT DATA

a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	d. TARGET PROFIT/FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING	i. DATE OF OTB/OTS (YYYYMMDD)
1	7,020,614	337,302	306,330	7,326,944	7,616,925	7,326,944	7,616,925	

6. ESTIMATED COST AT COMPLETION

	MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)
a. BEST CASE	7,267,287		
b. WORST CASE	7,332,764		
c. MOST LIKELY	7,310,595	7,357,915	47,321

7. AUTHORIZED CONTRACTOR REPRESENTATIVE

a. NAME (Last, First, Middle Initial)	b. TITLE	c. SIGNATURE	d. DATE SIGNED (YYYYMMDD)
Underwood, Teresa	Prime Contract Compliance Manager		

8. PERFORMANCE DATA

CAPN.PBS	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE					BUDGETED	ESTIMATED	VARIANCE
ITEM	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	COST VARIANCE	SCHEDULE VARIANCE	BUDGET			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)
RL-0011 Nuclear Mat Stab & Disp PFP	4,305	171	563	-4,134	-392	1,142,194	1,132,244	1,243,722	-9,950	-111,478	0	0	0	1,152,752	1,265,625	-112,873
RL-0012 SNF Stabilization & Disp	0	0	0	0	0	759,593	759,593	729,813	0	29,780	0	0	0	759,593	729,813	29,780
RL-0013 Solid Waste Stab & Disp	14,070	13,550	14,225	-520	-675	1,702,134	1,681,679	1,593,774	-20,455	87,905	0	0	0	1,860,289	1,774,396	85,892
RL-0030 Soil &Water Rem-Grndwtr/Vadose	7,681	9,379	8,977	1,698	402	1,768,841	1,750,690	1,693,837	-18,151	56,853	0	0	0	1,861,433	1,801,505	59,928
RL-0040 Nuc Fac D&D - Remainder Hanfrd	6,729	8,098	9,976	1,369	-1,878	654,445	631,399	637,210	-23,046	-5,810	0	0	0	726,232	734,337	-8,104
RL-0041 Nuc Fac D&D - RC Closure Proj	8,544	8,097	10,311	-447	-2,213	823,464	795,487	798,927	-27,976	-3,439	0	0	0	918,794	931,244	-12,451
RL-0042 Nuc Fac D&D - FFTF Proj	188	310	287	122	23	32,654	32,431	27,317	-223	5,115	0	0	0	35,484	30,368	5,116
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL	41,517	39,605	44,339	-1,912	-4,734	6,883,325	6,783,524	6,724,599	-99,801	58,925	0	0	0	7,314,577	7,267,287	47,289
f. MANAGEMENT RESERVE														43,307		
g. TOTAL	41,517	39,605	44,339	-1,912	-4,734	6,883,325	6,783,524	6,724,599	-99,801	58,925	0	0	0	7,357,884		

9. RECONCILIATION TO CONTRACT BUDGET BASELINE

a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE									-99,801	58,925				7,357,884	7,267,287	90,596

**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 / 10 / 26
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 11 / 22
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO:	YES: X *(YYYYMMDD)* 2009 / 09 / 18

