CHPRC-2020-03
Revision 0

Monthly Performance Report

March 2020

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

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

CH2MHILL
Plateau Remediation Company

P.O. Box 1600
Richland, Washington 99352

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APPROVED
By Janis D. Aardal at 3:12 pm, Apr 23, 2020

Release Approval | Date

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CH2MHILL
Plateau Remediation Company
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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

March 2020

CHPRC-2020-03, Revision 0

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EXECUTIVE SUMMARY

CH2M HILL Plateau Remediation Company (CHPRC) has advanced cleanup throughout the Hanford Site during March. Major accomplishments included the following:

- **Soil and Groundwater Remediation Project (S&GRP):** Two monitoring wells in the 100-KR-4 Operable Unit were completed in March. Activities supporting the suspension of the biological treatment of nitrate continued with the completion of the layup of the centrifuge system. The project continued trending toward a record year for the volume of groundwater treated.
- **Plutonium Finishing Plant (PFP) Closure Project:** Crews continued Plutonium Reclamation Facility rubble loadout, shipping 33 containers of final-phase demolition debris to the Environmental Restoration Disposal Facility for permanent disposal, including 26 Contaminated Equipment – Special Package Authorization shipments. Crews also prepared for and began demolition of the steam line that ran from 234-5Z Building to 234-5A-BA, including support poles and structures.

Electricians uncovered a network of thousands of wires in the basement of an old PUREX guard shack. Crews had to identify and safely deactivate any live wires in preparation for demolition of the building

- **K Basins Operations (KBO):** KBO finished loading floor sparging debris from the vertical pipe casings footprint into containers, and continued dosing and relocation of fuel cans in the center bay. A grouting assembly was installed in Engineering Container 210 to facilitate use as a collection bin for below water debris. Work to prepare for installing the 105-KE Reactor Interim Safe Storage (ISS) construction support trailer continued. The ground scan was completed, trailer location revised in response to underground equipment issues and walk down with Mission Support Alliance, LLC (MSA) Electrical Utilities engineering completed for installation of power for the new trailer. The ISS/Safe Storage Enclosure construction contract and request for proposal documents were released for bid. The Decontamination and Decommissioning Team continued demolition preparation for 165KE and demolition of the 166KE Fuel Storage Bunker. Sampling tools for the 166KW bunker heel were completed and delivered to the S&GRP sampling organization.
- **Waste and Fuels Management Project (W&FMP):** The management of cesium and strontium capsule (MCSC) project, Project W-135, *Capsule Storage Area* (CSA), general plant project construction subcontractor completed mobilization and commenced site preparation activities. Excavation for the storage pad and potholing for utility locations was initiated. The Washington State Department of Ecology (Ecology) issued the *Resource Conservation and Recovery Act of 1976* (RCRA) permit for the CSA. At the Waste Encapsulation and Storage Facility, G Cell shielding window refurbishment activities continued. The east window cleaning/polish was completed, and the window was reinserted into the G Cell opening. The west window was removed and cleaning/polishing was initiated. Installation of the new K2-7-1 exhaust fan motor onto the roof of the 225B Building was completed. At the Canister Storage Building, the crew completed the final phase of annual multi-canister overpack (MCO) sampling proficiency demonstrations using the MCO sampling mockup assembly. At T Plant, the crew completed the laydown yard cleanup.
- **River Risk Management Project (RRMP):** The 324 Building Disposition Project performed routine inspections and maintenance. In support of resumption of project work, advanced radiological training was completed for all primary workers, modifications to the mockup for training were initiated and the field test of FRHAM Stay Clean coverall suit were completed. Crews completed the following to support future

resumption of project work at the 324 Building: Performed remote excavator arm/hydraulic power unit layup maintenance, performed beryllium sampling in Room 308/309A and completed modification of lid spacers in the container transfer area. Continued response formulation to regulator and public comments on the Integrated Disposal Facility RCRA application for permit modification.

- **Central Plateau Risk Management (CPRM) Project:** CPRM crews abated 438 feet of steam line asbestos insulation and loaded out the equivalent of 141 feet of steam line waste in the 200 East Area. At the 224B Facility, personnel completed the electrical investigation and subsequent cold-and-dark work package. At Plutonium Uranium Extraction Plant (PUREX) North, crews completed electrical isolations on 2701AB and mechanical isolations on 214A and 2714A. Personnel submitted the time-critical-removal action to temporarily stabilize 216-Z-9, 241-Z-361 and 216-Z-2 in the 200 West Area. At Reduction and Oxidation (REDOX), crews completed installation of walkways to the loading dock and CONEX boxes as well as ground and topography surveys for excavation of the air tunnel. Finally, crews performed electrical investigations to ensure electrical safety on 10 facilities on the Central Plateau.

The President's Zero Accident Council (PZAC) meeting for March was cancelled due to coronavirus (COVID-19) safety measures. The Hanford Site remains in an essential mission critical operations posture.

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

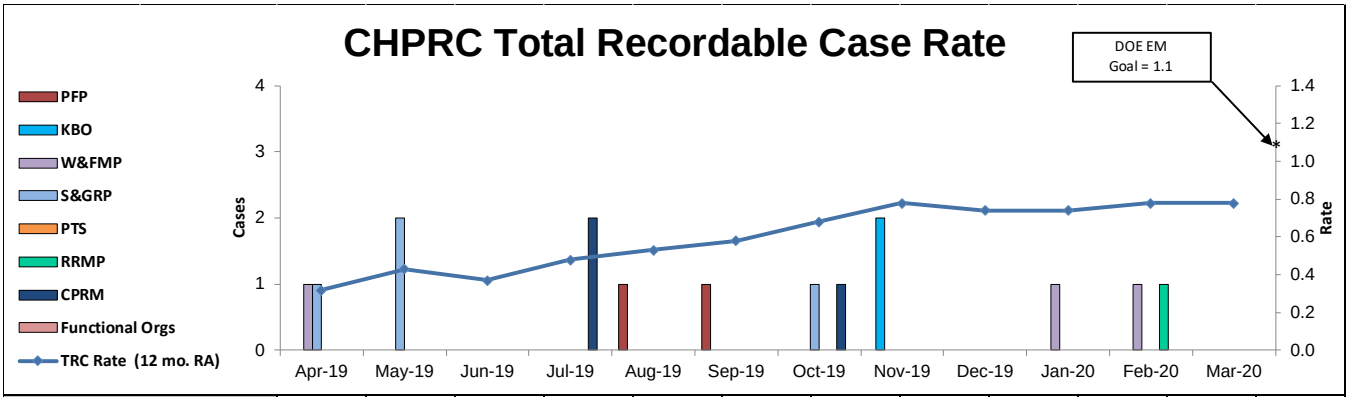
- Spring Forward.
- Eye Wellness.
- VPP – EP Drills.
- Driving Review.
- Personal Health.

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

- Five Lessons Learned:
  - OPEXShare: *2020-SSQ-0003 Paper Towel Roll Fire Initiated by Unattended Heat Lamp*.
  - OPEXShare: *FRNP-LL-2020-002 Employee Injury Reacting to Fallen Equipment.*
  - OPEXShare: *WRPS-IB-20-002 Transfer Knowledge for Key Positions Using Company Webpages.*
  - OPEXShare: *B-2020-OR-UCOROOCE-0301 Failure to Recognize and Respond to a Worker's Questioning Attitude.*
  - OPEXShare: *NREL-FY20-S-001-MAR See Something? Say Something, then DO Something*.
- Injuries.
- Weekly Ethics Moments.
- Vehicle Events.
- Ladder Safety Month.
- Spring Forward Safely.
- Spring Safety Tasks.
- Safety Around Heat Lamps.
- Health Information.
- Eye Safety at Work.
- Week 2: Ladder Safety.
- Health and Hand Washing.
- Week 3: Ladder Safety.
- Hanford Learning Management System.
- Emergency Preparedness.
- Seasonal Safety.
- Safety Share – WRPS.
- Week 4: Ladder Safety.
- HPMC Services Update.
- COVID-19 Update.
- Temporary Alternate Work Location (TAWL) Safety Tips.
- TAWL Ergonomics.