5. PERFORMANCE DATA

WBS.Resp Org Group	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE							
ITEM	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	COST VARIANCE	SCHEDULE VARIANCE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)
34 - Env Program & Strategic Plng	1,164	1,199	1,069	35	130	114,942	114,984	106,164	42	8,820	0	0	0	126,693	117,974	8,719
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	247	0	-247	1,111	1,111	77,869	0	-76,758	0	0	0	1,111	77,869	-76,758
37 - Resource Mgmt & Strategic Intg	107	107	97	0	10	10,120	10,120	6,701	0	3,419	0	0	0	11,223	7,805	3,418
38 - Project Technical Services	0	0	0	0	0	124,400	124,400	105,303	0	19,097	0	0	0	124,400	105,303	19,097
3B - PFP Closure Project	7,402	4,885	5,046	-2,516	-161	1,079,882	1,060,481	1,177,180	-19,400	-116,699	0	0	0	1,112,935	1,230,463	-117,528
3C - Waste & Fuels Management Project	10,720	9,692	11,085	-1,029	-1,393	1,477,649	1,459,755	1,364,062	-17,894	95,693	0	0	0	1,605,837	1,509,083	96,754
3D - Soil & Groundwater Remediation	6,489	8,152	7,823	1,663	329	1,551,815	1,533,622	1,468,347	-18,193	65,275	0	0	0	1,632,370	1,563,918	68,452
3G - K Basin Oper & Plateau Remediation Project	4,586	4,674	5,531	88	-858	1,034,533	1,024,851	984,851	-9,682	40,000	0	0	0	1,087,760	1,051,937	35,823
3H - River Risk Management Project	7,253	7,227	7,896	-26	-669	380,044	359,188	363,646	-20,856	-4,458	0	0	0	451,552	463,919	-12,366
3K - Central Plateau Risk Reduction	3,796	3,669	5,545	-127	-1,876	631,952	618,133	616,880	-13,819	1,253	0	0	0	683,817	685,421	-1,604
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL *(Performance Measurement Baseline)*	41,517	39,605	44,339	-1,912	-4,734	6,883,325	6,783,524	6,724,599	-99,801	58,925		0	0	7,314,577	7,267,287	47,289
f. MANAGEMENT RESERVE														43,307		
g. TOTAL	41,517	39,605	44,339	-1,912	-4,734	6,883,325	6,783,524	6,724,599	-99,801	58,925	0	0	0	7,357,884		

November 2020

CONTRACT PERFORMANCE REPORT

FORMAT 3 - BASELINE

DOLLARS IN THOUSANDS

Form Approved

OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT	3. PROGRAM	4. REPORT PERIOD
CH2M HILL Plateau Remediation Company	a. NAME: Plateau Remediation Contract	a. NAME: Plateau Remediation Contract	a. FROM: 2020/10/26
b. LOCATION:	b. NUMBER: RL14788	b. PHASE	b. TO: 2020/11/22
Richland, WA	c. TYPE: CPAF	c. EVMS ACCEPTANCE	
	d. SHARE RATIO:	NO YES X 9/18/2009	

5. CONTRACT DATA

a. ORIGINAL NEGOTIATED COST	b. NEGOTIATED CONTRACT CHANGE	c. CURRENT NEGOTIATED COST (A + B)	d. ESTIMATED COST AUTH UNPRICED WORK	e. CONTRACT BUDGET BASE (C + D)	f. TOTAL ALLOCATED BUDGET	g. DIFFERENCE (E - F)
$4,312,366	$2,708,247	$7,020,614	$337,302	$7,357,915	$7,357,884	$32

h. CONTRACT START DATE	i. DEFINITIZATION DATE	j. PLANNED COMPL DATE	k. CONT COMPLETION DATE	l. EST COMPLETION DATE
6/19/2008	6/19/2008	9/30/2021	9/30/2021	9/30/2021

6. PERFORMANCE DATA — BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)

ITEM	BCWS CUM TO DATE	BCWS FOR REPORT PERIOD	SIX MONTH FORECAST +1 Dec-20	+2 Jan-21	+3 Feb-21	+4 Mar-21	+5 Apr-21	+6 May-21	FY09-13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	UNDISTRIB BUDGET	TOTAL BUDGET
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
a. PM BASELINE																			
(BEGIN OF PERIOD)	**6,841,808**	**32,583**	**34,546**	**38,360**	**38,939**	**38,505**	**52,065**	**43,077**	**3,391,477**	**391,653**	**471,323**	**504,826**	**485,028**	**470,649**	**563,065**	**531,205**	**502,078**	**0**	**7,311,303**
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																			
BCR-013-21-001R0 - W135 WESF Mods CD 2/3 IPT/IPR RCR Comment Incorporation																	**(223)**		**(223)**
BCR-030-21-001R0 - Incorporate Additional M24 Wells and Associated Opportunisti																	**2,058**		**2,058**
BCR-030-21-002R0 - Plan for Long Lead IX Train Procurement																	**0**		**0**
BCR-040-21-001R0 - Incorporate RCRA Rev 9 Permit Scope																	**464**		**464**
BCR-041-21-001R0 - Perform Additional Structural Modification Prep																	**793**		**793**
BCR-041-21-003R0 - MR Draw for Additional Scope for the 100-K-47:1 Waste Site																	**181**		**181**
BCR-PRC-21-004R0 - Mod 760 Implementation - Fee Adjustment																	**0**		**0**
BCRA-PRC-21-003R0, HPIC Updates November 2020																	**0**		**0**
c. PM BASELINE (END OF PERIOD)	**6,883,325**	**41,517**	**33,684**	**37,512**	**39,236**	**38,847**	**53,161**	**44,013**	**3,391,477**	**391,653**	**471,323**	**504,826**	**485,028**	**470,649**	**563,065**	**531,205**	**505,352**	**0**	**7,314,577**
7. MANAGEMENT RESERVE																			**43,307**
8. TOTAL																			**7,357,884**