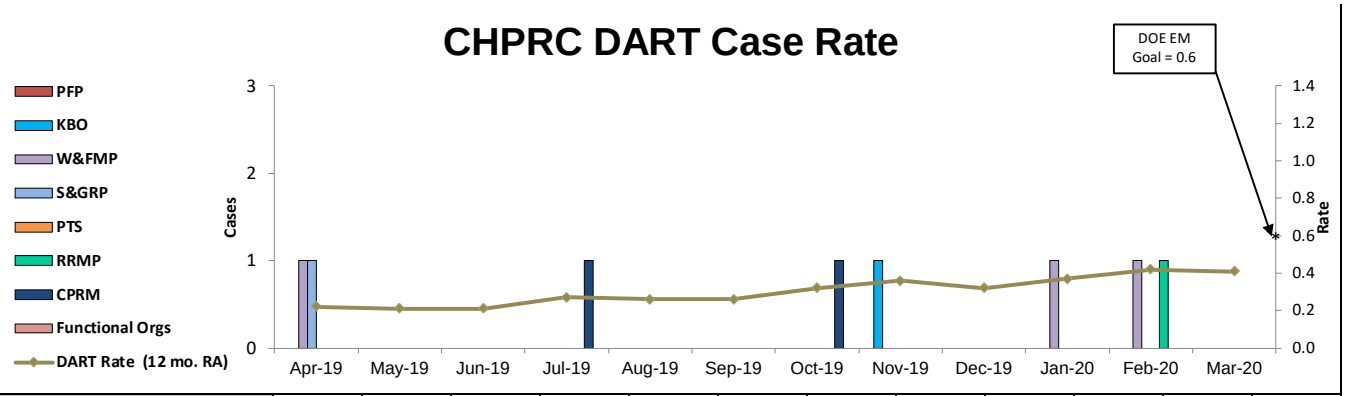
TARGET ZERO PERFORMANCE

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



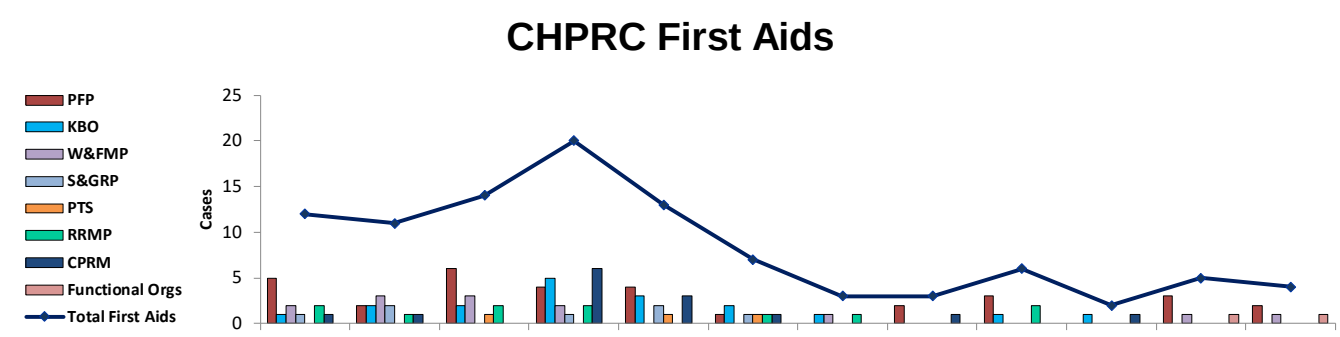
	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
PFP	0	0	0	0	1	1	0	0	0	0	0	0
KBO	0	0	0	0	0	0	0	2	0	0	0	0
W&FMP	1	0	0	0	0	0	0	0	0	1	1	0
S&GRP	1	2	0	0	0	0	1	0	0	0	0	0
PTS	0	0	0	0	0	0	0	0	0	0	0	0
RRMP	0	0	0	0	0	0	0	0	0	0	1	0
CPRM	0	0	0	2	0	0	1	0	0	0	0	0
Functional Orgs	0	0	0	0	0	0	0	0	0	0	0	0
Recordable Cases	**2**	**2**	**0**	**2**	**1**	**1**	**2**	**2**	**0**	**1**	**2**	**0**
TRC Rate (12 mo. RA)	**0.32**	**0.43**	**0.37**	**0.48**	**0.53**	**0.58**	**0.68**	**0.78**	**0.74**	**0.74**	**0.78**	**0.78**

Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.78 is based on a total of 15 Recordable injuries. March had no OSHA Recordable cases.



	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
PFP	0	0	0	0	0	0	0	0	0	0	0	0
KBO	0	0	0	0	0	0	0	1	0	0	0	0
W&FMP	1	0	0	0	0	0	0	0	0	1	1	0
S&GRP	1	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	0	0	0	0	0	0	0	0	1	0
CPRM	0	0	0	1	0	0	1	0	0	0	0	0
Functional Orgs	0	0	0	0	0	0	0	0	0	0	0	0
DART Cases	**2**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**1**	**2**	**0**
DART Rate (12 mo. RA)	**0.22**	**0.21**	**0.21**	**0.27**	**0.26**	**0.26**	**0.32**	**0.36**	**0.32**	**0.37**	**0.42**	**0.41**

Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.41 is based on a total of eight Days Away cases. March had no reported DART cases.



	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20
PFP	5	2	6	4	4	1	0	2	3	0	3	2
KBO	1	2	2	5	3	2	1	0	1	1	0	0
W&FMP	2	3	3	2	0	0	1	0	0	0	1	1
S&GRP	1	2	0	1	2	1	0	0	0	0	0	0
PTS	0	0	1	0	1	1	0	0	0	0	0	0
RRMP	2	1	2	2	0	1	1	0	2	0	0	0
CPRM	1	1	0	6	3	1	0	1	0	1	0	0
Functional Orgs	0	0	0	0	0	0	0	0	0	0	1	1
Total First Aids	**12**	**11**	**14**	**20**	**13**	**7**	**3**	**3**	**6**	**2**	**5**	**4**

First-Aid Case Summary: CHPRC reported four First-Aid cases in March. The contributors were three sprains/strains/pains and one foreign body/irritation in the eye 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 the novel COVID-19 pandemic, 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 the U.S. Department of Energy (DOE), Richland Operations Office (RL) identifying that the pandemic may impact CHPRC's ability to meet contractual requirements. On March 24, 2020, RL issued letter 20-PRO-0139, a partial stop work order (PSWO) for non-portable work. The PSWO noted that CHPRC would have 30 days following termination of the PSWO to assert an equitable adjustment. 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 Contract Clause I.102 FAR 52.243-2, “Changes – Cost Reimbursement” (August 1987) – Alternate II (April 1984), Alternate III (April 1984), and Alternate IV (April 1984)
- PRC Contract Clause I.89 FAR 52.236-2, “Differing Site Conditions” (April 1984)

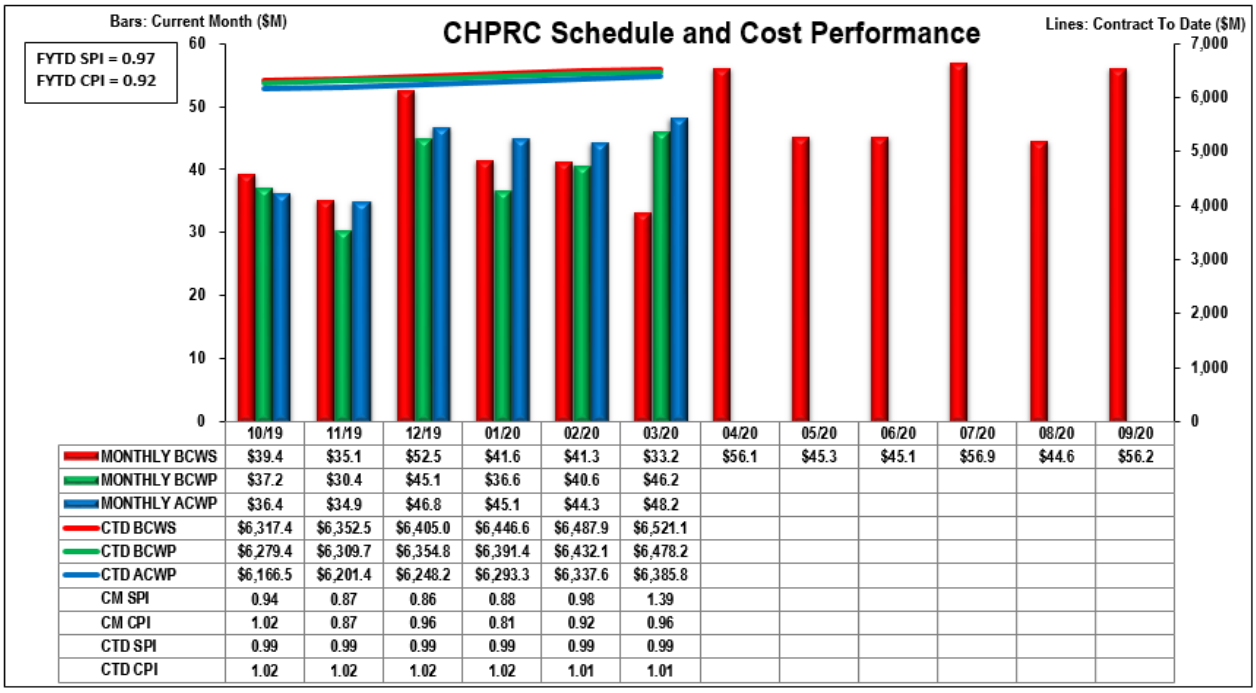
Corrective Action

CHPRC will timely notify the RL contracting officer of events, incidents, or circumstances causing grounds to submit a Request for Equitable Adjustment. Following receipt of RL’s partial stop work direction, a partial stop work implementation plan and restart plan were developed and submitted to RL. To support workforce stability as directed by RL, CHPRC employees were provided “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. In addition, CHPRC provided similar guidance to our subcontractors that we believe will be critical to ramp up and execute to full performance capacity at the conclusion of the partial stop work period. This guidance also notified our subcontractors that justifiable absence time could be reimbursable by CHPRC.