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 / 10 / 26
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 11 / 22
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO: [ ] YES: [X] *(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)* SIX MONTH FORECAST BY MONTH *(Enter names of months)* +1 DEC 2020 (4)	+2 JAN 2021 (5)	+3 FEB 2021 (6)	+4 MAR 2021 (7)	+5 APR 2021 (8)	+6 MAY 2021 (9)	ENTER SPECIFIED PERIODS JUN 2021 (10)	JUL 2021 (11)	AUG 2021 (12)	SEP 2021 (13)	ATCOMPLETE (14)	AT COMPLETION (15)
300 - Office of the President	24	2,353	15	16	13	13	13	13	13	13	13	13	-	2,485
303 - Internal Audit	4	651	4	4	4	5	5	5	5	5	5	5	-	697
304 - General Counsel	4	600	4	4	4	4	4	4	4	4	4	4	-	639
32 - Safety Health Security & Quality	62	9,295	65	65	68	68	68	68	68	68	68	68	-	9,972
34 - Env Program & Strategic Plng	44	6,342	46	48	48	48	45	44	45	44	46	45	-	6,801
35 - Business Services	51	8,802	58	58	58	63	63	65	66	66	66	65	-	9,429
36 - Prime Contract & Proj Integr	86	8,818	39	39	39	40	41	41	41	41	41	41	-	9,222
37 - Resource Mgmt & Strategic Intg	45	3,888	46	46	46	46	46	46	46	46	46	46	-	4,345
38 - Project Technical Services	37	9,421	40	40	42	42	42	42	42	42	42	42	-	9,838
3B - PFP Closure Project	169	55,758	209	211	178	159	186	191	186	196	166	128	64	57,631
3C - Waste & Fuels Management Project	380	62,989	393	399	416	420	412	414	415	409	408	393	13	67,081
3D - Soil & Groundwater Remediation	226	45,720	231	256	249	256	259	250	250	250	243	223	102	48,289
3G - K Basin Oper & Plateau Remediation Project	182	35,673	207	210	222	211	215	227	219	210	187	189	104	37,874
3H - River Risk Management Project	200	10,034	212	223	223	221	222	226	226	224	220	219	6	12,254
3K - Central Plateau Risk Reduction	227	24,847	256	236	224	220	219	227	216	233	235	219	489	27,621
g. TOTAL DIRECT	1,741	285,191	1,823	1,855	1,834	1,814	1,841	1,862	1,841	1,850	1,789	1,699	779	304,178

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) 2020/10/26
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER DE-AC06-08RL14788		b. PHASE	b. TO (YYYYMMDD) 2020/11/22
	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:	41,516.9	39,605	44,339	(1,912)	-4.6%	(4,734)	-12.0%	0.95	0.89
Cumulative:	6,883,325	6,783,524	6,724,599	(99,801)	-1.4%	58,925	0.9%	0.99	1.01
	BAC	**EAC**	**VAC in $**	**VAC in %**	**TCPI**				
At Complete:	7,314,577	7,267,287	47,289	0.6%	0.98				

Explanation of Variance/Description of Problem:

Current Period Schedule and Cost Variance:

The current month (CM) negative schedule variance is primarily the result of demolition delay at PFP. Due to the COVID-19 pandemic response, the reliability of PPE supply is uncertain. High-risk activities requiring significant use of PPE like PFP have not resumed as planned. This negative variance is partially offset by the recovery of scope that was planned in FY2020 and delayed due to the PSWO.