Status

The situation at the Hanford Site continues to evolve. CHPRC has implemented plans to mitigate work delays and disruption and cost-effectively address unanticipated impacts to programmatic work. In compliance with state and federal government COVID-19 guidance, and as required by or in consequence of the PSWO, CHPRC has and will continue to take reasonable actions to protect and provide support to the workforce. CHPRC has established separate financial account(s) to collect costs associated with COVID-19. CHPRC remains in constant contact with RL to ensure related information requests and deliverables meet RL needs, and CHPRC stays abreast of potential changes in the essential minimum safe posture so they can be anticipated and addressed in a timely manner should they occur. CHPRC is also in constant contact with other RL major prime contractors at the Hanford Site to ensure a collaborative, consistent approach for both work ramp down and resumption activities planned and proposed to RL. Additionally, CHPRC continues to communicate to RL that the ramp down and resumption activities will have both cost and schedule impacts on the work planned for FY2020 and FY2021.

EARNED VALUE MANAGEMENT



	10/19	11/19	12/19	01/20	02/20	03/20	04/20	05/20	06/20	07/20	08/20	09/20
MONTHLY BCWS	$39.4	$35.1	$52.5	$41.6	$41.3	$33.2	$56.1	$45.3	$45.1	$56.9	$44.6	$56.2
MONTHLY BCWP	$37.2	$30.4	$45.1	$36.6	$40.6	$46.2						
MONTHLY ACWP	$36.4	$34.9	$46.8	$45.1	$44.3	$48.2						
CTD BCWS	$6,317.4	$6,352.5	$6,405.0	$6,446.6	$6,487.9	$6,521.1						
CTD BCWP	$6,279.4	$6,309.7	$6,354.8	$6,391.4	$6,432.1	$6,478.2						
CTD ACWP	$6,166.5	$6,201.4	$6,248.2	$6,293.3	$6,337.6	$6,385.8						
CM SPI	0.94	0.87	0.86	0.88	0.98	1.39						
CM CPI	1.02	0.87	0.96	0.81	0.92	0.96						
CTD SPI	0.99	0.99	0.99	0.99	0.99	0.99						
CTD CPI	1.02	1.02	1.02	1.02	1.01	1.01						

	$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	0.2	3.5	4.6	3.2	(1.1)	1,143.6	1,129.8	1,232.4	(13.7)	(102.6)	1,143.6	1,246.6	(103.1)
RL-0012 - SNF Stabilization & Disposition	-	-	(0.0)	-	0.0	759.6	759.6	729.8	(0.0)	29.8	759.6	729.8	29.8
RL-0013 - Solid Waste Stab & Disposition	13.9	18.9	18.8	5.1	0.2	1,566.4	1,561.7	1,477.7	(4.8)	83.9	1,681.2	1,596.4	84.8
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	10.2	10.0	8.0	(0.2)	2.0	1,686.5	1,681.7	1,630.3	(4.8)	51.4	1,756.2	1,702.9	53.3
RL-0040 - Nuc Fac D&D - Remainder	4.9	3.5	5.3	(1.3)	(1.8)	592.7	584.7	570.2	(8.0)	14.5	642.0	624.4	17.6
RL-0041 - Nuc Fac D&D - RC Closure Project	3.8	10.0	11.3	6.2	(1.3)	742.1	730.5	719.8	(11.5)	10.8	809.9	802.5	7.4
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.2	0.2	0.0	0.0	30.2	30.2	25.5	(0.0)	4.7	32.9	27.8	5.1
(Values are rounded to the nearest $0.1M) Total	33.2	46.2	48.2	13.0	(2.0)	6,521.1	6,478.2	6,385.8	(42.8)	92.4	6,825.3	6,730.5	94.8

Performance Summary

CHPRC continues to track completion of the contract within budget. Currently, a variance at completion of $94.8 million is projected, with an additional $48.4 million of management reserve (MR) for a total positive variance of $143.2 million. For March, the project was 39.1 percent ahead of schedule and 4.4 percent over planned cost. Contract to date, the project was 0.7 percent behind schedule and 1.4 percent under planned cost.

The current month (CM) positive schedule variance reflects the implementation of several baseline change requests (BCR) that removed baseline scope that will not be performed in FY2020 based on RL guidance. This scope removal resulted in a large CM positive schedule variance for the structural modifications at the 324 Building at RRMP. Furthermore, a BCR realignment of FY2020 scope within the MCSC project at W&FMP was profiled to match the subcontractor's baseline impacting the CM schedule variance. Finally, continued progress at PFP resulted in significant schedule recovery.

The CM cost variance is within thresholds.

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

PBS	Project	FY2020 Projected Funding	FY2020 Spending Forecast	Variance
Estimate at Complete				
RL-0011	Nuclear Materials Stabilization and Disposition	34.4	42.1	(7.7)
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	0.6	(0.0)	0.6
RL-0013	Waste and Fuels Management Project	202.7	201.4	1.3
RL-0013	Management of Cesium and Strontium Capsules	14.3	0.8	13.5
RL-0030	Soil, Groundwater and Vadose Zone Remediation	126.0	117.2	8.8
RL-0040	Nuclear Facility D&D, Remainder of Hanford	93.3	90.8	2.4
RL-0041	Nuclear Facility D&D, River Corridor	150.9	150.2	0.6
RL-0042	Fast Flux Test Facility Closure	4.8	3.9	0.8
	Total Estimate at Complete	**626.8**	**606.4**	**20.4**

Funds/Variance Analysis

FY2020 overall projected funding of $626.8 million remains unchanged from February. However, per direction from RL, $8.8 million was reallocated from RL-0030, $4.9 million to RL-0011 and $3.9 million to RL-0013 to align funding with the RL Assistant Manager for River and Plateau (AMRP) FY2020 Execution Integrated Priority (IPL), Revision 2A. The spending forecast of $606.4 million reflects an overall reduction of $3.7 million from February, primarily for work scope pushing into FY2021.

BASELINE CHANGE REQUESTS

In March, CHPRC approved and implemented 14 BCRs into the performance measurement baseline (PMB) budget. Nine of the 14 BCRs impacted the PMB budget. Each change request is identified in the following table:

Change Request #	Title	PBS	Summary of Change
BCR-013-20-009R0	*Revise W-135 CSA Schedule to Align with Subcontract Award*	RL-0013	The purpose of this BCR is to segregate the work scope and budget associated with the construction of the CSA and the Utility Revisions, initially planned in FY2020 General Plant Project (GPP) work package 013.24.02.04.01, *(GPP) Mobilize/Construct CSA*. Implementation of the CSA's construction contractor's approved schedule further defines the revised utility scope and provides for a more accurate performance reporting and traceability from the contractor's schedule directly into the PMB. This BCR did not change the PMB value.
BCR-013-20-010R0	*Cask Storage System Fabrication Schedule Incorporation*	RL-0013	This BCR incorporated the approved subcontractor fabrication schedule/contract into the CHPRC PMB for performance purposes. New work breakdown structure (WBS) 13.25.01.04.09, *(CE) UCS Fabrication and Delivery*, was established to provide separation of the UCS fabrication from the rest of the storage system fabrications due to early procurement authorization received from RL. This BCR also accelerated WBS 013.25.01.04.01, *(CE) Storage System Fabrication/Delivery*, and WBS 013.25.01.05.08 and 013.25.01.06.08 from FY2021 to FY2020, to align with the FY2020 Execution IPL Revision 2A, dated January 23, 2020, as directed by RL. This BCR increased the PMB by $9,532.5K.
BCR-013-20-013R0	*RL-0013 Scope Reductions*	RL-0013	This BCR modified the FY2020 PMB to remove planned scope that will not be performed in FY2020. Specific activities identified for deletion were agreed upon during collaborative meetings between CHPRC W&FMP and RL personnel. This BCR decreased the PMB by $4,567.6K.
BCR-013-20-015R0	*W-135 Incorporation of New WBS for MASF Mockup Preps*	RL-0013	This BCR implemented a new WBS, 013.25.01.07.07, *MASF Mockup Preps*. Incorporation of this BCR will allow the project to better manage and control the division of work scope between construction of the MCSC project mockup facility at the MASF and preparation activities needed ahead of CSA capsule processing equipment delivery at the MASF. This BCR did not change the PMB value.
BCR-013-20-016R0	*Removal of T-Plant Permacon Scope*	RL-0013	This BCR removed WBS 013.08.02.01.16, *T-Plant Permacon Removal and Work Package Closeout*, from the FY2020 PMB. Development of the facility modification package, material procurement, and electrical work package remains in the PMB; to be performed in FY2020. The projected number of sludge transport and storage containers (STSCs) to be received from 100K is lower than initially planned, no immediate need to remove the Permacon to make additional space for STSC receipt. This BCR decreases the PMB by $783.9K.

Change Request #	Title	PBS	Summary of Change
BCR-030-20-011R0	*Incorporate RL-0030 Scope Reductions*	RL-0030	This BCR revised the FY2020 PMB to remove planned scope that will not be completed within FY2020. The planned scope has evolved since it was authorized by RL, as documented by 1904079A-_19-AMRP-0084, and will not be completed as planned. In addition to the changes in scope and schedule, TPA Milestone M-016-119-T01 has been removed from the PMB. This BCR decreases the PMB by $2,502.2K.
BCR-040-20-004R0	*D&D and Demolition Readiness Scope Additions*	RL-0040	This BCR incorporated additional planning of work scope as identified in the FY2020 Execution IPL Revision 2A. Additional scope includes planning and implementation of deactivation and demolition of the PFP "Trailer Village" and miscellaneous facilities associated with the PFP complex, planning and risk mitigation activities in preparation for demolition of 231-Z and planning and implementation of readying the 224-T and 222-T facilities for future demolition. This BCR also establishes 040.5, *West Area Remediation (WARP)* as the functional organization code to allow separate reporting for the WARP scope. This BCR increases the PMB by $19,470.7K.
BCR-040-20-007R0	*RL-0040 Add Scope for UPR-600-12*	RL-0040	This BCR incorporated new scope for the Waste Information Data Systems site UPR-600-12. Scope includes project management oversite, ecological/cultural review, and initial characterization planning and procurement preparation. This effort is in anticipation of implementing the remove, treat and dispose remedy for the UPR 600-12 site in accordance with DOE/RL-2009-53, Rev. 1, *Removal Action Work Plan for 48 Waste Sites in the 200-MG-1 Operable Unit*, and DOE/RL-2009-60, Rev. 1, *Sampling and Analysis Plan for Selected 200-MG-1 Operable Unit Waste Sites*. This BCR increased the PMB by $89.9K.
BCR-040-20-008R0	*RL-0040 REDOX and PUREX Ventilation System Scope Reductions*	RL-0040	This BCR incorporated the delay in completion of the REDOX temporary ventilation system design. Delays result in the removal of the FY2020 scope for installation of the temporary ventilation system. The delay in the installation impacts the ability of REDOX personnel to perform demolition preparation activities and risk mitigation activities as initially planned. This BCR removes FY2020 scope activities on the North Sample Gallery wall to install a waste egress door and the removal of the process piping. This BCR also removed the scope of WBS 040.02.39.01.02.05, *PUREX IA-Main-Ventilation CAP*, from the FY2020 PMB, as it relied on the lessons learned for the design and fabrication at REDOX. The PMB decreased by $3,371.5K.
BCR-041-20-002R0	*324 Scope Alignment*	RL-0041	The FY2020 baseline was developed and submitted prior to the project experiencing multiple contamination events, crane failures and resumption corrective actions, which have had significant schedule impacts. Due to these events, and the project expectation of prestart items based on the draft corrective actions (received February 11, 2020), the project needs to retime-phase FY2020 scope to align to the current project trajectory. This BCR decreased the PMB by $7,404.5K.

Change Request #	Title	PBS	Summary of Change
BCR-041-20-007R0	*Update to 100K Backfill Campaign WBS Dictionary and BOE*	RL-0041	This BCR revised the WBS dictionary for WBS 041.02.34.32, *100K Backfill Campaign*, and the corresponding basis of estimate (BOE), to reflect scope to be performed in FY2020. WBS Dictionary for 041.02.34.32, *l00K Backfill Campaign*, changes the area used for clean backfill from Pit 23 to Pit 24, was revised to include the development of a request for proposal (RFP) for the construction of the haul roads as well as awarding a construction subcontract. BOE updates in WBS 41.02.34.32.01, *Site Prep - Pit 24*, include the provision of a technical approach for planning and developing Pit 24 haul road design and construction documentation. This BCR did not change the PMB value.
BCR-PRC-20-010R0	*Incorporate 200-CP-1 RI/FS WP*	RL-0030 RL-0041	This BCR incorporated scope not originally in the PMB to develop and submit of a draft work plan (WP) for the Remedial Investigation/Feasibility Study (RI/FS) at the PUREX (200-CP-1) Storage Tunnels (TPA Milestone M-085-80). The RI/FS WP was authorized to be performed in FY2020 by RL via CHPRC Correspondence Number 2000491A, received February 3, 2020, and was added to the AMRP Execution IPL Revision 3, dated February 21, 2020. WP is to be submitted to Ecology by September 30, 2020. This BCR increased the PMB by $1,042K.
BCR-PRC-20-011R0	*Update FY2020 Level 1 WBS Dictionaries*	RL-0013 RL-0030 RL-0040 RL-0041 RL-0042	This BCR updated the Level 1 WBS dictionaries to align with changes made to the FY2020 PMB through March 2020. This BCR did not change the PMB value
BCRA-PRC-20-009R0	*HPIC Updates March 2020*	RL-0013 RL-0030 RL-0040 RL-0041	This administrative BCR documented HPIC changes made in March 2020 performance period prior to archive. These changes include new work packages, cost account charge number requests, and control account manager changes as documented in the HPIC forms. This BCR did not change the PMB value.

The allocated (distributed) budget increased $11,503.6K in March.

Undistributed Budget (UB) Activity

BCR Number	Title	PBS	Fiscal Year	UB
N/A	*N/A*	N/A	2020	$0

There was no change to UB in March.

Management Reserve (MR) Activity

BCR Number	Title	PBS	Fiscal Year	MR
N/A	*N/A*	N/A	2020	$0

There was no change to MR in March.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	*N/A*	N/A	2020	$0

There was no change to fee in March.

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

March 2020 Summary of Changes ($M)

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	FY2019	FY2020	Contract Period Total	Total PMB
February 2020 Estimate											
PMB	3,391.5	391.7	471.3	504.8	485.0	470.6	2,323.5	563.1	535.8	6,813.8	6,813.8
MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.4	48.4	48.4
Fee	155.5	14.3	14.5	27.8	10.6	18.9	86.1	36.5	0.0	278.1	278.1
Total	*3,547.0*	*406.0*	*485.8*	*532.6*	*495.6*	*489.5*	*2,409.6*	*599.5*	*584.1*	*7,140.2*	*7,140.2*
March 2020 Change											
PMB											
Change to PMB	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*11.5*	*11.5*	*11.5*
MR											
Change to MR	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Fee											
Change to Fee	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Total Change	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*11.5*	*11.5*	*11.5*
March 2020 Estimate											
PMB	3,391.5	391.7	471.3	504.8	485.0	470.6	2,323.5	563.1	547.3	6,825.3	6,825.3
MR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.4	48.4	48.4
Fee	155.5	14.3	14.5	27.8	10.6	18.9	86.1	36.5	0.0	278.1	278.1
Total	*3,547.0*	*406.0*	*485.8*	*532.6*	*495.6*	*489.5*	*2,409.6*	*599.5*	*595.6*	*7,151.7*	*7,151.7*

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

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	FY2019	FY2020	Total
February 2020 MR Totals										
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	5.5
RL-0012	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	5.4
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	8.4
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	13.6
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
Total	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*48.4*	*48.4*
March 2020 MR Changes/Utilization										
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RL-0040	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	0.0
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
March 2020 MR Totals										
RL-0011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	5.5
RL-0012	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	5.4
RL-0013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	8.4
RL-0030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
RL-0040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5
RL-0041	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	13.6
RL-0042	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5
Total	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*48.4*	*48.4*

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 - 03/31/2020

Reporting Category

	$ Value	%	Goal %
SB	$1,731.52	56.76%	49.3%
SDB	$323.96	10.62%	8.2%
SWOB	$308.08	10.10%	7.5%
HUB	$100.19	3.28%	2.2%
VOSB	$266.88	8.75%	3.5%
SDVO	$173.87	5.70%	1.3%
NAB	$104.68	3.43%	N/A
Large	$816.64	26.77%	N/A
GOVT	$5.58	0.18%	N/A
GOVT CONT	$483.23	15.84%	N/A
EDUCATION	$0.17	0.01%	N/A
NONPROFIT_	$4.45	0.15%	N/A
FOREIGN	$9.22	0.30%	N/A
Total	$3,050.81	100.00%	N/A

PRC clause H.20b small business requirement
≥ 17% of CHPRC Contract Price performed by SB.