The CM negative cost variance is partially due to an error in the processing of October 2020 labor accruals by the Business Management System (BMS), which impacted all of Hanford Site contractors using BMS. The incorrect calculation resulted in labor costs for fiscal month October being understated. The accrual error was reversed and replaced by actuals in November resulting in an overstatement of labor costs by approximately $2.3 million, which was partially offset by other positive labor cost variances. Additionally, in November, performance was taken on negative budgeted cost of work scheduled (BCWS) activities related to Contract Modification #707, which documented the definitization of the FY2019 performance measurement baseline (PMB). The remaining performance, for these adjustment activities was taken in November to simplify CHPRC performance reporting, resulting in negative BCWP and consequently a negative cost variance of approximately $2.0 million. Finally, at CPRM, REDOX continues to experience negative cost variances on corrective actions during the Phase 2 addressing of work conditions. The limited performance is due to COVID-19 impacts on resources as well as more conservative work controls than planned associated with the safe approach to cold and dark work activities.

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 $47.3 million is projected, with an additional $43.3 million of management reserve (MR) for a total positive variance of $90.6 million. For November, the project was 4.6 percent behind of schedule and 12.0 percent over planned cost. Contract to date, the project was 1.4 percent behind schedule and 0.9 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 November. The $32K delta is a

result of rounding over time for implementation of multiple change order definitizations.

Eight BCRs were implemented in the current period:
BCR-013-21-001R0, W135 WESF Mods CD 2/3 IPT/IPR RCR Comment Incorporation
BCR-030-21-001R0, Incorporate Additional M24 Wells and Associated Opportunistic Sampling
BCR-030-21-002R0, Plan for Long Lead IX Train Procurement
BCR-040-21-001R0, Incorporate RCRA Rev 9 Permit Scope
BCR-041-21-001R0, Perform Additional Structural Modification Prep
BCR-041-21-003R0, MR Draw for Additional Scope for the 100-K-47:1 Waste Site
BCR-PRC-21-004R0, Mod 760 Implementation - Fee Adjustment
BCRA-PRC-21-003R0, HPIC Updates November 2020

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 +$47.3million, +.06% and is within reporting thresholds.

Format 1 and 3 Contract Data:

Contract Price Adjustments

CPs - In Process		
	Total Authorized Unpriced Work	**$337,301.5**
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	**$337,301.5**
	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
BCR-PRC-21-004R0	*Mod 760 Implementation - Fee Adjustment*	RL-0013 RL-0030 RL-0040 RL-0041	2021	$3,092.3K

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:	Date:	Approved by:	Date:
Project Controls Staff	12/16/2020		

Appendix B
Project Services and Support
(WBS 000)

CH2MHILL
Plateau Remediation Company

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

M. A. Wright
Vice President for
Project Technical
Services

November 2020
CHPRC-2020-11, 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

November 2020
CHPRC-2020-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

Appendix C.2
Capital Asset Project
RL-0011.C2 - Demolition of PFP Facilities

CH2MHILL
Plateau Remediation Company
a Jacobs company

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

November 2020
CHPRC-2020-11, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In November, the Plutonium Finishing Plant (PFP) Closure Project team continued Phase 2 operations in compliance with the U.S. Department of Energy (DOE), Richland Operations Office (RL)-approved CH2M HILL Plateau Remediation Company (CHPRC) resumption of work plan developed in response to the RL-directed March 24, 2020, partial stop work order (PSWO). The PSWO was issued as part of the Hanford Site response to the novel coronavirus (COVID-19). Work performed included surveying PFP radiological boundaries, re-applying soil fixative to the PFP demolition site and performing equipment maintenance. The PFP senior management team continued preparations and planning to support the resumption of Plutonium Reclamation Facility (PRF) work scope.

Key Metrics	*Current Month Plan*	*Current Month Actuals*	*Cumulative Plan*	*Cumulative Actuals*
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:

- November operations consisted of the completion of required surveillance and maintenance (S&M) activities to protect government property and maintain safety and environmental compliance. These efforts included surveying PFP radiological boundaries, re-applying soil fixative to the PFP demolition site and performing equipment maintenance.
- Crews continued work on the disposition of legacy waste.
- The PFP senior management team continued preparations and planning to support the resumption of PRF work scope.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

Opportunity currently realized, or mitigation efforts are currently working toward, or after risk trigger with no foreseeable impacts.

Mitigation efforts are currently working toward risk trigger with the possibility of actions not in place prior to risk occurrence. Recovery actions may be needed.