CHPRC Contract Value:	$6,596.68
SB actual:	$1,731.52
SB Performed %:	26.25%

PRC clause H.20a max self performed requirement
≤ 65% of Contract Price Self Performed

CHPRC Contract Value:	$6,596.68
CHPRC Self Performed:	$3,838.35
CHPRC Self Performed %:	58.19%

Notes:

1. Since the contract award in October 2008, CHPRC has subcontracted more than $3.0 billion in goods and services, with more than 56 percent going to small businesses. All subcontracting goals have been exceeded.
2. Approximately 91 percent of the total dollars arise from service and staffing contracts and contract amendments, with 6 percent of the remaining expenditures arising from PCard purchases and 3 percent from the balance in purchase orders for materials and equipment.
3. Data are summarized by business categories (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 TRU materials outbound/inbound between the Hanford Site and Perma-fix 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 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

March 2020
CHPRC-2020-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In March, the Plutonium Finishing Plant (PFP) Closure Project team continued Plutonium Reclamation Facility (PRF) rubble loadout, shipped 33 containers of final-phase demolition debris to the Environmental Restoration Disposal Facility (ERDF) for permanent disposal, including 26 Contaminated Equipment – Special Package Authorization shipments of containers. Crews also prepared for and began demolition of the steam line that ran from the 234-5Z Building to 234-5A-BA, which included support poles and structures.

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/TRU-M) Shipped	2 m^3	5,016 m^3
Low-level Waste (LLW)/Mixed (M)LLW Shipped	231 m^3	23,276 m^3

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
20-EMS-PFP-OBJI-P1	Complete *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) removal action at the PFP Complex.	Performs actions for final PFP turnover to surveillance and maintenance.	7/30/2020	25%

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	2	N/A
First Aid Cases	2	32	3/03/2020 – Employee rolled left ankle when stepping off a ramp just outside of MO 6118 onto a level gravel surface. The employee was not wearing safety boots with ankle support because they were performing office work. Employee notified a field work supervisor and was taken to HPM Corporation (HPMC), provided a cold pack and released back to work without restriction. (25499) 3/05/2020 – Employee had a small particle of dust blown into the left eye. Water absorbent had been added to the ERDF container approximately 15 minutes prior to the incident, so an assumption was made that the dust was absorbent. Notifications were made and the employee was taken to the 2754 Building where the eye was irrigated with distilled water. Worker was then taken to HPMC, treated and released back to work without restriction. (25511)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments:

- Crews continued PRF rubble loadout. Crews also completed self-identified process modifications, including re-routing roads around the debris pile and direction of loadout.
- Work teams installed a new container transfer area (CTA) and waste container-loading pad in the north trailer village across from 212Z Lag Yard. The additional CTA will help expedite container preparation activities during PRF loadout.
- Shipped 33 containers of final-phase demolition debris to ERDF for permanent disposal, including 26 containers of PRF rubble debris.

MAJOR ISSUES

Issue
The project's fiscal year (FY) 2020 forecast reflects spending approximately $7.7 million more than the entire allotted carryover balance. Although RL-0011 was allocated a supplemental $4.9 million, additional funding is required in FY2020 to complete PFP demolition. The current forecast reflects that projected funding would not be exceeded until about May 2020.

Corrective Action
Resolve funding shortfall.

Status
CH2M HILL Plateau Remediation Company (CHPRC) is working with the U.S. Department of Energy (DOE), Richland Operations Office (RL), to address this issue and anticipates resolving it prior to May 2020 so that funding limitations will not impact project completion.

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: Risk PFP-P3-003, *Weather Impacts During 234-5Z Demolition* was removed from the stoplight chart in March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks identified in March.				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)				
No critical risks identified in March.				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No high threat risks identified in March.				
FY2020 Key Risks				
PFP-P4-002: Weather Impacts During 236-Z Demolition	Inclement weather, including moderate winds, low or high temperatures, and above average snowfall or thunderstorms will result in in-scope unplanned work and schedule impacts to the project. **Risk Handling Strategy**: Control **Probability**: Low (10% to 25%) **Worst Case Impacts**: $0, 30 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 March. Wind events continue to impact the project, including three days of work control zone restrictions due to high winds or expected high winds in March.

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011				
PFP-P-004: Stop Work From Concerned Workers	Concerned workers can implement a stop work to address off-normal or safety issues. The work cannot be restarted until the implementation of corrective actions is completed, resulting in schedule impacts to the project. **Risk Handling Strategy**: Control **Probability**: Medium (26% to 74%) **Worst Case Impacts**: $0, 16 days			**Risk Trigger**: During PFP demolition activities, an increase in stop works could result in delays. **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 March. 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. One stop work was called in March related to powered air purifying respirator failures, which was resolved the following day based on providing an employee additional information and concurring on a path forward to prevent failures. Additionally, COVID-19 social distancing concerns caused two stop works for the PFP Project.
Unassigned Risks (Pending ownership of identified threats/opportunities)				
No unassigned risks identified in March.				

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

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled (BCWS)	Budgeted Cost of Work Performed (BCWP)	Actual Cost of Work Performed (ACWP)	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)
Total	0.2	3.5	4.6	3.2	1,394.6%	(1.1)	-32.4%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Variance: (+$3.2M/+1,394.6%)

The favorable schedule variance is due to progress on 236-Z rubble debris loadout in the current period, which was scheduled to be complete in December 2019. Rubble loadout of 236-Z began in February 2020. The behind schedule condition is due to delays in sizing the 234-5Z Building rubble, weather events and a conservative approach to demolition and loadout. The current positive performance was partially offset by the BCWS associated with not completing DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, Capital Asset Project RL-11.C2, *Demolition of PFP Facilities*, Critical Decision-4, *Approve Project Completion*, and overall project closeout as planned.

CM Cost Variance: (-$1.1M/-32.4%)

The unfavorable cost variance is due to slower-than-planned performance on 236-Z debris disposition. Progress has been hindered due to the conservative approach to debris loadout, weather events and COVID-19 associated concerns.

Contract to Date (CTD)
($M)

WBS 011/ RL-0011 Nuclear Matl Stab & Disp PFP	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	1,143.6	1,129.8	1,232.4	(13.7)	-1.2%	(102.6)	-9.1%	1,143.6	1,246.6	14.2	(103.1)

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Variance: (-$13.7M/-1.2%)
The CTD schedule variance is within threshold.

CTD Cost Variance: (-$102.6M/-9.1%)
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 (waste shipping containers TL-1800s, SLB2s, IP-1 bags, etc.) required for TRU waste disposition loadout activities; and unplanned work to reconfigure the high-density polyethylene (HDPE) water loop to support the new radiological boundaries.

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

After resumption activities were completed, a deliberate and in-series approach has 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 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 entries. These reductions were the result of fewer fieldwork team members required to perform hands-on work in 242-Z due to the confined space.

In addition, recognized efficiencies contributed to the negative variance offset, including crews completing process vacuum removal in 291-Z 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 291-Z versus individual isolations from within; hazardous material removal, stabilization and decontamination was more resourceful than anticipated (i.e., powerful fans used with vertical fixative flow up the stack); and additional efficiencies associated with 242-Z, 291-Z and 234-5ZA Building demolition.

Variance at Completion (VAC): (-$103.1M/-9.0%)
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 due to concerns regarding COVID-19 has 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 234-5Z, 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)

	FY2020		
RL-0011 Nuclear Matl Stab & Disp PFP	**Projected Funding**	**Spending Forecast**	**Variance**
Spending Forecast	34.4	42.1	(7.7)
Numbers are rounded to the nearest $0.1 million.			

Funds/Variance Analysis
Projected funding in FY2020 of $34.4 million includes an increase of $4.9 million in March. The spend forecast reflects an increase of $6.9 million over last month due to a 92-day delay in the forecast completion and closeout of the project from the June 24, 2020, date (reported in February) to September 24, 2020. The revised forecast completion date for the project reflects the slower-than-planned loading and disposal of the 236-Z rubble pile; worker-initiated stop works associated with COVID-19 pandemic worker concerns; the CHPRC senior management-directed companywide stop work to address worker COVID-19 concerns, and the March RL-directed Hanford Site wide partial stop work for up to 30 days associated with COVID-19. CHPRC is working with RL to address the projected funding shortfall and anticipates a resolution prior to the issue impacting the project.

Critical Path Analysis
The PFP critical path schedule begins with the completion of 236-Z loadout, which is anticipated by June 29, 2020, meeting the requirements for the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-083-00A, "Plutonium Finishing Plant (PFP) Facility Transition and Selected Disposition Activities." Demolition completion will be followed by site stabilization and demobilization, turnover to surveillance and maintenance, and project closeout activities, completing by September 24, 2020.

MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/Comment
M-083-00A	"Plutonium Finishing Plant (PFP) Facility Transition and Selected Disposition Activities"	9/30/2017		6/29/2020	The project began PRF rubble disposition in February, with completion forecasted for June. The forecasted completion slipped 92 days due to COVID-19 impacts and the slower-than-planned disposition of the rubble pile.

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 B
Spent Nuclear Fuel Stabilization and Disposition (RL-0012)

CH2MHILL
Plateau Remediation Company
a Jacobs company

R. M. Geimer
Vice President for
K Basin Operations

March 2020
CHPRC-2020-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Sludge removal from the 105K West basin completed in fiscal year (FY) 2019. Documentation for the completion of the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-016-176 was submitted to the U.S. Department of Energy (DOE), Richland Operations Office (RL) in December. There was no significant progress in March, as the project is completing administrative closeout activities.

EMS OBJECTIVES AND TARGET STATUS

None currently identified.

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	0	9	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

None currently identified.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

None currently identified.

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

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)
Total	0.0	0.0	(0.0)	0.0	0.0%	0.0	0.0%

Numbers rounded to the nearest $0.1 million.

CM Schedule Performance ($0.0M/0.0%)
Variance is within threshold.

CM Cost Performance ($0.0M/0.0%)
Variance is within threshold.

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

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	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	759.6	759.6	729.8	(0.0)	-0.0%	29.8	3.9%	759.6	729.8	0.0	29.8

Numbers rounded to the nearest $0.1 million.

CTD Schedule Performance (-$0.0M/-0.0%)
The variance is within reporting thresholds.

CTD Cost Performance (+$29.8M/+3.9%)
The variance is within reporting thresholds.

Variance at Completion (+$29.8M/+3.9%)
The variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

RL-0012 Spent Nuclear Fuel Stabilization and Disposition	FY2020 Projected Funding	FY2020 Spending Forecast	FY2020 Variance
Spending Forecast	0.6	0.0	0.6

Numbers rounded to the nearest $0.1 million.

Funds/Variance Analysis

FY2020 funding for project breakdown structure (PBS) RL-0012 is $0.6 million. The projected funding includes carryover from FY2019 and new budget authority. The FY2020 spending forecast reflects early completion of the Sludge Retrieval and Transfer Project and aligns with the RL FY2020 Integrated Priority List.

Critical Path Analysis

All project scope is complete with the exception of closeout-related activities. The project completed Tri-Party Agreement Milestone M-016-176 ahead of the December 31, 2019, due date.

MILESTONE STATUS

The following table is a one-year look ahead of PBS RL-0012 Tri-Party Agreement enforceable milestones, nonenforceable target due dates and commitments.

Number	Title	Due Date	Forecast Date	Status/ Comment
M-016-176	Complete sludge removal	12/31/2019	09/11/2019(A)	Complete

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

None currently identified.

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

CH2MHILL
Plateau Remediation Company

a Jacobs company

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

T. L. Hobbes
Vice President for
River Risk Management Project

M. A. Wright
Vice President for Project Technical Services

March 2020
CHPRC-2020-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In the March reporting period (February 24 to March 22, 2020), the Waste and Fuels Management Project (W&FMP) maintained facilities in a safe and compliant condition. The River Risk Management Project continued to operate the Environmental Restoration Disposal Facility (ERDF) and the Integrated Disposal Facility (IDF) in a safe and compliant condition.

The following items were accomplished in March:

- The management of cesium and strontium capsule (MCSC) Project W-135, *Capsule Storage Area (CSA)*, general plant project construction subcontractor completed mobilization and commenced site preparation activities. Excavation for the storage pad and potholing for utility locations was initiated. The Washington State Department of Ecology (Ecology) issued the *Resource Conservation and Recovery Act of 1976* (RCRA) permit for the CSA.
- At the Waste Encapsulation and Storage Facility (WESF), G Cell shielding window refurbishment activities continued. The east window cleaning and polish was completed, and the window was reinserted into the G Cell opening. The west window was removed with cleaning and polish initiated. Installation of the new K2-7-1 exhaust fan motor onto the roof of the 225B Building was completed.
- At the Canister Storage Building (CSB), the crew completed the final phase of annual multi-canister overpack (MCO) sampling proficiency demonstrations using the MCO sampling mockup assembly.
- At IDF, development of responses to regulator and public comments on the RCRA application for a permit modification continued.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
20-EMS-WFMP-OBJ1-P1	Complete installation of the maintenance and storage facility (MASF) integrated testing mockup and demobilization.	Erect mockup structure and demobilization.	9/30/2020	0%
20-EMS-WFMP-OBJ2-P1	Receive three garnet filter shipments at T Plant.	T Plant Complex to receive three garnet filter shipments.	9/30/2020	0%
20-EMS-WFMP-OBJ3-P1	Repackage 400 m^3 of transuranic (TRU)/TRU mixed (TRUM) waste in preparation for certification/shipment to the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico.	Complete repackaging 400 m^3 of TRU/TRUM waste.	9/30/2020	42%
20-EMS-RRMP-OBJ1-P1	Track maintenance/recycling activities at ERDF e.g., used oil recycling, tires, batteries and product drums, etc.	On a quarterly basis, track the maintenance recycling activities of the ERDF subcontractor and CH2M HILL Plateau Remediation Company (CHPRC) transportation organization.	9/30/2020	25%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred (DART)	0	3*	*1 DART, Project Technical Services (PTS) in support of RL-0013 *1 DART, Mission Support Alliance, LLC in support of RL-0013.
Total Recordable Injuries	0	0	N/A
First Aid Cases	1	20	3/5/2020 – Employee was laying on back grinding the underside of a large frame. The employee felt a pop in their lower left back. The employee then crawled up out of the frame and notified the Field Work Supervisor. (25513)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

Waste and Fuels Management Project

13.01 Project Management

- CSA permit: Following the resolution of all comments, Ecology issued the final RCRA permit on February 20, 2020. The permit became effective on March 21, 2020.
- WESF Notice of Construction Application: On March 11, 2020, the Washington State Department of Health (DOH) issued the completeness determination for the Radioactive Air Notice of Construction Application for the WESF application to modify WESF from a major stack to a minor stack. The DOH plans to issue the license by May 10, 2020.

13.02 Capsule Storage and Disposition

- Continued with G Cell shielding window refurbishment activities. The east window cleaning and polish was completed, and the window reinserted into the G Cell opening.
- Completed run-in and testing of the new WESF K2-7-1 exhaust fan motor and placed the fan back in service.
- Performed recirculation and mid-volume sampling of Tank 100.
- Completed 40 preventative maintenance (PM) packages.

13.03 Canister Storage Building

- Completed sample cart component PCV-721 modifications. Post-maintenance testing is in progress.
- Completed the final phase of the annual MCO sampling proficiency demonstrations using the MCO sampling mockup assembly.
- Completed 29 PM packages.

13.06 TRU Repackaging

- Completed repackaging of 7.2 m^3 of TRU/TRUM waste for a total of 295.3 m^3 fiscal year to date (FYTD).

13.07 Waste Receiving and Processing (WRAP)

- Shipped one drum from WRAP to Stericycle.
- Completed 189 surveillances and 12 PM packages.

13.08 T Plant

- Completed Cell 14R annual sludge transfer and storage container weighing technical safety requirements and water addition consideration, cover block installation and TSR block gap measurements.
- Shipped one drum from T Plant to ERDF.
- Completed 461 surveillances and 36 PM packages.

13.09 Central Waste Center (CWC) and Low-Level Burial Grounds (LLBG)

- Shipped one 1800TL and one Super 7A loaded radioactive waste container from the CWC to Perma-Fix Northwest (PFNW) in two shipments for processing.
- Shipped one drum from LLBG to ERDF.
- Shipped six drums from CWC to ERDF in two shipments.
- Received five standard radioactive waste boxes and one drum containing processed waste from PFNW at CWC in two shipments.
- Completed 280 surveillances and 12 PM packages

13.15 TRU Disposition

- Continuing enhancement of acceptable knowledge on TRU waste streams.

13.16 Offsite Spent Nuclear Fuel Disposition

- Maintained coordination of offsite spent nuclear fuel disposition.