Risk currently realized, or risk mitigation efforts are past risk trigger date with foreseeable impacts. Recovery actions needed.

Increased Confidence
No Change
Decreased Confidence

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011.C2				
Explanation of major changes to the project monthly stoplight chart: Risks RL11 PFP-0001-T, *Unavailable Resources*, and RL11 PFP-00011-T, *Bump and Roll, LAMP, or Other Contractor Hiring of Bargaining Unit Employees*, were added to the stoplight chart as high-threat value risks. Risk RL11-PFP-0018-T, *Novel Viral Pandemic (COVID-19) Impacts Project Performance*, was added as a fiscal year (FY) 2021 key risk. These risks were identified as key risks during the FY2021 risk analysis.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks identified in November.				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)				
No critical risks identified in November.				
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 project inability to complete planned fieldwork. **Mitigation Action(s)** / **FC Date** / **%** Monitor and maintain adequate staffing levels to completed planned work scope. / Ongoing / N/A **Mitigation Assessment**: 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.
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. **Mitigation Action(s)** / **FC Date** / **%** Monitor and maintain adequate staffing levels to completed planned work scope. / Ongoing / N/A **Mitigation Assessment**: 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.
FY2021 Key Risks				
RL11 PFP-0003-T: Stop Work From Concerned Workers	Concerned workers can implement a stop work to address off-normal or safety issues. The work cannot be restarted until the implementation of corrective actions is completed, resulting in schedule impacts to the project. **Risk Handling Strategy**: Mitigate **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $0, 16 days			**Risk Trigger**: During PFP demolition activities, an increase in stop works could result in delays. **Mitigation Action(s)** / **FC Date** / **%** Update communications as positions change. / Ongoing / N/A Provide new maps with entry/exit instructions when boundaries are revised. / Ongoing / N/A Encourage additional worker involvement. / Ongoing / N/A Increase frequency of post-job reviews. / Ongoing / N/A **Mitigation Assessment**: No major changes in November. Increased communication and worker involvement to avoid confusion and concern to minimize stop works have continued; stop works may impact the project schedule going forward. This risk is no longer considered a key risk in FY2021 and will be removed from the stoplight chart prior to December reporting.

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011.C2				
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. **Mitigation Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment**: No major changes in November. No weather events impacted the project in November.
RL11-PFP-0017-T: Delay of PRF Debris Loadout	The loadout of PRF debris is delayed. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $0, 32 days			**Risk Trigger**: The project experiences delays to PRF debris loadout, impacting project completion. **Risk Recovery Action(s)** / **FC Date** / **%** Communicate PRF loadout options with RL. / Ongoing / N/A Encourage additional worker involvement. / Ongoing / N/A **Mitigation Assessment**: No major changes in November. PRF debris loadout has not resumed due to the phased return to work from the RL-directed response to the coronavirus (COVID-19).
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 the novel 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 impact the project's ability to maintain planned fieldwork activities. **Risk Recovery Action(s)** / **FC Date** / **%** Maintain the COVID-19 controls as detailed in the CHPRC general hazard analysis. / Ongoing / N/A **Mitigation Assessment**: This risk was identified as a key risk for FY2021. PFP discrete fieldwork activities have not resumed due to the phased return to work from the RL-directed response to COVID-19.
Unassigned Risks (Pending ownership of identified threats/opportunities)				
No unassigned risks identified in November.				

CRITICAL PATH ANALYSIS

The PFP critical path schedule begins with the completion of PRF loadout, which is forecast to occur by May 5, 2021, meeting the requirements for the *Hanford Federal Facility Agreement and Consent Order* Milestone M-083-00A, "Plutonium Finishing Plant (PFP) Facility Transition and Selected Disposition Activities." Demolition completion will be followed by site stabilization and demobilization, turnover to S&M and project closeout activities, completing by August 24, 2021. The two-month push to the project completion date is due to the continuing impacts of COVID-19 and the reliability of the supply chain for personal protective equipment (PPE).

SCHEDULE MARGIN/MANAGEMENT RESERVE

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

CRITICAL DECISION MILESTONE STATUS

Number	Title	Due Date*	Forecast Date†	Status/ Comment
RL-011.C2	Completion of demolition of all PFP facilities.	7/31/2020	8/24/2021	Work resumption was planned in the revised DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets, Critical Decision (CD)-2 and CD 3 package for early October based on a phased resumption approach and to conserve PPE in response to COVID-19 impacts. The forecast date reflects the unanticipated continuing impacts of COVID-19, which precluded work resumption as planned in the CD-2 and CD-3 package.

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

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None to report at this time.

Appendix C.2
RL-0011.C2 - Demolition of PFP Facilities
Contract Performance Reports

Format 1 - Work Breakdown Structure
Format 2 - Organizational Categories
Format 3 - Baseline
Format 4 - Staffing
Format 5 - Explanation and Problem Analysis

CH2MHILL
Plateau Remediation Company
a Jacobs company

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

November 2020
CHPRC-2020-11, 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 / 10 / 26
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE	b. TO (YYYYMMDD) 2020 / 11 / 22
	c. TYPE CPAF / d. SHARE RATIO	c. EVMS ACCEPTANCE NO: / X / YES (YYYYMMDD) 2009 / 09 / 18	

5. CONTRACT DATA

a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK	d. TARGET PROFIT/FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT CEILING	h. ESTIMATED CONTRACT CEILING	i. DATE OF OTB/OTS (YYYYMMDD)
1	150,986	0	5,000	155,986	200,301	155,986	200,301	

6. ESTIMATED COST AT COMPLETION

7. AUTHORIZED CONTRACTOR REPRESENTATIVE

a. NAME (Last, First, Middle Initial): Underwood, Teresa

b. TITLE: Prime Contract Compliance Manager

c. SIGNATURE

d. DATE SIGNED (YYYYMMDD)

	MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)
a. BEST CASE	188,999		
b. WORST CASE	195,369		
c. MOST LIKELY	195,301	150,986	-44,315

8. PERFORMANCE DATA

CAPN.PBS Control Account.PARS 2 WBS (2) ITEM (1)	CURRENT PERIOD: BUDGETED COST WORK SCHEDULED (2)	CURRENT PERIOD: BUDGETED COST WORK PERFORMED (3)	CURRENT PERIOD: ACTUAL COST WORK PERFORMED (4)	CURRENT PERIOD: VARIANCE SCHEDULE (5)	CURRENT PERIOD: VARIANCE COST (6)	CUMULATIVE TO DATE: BUDGETED COST WORK SCHEDULED (7)	CUMULATIVE TO DATE: BUDGETED COST WORK PERFORMED (8)	CUMULATIVE TO DATE: ACTUAL COST WORK PERFORMED (9)	CUMULATIVE TO DATE: VARIANCE SCHEDULE (10)	CUMULATIVE TO DATE: VARIANCE COST (11)	REPROGRAMMING ADJUSTMENTS: COST VARIANCE (12a)	REPROGRAMMING ADJUSTMENTS: SCHEDULE VARIANCE (12b)	REPROGRAMMING ADJUSTMENTS: BUDGET (13)	AT COMPLETION: BUDGETED (14)	AT COMPLETION: ESTIMATED (15)	AT COMPLETION: VARIANCE (16)
RL-0011 Nuclear Mat Stab & Disp PFP																
RL_0011_C2.05 Disposition PFP Facility	4,305	171	246	-4,134	-75	137,334	127,798	171,234	-9,536	-43,437	0	0	0	144,683	188,999	-44,315
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL	4,305	171	246	-4,134	-75	137,334	127,798	171,234	-9,536	-43,437	0	0	0	144,683	188,999	-44,315
f. MANAGEMENT RESERVE														6,302		
g. TOTAL	4,305	171	246	-4,134	-75	137,334	127,798	171,234	-9,536	-43,437	0	0	0	150,986		

9. RECONCILIATION TO CONTRACT BUDGET BASELINE

a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE									-9,536	-43,437				150,986	188,999	-38,013

CONTRACT PERFORMANCE REPORT
FORMAT 2 - ORGANIZATIONAL CATEGORIES

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

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME RL_0011_C2 PFP Demolition Capital Asset Project	a. FROM *(YYYYMMDD)* 2020 / 10 / 26
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 11 / 22
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO:	YES: X *(YYYYMMDD)* 2009 / 09 / 18