13.21 Mixed-Waste Disposal Trenches (MWT)

- Received 16 boxes from PFNW to MWT 31 in two shipments.
- Completed 169 surveillances.

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

- A CHPRC Project Review Board (PRB), charted by the CHPRC office of the president, was held to assess the readiness of Project W-135, *Waste Encapsulation & Storage Facility Modifications*, Capital Line Item (LI) 18-D-40 to submit a request for the U.S. Department of Energy (DOE), Richland Operations Office (RL) approval of Critical Decision (CD)-2, *Establish Project Baseline*, and CD-3, *Readiness to Start Construction*, as required by DOE O 413.3B, *Program and Project Management the Acquisition of Capital Assets*. A Technical Independent Project Review was performed as part of the PRB review. The PRB charter also included examining the adequacy of the integration of the entire MCSC Project scope due to the physical and safety interfaces between the LI Project and other MCSC Project scope, which included general plant project (GPP), operating expense, and capital equipment not related to construction-funded activities. The conclusion of the PRB, which was staffed by a mix of CHPRC, subcontractor, and Jacobs corporate personnel not involved in the project, was that they would endorse proceeding forward with the CD-2/3 package submittal to DOE once a small number of "prestart prior to CD-2/3 submittal" open items have been adequately resolved.
- With the support of PTS, the following progress was made on MCSC Project construction activities:
  - The Project W-135, *Capsule Storage Area*, GPP construction subcontractor completed mobilization and commenced site preparation and excavation activities. The subcontractor completed grubbing and clearing the operating pad and east side of the Capsule Storage Pad (CSP) sites and commenced excavation of operating pad and CSP sites.
  - Commenced planning for the 13.8KV distribution work scope associated with the WESF truckport utility relocation required to support the construction of Project W-135, *Waste Encapsulation & Storage Facility Modifications*, LI Project.
  - Continued primary structure and superstructure column and beam installation at the mockup located in the 400 Area MASF. Commenced bridge crane rail installation.

River Risk Management Project

13.10 Environmental Restoration Disposal Facility

- Received 7,186 tons of waste for disposal.
- Received 29,834 tons of waste for disposal FYTD. Any corrections in previous months are reflected in this total.
- Received 42 shipments (560 tons) of Plutonium Finishing Plant (PFP) Closure Project waste using the enhanced radiological controls during disposal operations.
- Disposed of 27 shipments or enhanced PFP place and cover material.
- Completed 26 special packaging authorization shipments from PFP to ERDF.

13.12 Integrated Disposal Facility

- Care and Custody
  - Completed March monthly inspections.
  - Completed quarterly inspections.
  - Completed one significant storm event inspection in March.
- IDF Operational Readiness
  - With the support of PTS, the following progress was made on installation of IDF infrastructure:
    - Completed grading activities of the waste receiving area.
    - Began receipt and installation of mobile offices.
    - Continued utility installation.

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

Issue
CHPRC submitted CHPRC-1901804, *Preliminary Documented Safety Analysis for the Capsule Storage Area*, to RL for review on May 13, 2019, and anticipated receiving approval 120 days later on September 12, 2019. Due to the extent and complexity of DOE-Headquarters (HQ) and RL comments, approval of the preliminary documented safety analysis (PDSA) did not occur on September 12, 2019, and that delay impacted initiation of CSA procurement/construction and cask storage system (CSS) procurement/fabrication.

Corrective Action
Submit an early procurement request to RL for approval to commence CSA procurement/construction and CSS procurement/fabrication prior to RL approval of the PDSA. CHPRC personnel continue to work with RL personnel to resolve outstanding comments.

Status

CHPRC submitted an early procurement request to RL for review and approval on October 21, 2019. RL subsequently authorized the procurement and construction of the CSA and early procurement of CSS universal capsule sleeves and transportable storage container baskets (reference 1905014/20-PFD-0003, dated November 26, 2019). RL is currently routing a second early procurement authorization letter for the transportable storage containers and vertical concrete casks as all RL PDSA review comments related to those components are satisfactorily resolved. CHPRC and RL personnel continue to work to resolve the balance of the outstanding PDSA comments. The forecast receipt of the second early procurement authorization has slipped one month since February reporting to fiscal month April. While this delay will defer the start of the associated procurements, it is not anticipated to negatively affect the overall completion of the MCSC Project.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

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

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

Increased Confidence
No Change
Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
Explanation of major changes to the project monthly stoplight chart: Risks WSD-W135-36, *MASF Mockup Construction Subcontractor Performance*, and WSD-135-37, *MASF Differing Conditions*, were added to the stoplight chart as realized risks in March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
13-RCRA-REV9-001: RL-13 - Additional Dangerous Waste Management Units (DWMUs)	Unplanned DWMUs are added to the scope, requiring additional document support, impacting the project in both cost and schedule. **Risk Handling Strategy**: Control **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $0, 48 days			**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 March. 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.
13-RCRA-REV9-003: RL-13 - Ecology Delays	Scope supported by Ecology is impacted by delays in Ecology review time that do not align with the permit management schedule. This issue requires that the project take recovery actions that result in schedule impacts. **Risk Handling Strategy**: Control **Probability**: Very likely (>90%) **Worst Case Impacts**: $0, 96 days			**Risk Event**: Ecology's review time is impacting the permit management schedule. **Risk Recovery Action(s)** / **FC Date** / **%**: Conduct routine meetings with Ecology and the contractor to promote communication efforts. / Ongoing / N/A **Recovery Action Assessment**: No significant changes in March. Select staff are prepared to respond to comments when they are received. 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>WSD-138: Regulatory Document (Closure Plan with Ecology) Results in Significant Comments from the Regulator</td><td>Significant comments from the regulator on closure plans submitted for approval results in nonapproval of the permit or rework, causing schedule impacts to the project.

Risk Handling Strategy: Control

Probability: Very likely (>90%)
Worst Case Impacts: $0, 96 days</td><td>  </td><td>  </td><td>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.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Use a standardized approach to quickly evaluate and categorize comments for resolution.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Conduct routine meetings to address agency comments and to remain current on the influences from agencies.</td><td>Ongoing</td><td>N/A</td></tr></table>
Recovery Action Assessment: No significant changes in March. RL informed Ecology that additional document revisions would not be completed at this time. The impacts associated with the realization of this risk are ongoing; as such, this risk will continue to be reported for visibility until it no longer poses a threat to the project. The project does not expect to resolve this realized risk within the current contract period.</td></tr>
<tr><td>WSD-CSA-015: Delays in PDSA/FHA Approval by DOE</td><td>A delay in DOE approval of the PDSA/Fire Hazard Analysis delays start of CSA construction.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impact: $0K, 96 days</td><td>  </td><td></td><td>Risk Event: CHPRC received DOE-HQ comments on the CSA PDSA that require additional analysis. Due to the time it has taken to resolve RL comments, the delay of PDSA approval impacted the start of CSA material procurement and construction.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Continue working with DOE-HQ to resolve the comments that may prevent RL approval of the CSA PDSA.</td><td>4/8/20</td><td>90</td></tr></table>
Recovery Action Assessment: No significant changes in March. Due to outstanding comments on the CSA PDSA, RL was unable to approve this document by the scheduled date of September 12, 2019. The RL federal project director and the CHPRC project manager agreed that submitting an early procurement request was appropriate and would minimize negative impact to the W-135 Project baseline. Approval of the early procurement request occurred via 1905014/20-PFD-0003 on November 26, 2019. In addition, the RL and CHPRC W-135 Project team are working to resolve outstanding CSA PDSA comments. Resolution of DOE-HQ comments is anticipated to lead to RL issuing a safety evaluation report (SER), approving the CSA PDSA currently forecast for June 2020, a one-month delay from the May forecast completion reported in February. RL review has been delayed due to higher priorities.</td></tr>
<tr><td>WSD-CSS-009: PDSA Comments Result in Schedule Delays</td><td>Comments on the PDSA received from RL are unable to be resolved within the allotted time frame provided in the baseline schedule, resulting in schedule delays.