5. PERFORMANCE DATA

WBS.Resp Org Group	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE							
ITEM	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	WORK SCHEDULED	WORK PERFORMED	COST WORK PERFORMED	SCHEDULE	COST	COST VARIANCE	SCHEDULE VARIANCE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)
3B - PFP Closure Project	4,305	171	246	-4,134	-75	137,334	127,798	171,234	-9,536	-43,437	0	0	0	144,683	188,999	-44,315
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL *(Performance Measurement Baseline)*	4,305	171	246	-4,134	-75	137,334	127,798	171,234	-9,536	-43,437	0	0	0	144,683	188,999	-44,315
f. MANAGEMENT RESERVE														6,302		
g. TOTAL	4,305	171	246	-4,134	-75	137,334	127,798	171,234	-9,536	-43,437	0	0	0	150,986		

CLASSIFICATION (When Filled In)

November 2020

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE			DOLLARS IN THOUSANDS	Form Approved OMB No. 0704-0188
1. CONTRACTOR	2. CONTRACT	3. PROGRAM	RL_0011_C2 PFP Demolition Capital Asset Project	4. REPORT PERIOD
CH2M HILL Plateau Remediation Company	a. NAME: Plateau Remediation Contract	a. NAME:	Plateau Remediation Contract	a. FROM: 2020/10/26
b. LOCATION:	b. NUMBER: RL14788	b. PHASE		b. TO: 2020/11/22
Richland, WA	c. TYPE: CPAF	c. EVMS ACCEPTANCE		
	d. SHARE RATIO:	NO	YES X 9/18/2009	

5. CONTRACT DATA

a. ORIGINAL NEGOTIATED COST	b. NEGOTIATED CONTRACT CHANGE	c. CURRENT NEGOTIATED COST (A + B)	d. ESTIMATED COST AUTH UNPRICED WORK	e. CONTRACT BUDGET BASE (C + D)	f. TOTAL ALLOCATED BUDGET	g. DIFFERENCE (E - F)
51,683	$85,522	$150,986	$0	$150,986	$150,986	$0

h. CONTRACT START DATE	i. DEFINITIZATION DATE	j. PLANNED COMPL DATE	k. CONT COMPLETION DATE	l. EST COMPLETION DATE
6/19/2008	6/19/2008	9/30/2021	9/30/2021	9/30/2021

6. PERFORMANCE DATA — BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)

ITEM	BCWS CUM TO DATE	BCWS FOR REPORT PERIOD	SIX MONTH FORECAST +1 Dec-20	+2 Jan-21	+3 Feb-21	+4 Mar-21	+5 Apr-21	+6 May-21	FY09-13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	UNDISTRIB BUDGET	TOTAL BUDGET
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
a. PM BASELINE																			
(BEGIN OF PERIOD)	**133,029**	**3,605**	**3,008**	**2,130**	**2,107**	**97**	**7**	**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)	**137,334**	**4,305**	**3,008**	**2,130**	**2,107**	**97**	**7**	**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 / 10 / 26
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 11 / 22
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO: [ ] YES: [X] *(YYYYMMDD)* 2009 / 09 / 18	

5. PERFORMANCE DATA

WBS.Resp Org Group / ORGANIZATIONAL CATEGORY	ACTUAL CURRENT PERIOD	ACTUAL END OF CURRENT PERIOD *(Cumulative)*	FORECAST *(Non-Cumulative)* — SIX MONTH FORECAST BY MONTH *(Enter names of months)*						ENTER SPECIFIED PERIODS					AT COMPLETION
			+1 DEC 2020	+2 JAN 2021	+3 FEB 2021	+4 MAR 2021	+5 APR 2021	+6 MAY 2021	JUN 2021	JUL 2021	AUG 2021	SEP 2021	TCOMPLET	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
3B - PFP Closure Project	4	4,993	70	99	68	82	88	82	72	52	1	0	-	5,606
g. TOTAL DIRECT	4	4,993	70	99	68	82	88	82	72	52	1	0	-	5,606

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 RL_0011_C2 PFP Demolition Capital Asset Project	a. FROM (YYYYMMDD) 2020/10/26
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO (YYYYMMDD) 2020/11/22
	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:	4,304.9	170.8	246.0	-4,134.1	-96.0%	-75.2	-44.0%	0.04	0.69
Cumulative:	137,333.9	127,797.5	171,234.1	-9,536.4	-6.9%	-43,436.7	-34.0%	0.93	0.75
	BAC	EAC	VAC in $	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	144,683.3	188,998.8	-44,315.5	-30.6%	0	0.95			

Explanation of Variance/Description of Problem:

Current Month Schedule Variance: PFP demolition was scheduled to resume in October, however, due to the COVID 19 pandemic, reliability of PPE is uncertain. Resumption of demolition activities is currently scheduled to begin January 2021 when it is believed a reliable supply of PPE will be available to continue and complete demolition of PFP.

Cost Variance: The current month cost variance is within thresholds.

Cumulative to Date Schedule Variance: The cumulative to date schedule variance is within thresholds.

Cost Variance: The cumulative negative cost variance is associated with MSA resources arriving to support PFP demolition that were planned as P/Q shift support. Additionally, Readiness Assessment activities lagged due to a delay in the start of 236-Z Demolition and increased requirements to show readiness resulting in increased costs due to additional time and effort required from subcontracted and direct labor resources. The apportioned project management activities (i.e. project oversight and planning) and support activities are ongoing, while a delay in the discrete field work is resulting in minimal apportioned BCWP. Demolition mobilization activities took longer than originally assumed because of recommendations made during the readiness assessment and purchasing unplanned PBS fixative to support 236-Z demolition. In addition, significant winter weather impacts (i.e., snow, wind, freezing rain, etc.) have been recognized on the Hanford Site. Site closures, freezing temperatures and significant snowfall that required clearing of the demolition zone rather than performing physical demolition on the facilities while a constant staff provides demolition support services is a contributing factor. Unplanned Management Assessment efforts for the 234-5Z and 291-Z facilities took longer than originally assumed. Impacts associated with the Stop Work that was initiated by the HAMTC union leadership on November 11, 2017 "associated with concerns over events both inside and outside of the facility." The main issue involved employee proximity to radiological boundary areas during demolition. Radiological boundaries were reconfigured and impacted employees were relocated. As the project gets further into the demolition phase of the PRF Canyon, increased utilization of Personnel Protective Equipment to align with the original plan as well as increased material procurements to align with the scope being performed (i.e., P-100 filters, Labounty Shear, additional fixative, etc.) are also contributing to this variance. An adjustment to the General & Administrative (G&A) Rate for FY2017 resulted in a reduction to the Performance Measurement Baseline (PMB) of $463K. Finally, impacts from a contamination event that occurred on Friday, December 15, 2017, swing shift where RadCon personnel performing routine surveys following the day shift demolition activities discovered low level contamination on a cookie sheet. This led to a wider search, and a "speck" of contamination was smeared from a government vehicle. A CHPRC management stop work on demolition activities was declared and a critique held to discuss the contamination spread, possible causes, and path forward. A root cause analysis was conducted and resumption actions identified.

This is partially offset by recognized efficiencies associated with the removal of the 18 sections of the PRF gallery gloveboxes, progress on demolition of 236-Z, demolition of the 2727-Z and 2729-Z facilities, the 242-ZA and 242-Z facilities, the 291-Z facility, 291-Z stack, 234-5ZA, 252-Z1, 2503-Z, 2735Z, 2734ZA, ZB, ZC, ZD, and ZL facilities.

Impact:

Schedule Impact: Completion of all demolition activities followed by site stabilization and demobilization, turnover to surveillance and maintenance, and project closeout activities forecast to occur in 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 November.

The following items are addressed, as applicable:
1. Schedule Margin Analysis: No drawdowns of schedule margin were made in the month of November.
2. Data dictionary Changes: No change in the month of November.
3. Forecast Schedule with No Baseline: No change in the month of November.
4. UB Balance: No change in the month of November.
5. Negative Actual Cost of Work Performed (ACWP): No change in the month of November.
6. Earned Actual Cost (EAC) Analysis: Best Case = $188,999; Most Likely = $195,301; Worst Case = $195,369. 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 November.
8. Management Reserve Transactions: No management reserve transactions were made in the month of November.
9. Freeze Period Changes: No change in the month of November.
10. Retroactive Changes: No change in the month of November.
11. Earned Value Type Changes: No change in the month of November.

Prepared by:	Date:	Approved by:	Date:
Kerri Scott	12/9/2020		