Risk Handling Strategy: Control

Probability: Likely (75% to 90%)
Worst Case Impacts: $1.7M, 192 days</td><td>  </td><td>  </td><td>Risk Event: CHPRC received DOE-HQ comments on the CSA PDSA that require additional analysis of the CSS final design. Depending on the analysis results, the CSS final design may need to be modified. Additionally, delay of the PDSA approval could impact CSS procurement/fabrication.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Receive RL approval of CSS early procurement as requested via CHPRC-1904278.</td><td>4/5/20</td><td>80</td></tr><tr><td>Continue working with DOE-HQ to resolve the comments that may prevent RL approval of the CSA PDSA.</td><td>4/8/20</td><td>90</td></tr></table>
Recovery Action Assessment: Progress was achieved in March. Due to outstanding comments, RL was unable to approve the CSA PDSA by the scheduled date of September 12, 2019. The RL federal project director and the CHPRC project manager agreed that submitting an early procurement request was appropriate and would minimize negative impact to the W-135 Project baseline. Partial approval of the early procurement request occurred via 1905014/20-PFD-0003 on November 26, 2019. Remaining comments preventing full early procurement authorization have been resolved and a formal authorization letter for procurement of the balance of CSS equipment is anticipated in early April 2020. Resolution of DOE-HQ comments is anticipated to lead to RL issuing an SER, approving the CSA PDSA, currently forecast for June 2020, a one-month delay from the May forecast completion reported in February. RL review has been delayed due to higher priorities.</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-0013/WBS-013</td></tr>
<tr><td>WSD-W135-36: MASF Mockup Construction Subcontractor Performance</td><td>The MASF mockup construction contractor fails to perform per their proposal or fails to meet CHPRC expectations, leading to schedule delays.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $350K, 64 days</td><td>  </td><td>  </td><td>Risk Event: The MASF mockup construction contractor does not manage their subcontractors effectively and submits fabrication drawings that cannot be approved. Workmanship in the field is not adequate and results in Nonconformance Report (NCR) conditions that require rework.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Set clear expectations for quality of shop drawings.</td><td>Complete</td><td>100%</td></tr><tr><td>Work with construction contractor to expedite approval of shop drawings for fabrication.</td><td>Complete</td><td>100%</td></tr><tr><td>Provide additional oversight of apprentice employees.</td><td>Ongoing</td><td>75%</td></tr></table>
Recovery Action Assessment: Mockup construction contractor submitted fabrication drawings that were low quality and could not be approved. Multiple rounds of submittal review, comment, resubmit and review were necessary prior to authorization of shop fabrication of the structural steel, causing schedule delay. All shop drawings are now approved. Work in the field was performed using incorrect means and methods by apprentice employees without direct oversight, causing NCR conditions, which required rework, resulting in schedule delay. The contractor has implemented restrictions on performing work with certain tools and additional oversight of apprentice employees.</td></tr>
<tr><td>WSD-W135-37: MASF Differing Conditions</td><td>MASF mockup construction is impacted by a discovery that the actual configuration/as-found condition of MASF differs from assumed conditions.

Risk Handling Strategy: Control

Probability: Likely (75% to 90%)
Worst Case Impacts: $100K, 48 days</td><td>  </td><td>  </td><td>Risk Event: Extensive walk downs, drawing reviews and interviews with MASF personnel were performed prior to and during the design effort for the MASF mockup to ensure that the design for the mockup structure could be constructed accurately to replicate WESF conditions. During construction, differing as-found conditions were discovered (lead-based paint, uneven floor surface affecting levelness of the mockup structure).

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Incorporated lead abatement controls into a work package.</td><td>Complete</td><td>100%</td></tr><tr><td>Perform engineering evaluation of floor levelness and incorporate shims into drawings as required.</td><td>Complete</td><td>100%</td></tr><tr><td>Install shims as required.</td><td>Complete</td><td>100%</td></tr></table>
Recovery Action Assessment: Lead paint was discovered on an existing MASF structure that interfaced with the new WESF mockup structure. The lead-based paint on the structure was abated prior to cutting the structure in order to make the proper tie-in to the WESF mockup. The MASF floor was discovered to be uneven, affecting the levelness of the WESF mockup. The WESF mockup structure must be level in order for the future capsule transfer equipment to operate properly. Extensive shimming of the WESF mockup structure was performed in order to construct the structure.</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</td></tr>
<tr><td>WSD-097: Major Equipment Failure – T Plant</td><td>T Plant suffers a major equipment failure (crane, primary power supply, etc.), resulting in cost impacts and schedule delays.

Risk Handling Strategy: Control

Probability: Medium (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>Implement aggressive CM/PM program.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. 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.</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-0013/WBS-013</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td>WSD-CSS-006: Fabrication of the Equipment from the Contractor</td><td>Fabrication of critical items for the long-term storage of the Cs and Sr capsules does not go exactly as planned, resulting in design changes and rework.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $5M, 64 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: Fabrication of required equipment and items does not go according to schedule, requiring redesign or additional components that will affect the project's cost and schedule baseline. Fabrication is not currently anticipated until fiscal month June.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>The scope of each task will be reviewed prior to initiation to ensure that the contractor is aligned for the upcoming work. Contractor oversight is accomplished via weekly interface meetings and trips to the contractor's location for in-person interface meetings.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No changes in March. Procurement of transfer (including universal capsule sleeves) and ancillary equipment commenced in January 2020 following RL approval of the Task 5/6 and 9 consent packages. Fabrication is scheduled to commence in June 2020.</td></tr>
<tr><td colspan="5">FY2020 Key Risks</td></tr>
<tr><td>WSD-086: W&FM Industrial Accident or Contamination</td><td>An industrial accident or contamination event requires corrective actions.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $3M, 0 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: An industrial accident or contamination event requires corrective actions, resulting in cost impacts.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Adhere to CHPRC procedures, safety programs, and training programs that are designed to minimize the potential of worker injury.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Process 10 large waste boxes.</td><td>7/21/20</td><td>40</td></tr></table>
Mitigation Assessment: No significant changes in March. 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. Four large waste boxes have been processed in FY2020, reducing the risk of a contamination event.</td></tr>
<tr><td>WSD-125: 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 Solid Waste Operations Complex (SWOC) (excluding TRU retrieval activities) and requires additional resources to respond.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $5M, 0 days</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>Process waste packages at a rate funded by RL.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. This risk was identified as a key project risk for FY2020. Surveillances continue to be performed for the project to identify container and container cover abnormalities. The remaining containers will require surveillance and enhanced monitoring.</td></tr>
<tr><td>WSD-136: CWC/Waste Receiving and Processing (WRAP) Components Fail</td><td>CWC facilities and components may reach their end of life. These items will need to be replaced and/or repaired outside of planned funding profiles, resulting in cost impacts.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $4.1M, 0 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: Maintenance activities at CWC increase due to aging facilities.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Conduct floor repairs as necessary.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Conducting doorframe replacements and electrical equipment repairs as necessary.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Draft statement of work (SOW) for WRAP roof replacement.</td><td>4/23/20</td><td>90</td></tr></table>
Mitigation Assessment: No significant changes in March. This risk was identified as a key project risk for FY2020. The WRAP roof was analyzed for structural integrity following water intrusion. There was insufficient basis for the roof's integrity, which will lead to an eventual roof replacement. A statement of work for the roof replacement design will be drafted this year. The master documented safety analysis container stacking requirements are complete. Maintenance work at CWC will be scheduled based on facility work priorities.</td></tr>
</table>

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
WSD-140: As-Found-Unknown Conditions - W&FMP Facilities	Unknowns, as found or emergent conditions, impact the operability of one or more W&FMP facilities, requiring recovery actions that result in in-scope unplanned work. **Risk Handling Strategy**: Accept **Probability**: Medium (26% to 74%) **Worst Case Impacts**: $2M, 0 days			**Risk Trigger Metric**: Unknowns, as found or emergent conditions impact the operability of one or more W&FMP facilities, requiring recovery actions that result in in-scope unplanned work. **Mitigation Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment**: No significant changes in March. This risk was identified as a key project risk for FY2020. This risk is an accepted risk, as the project cannot mitigate for unknown conditions. The probability level was decreased from likely to medium based on current project status.
WSD-144: Changes to Ecology Strategy	Ecology issues a permit that significantly differs from planned scope, resulting in both cost and schedule impacts to the project. **Risk Handling Strategy**: Control **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $10M, 192 days			**Risk Trigger Metric**: Ecology issues a permit that does not align with CHPRC's plans. RL does not appeal the permit, causing CHPRC to incorporate all permit requirements. **Mitigation Action(s)** / **FC Date** / **%** Continuous communication and routine meetings to address agency comments. / Ongoing / N/A Periodic meetings with RL to discuss the impacts of Ecology decisions. / Ongoing / N/A **Mitigation Assessment**: No significant changes in March. This risk was identified as a key project risk for FY2020. W&FMP personnel continue to meet routinely with Ecology to resolve comments on permit addenda and preclude issuance of a draft permit different in scope than anticipated. The risk probability was increased to reflect current project status.
WSD-CSA-006: Delays Associated with Temporary Authorization	Delays are experienced while awaiting Ecology approval of the temporary authorization (TA) for CSA construction, thereby impacting the schedule. **Risk Handling Strategy**: Control **Probability**: Low (10% to 25%) **Worst Case Impacts**: $0, 96 days			**Risk Trigger Metric**: Ecology is not successful at issuing the RCRA Part B Permit or the TA prior to the March 1, 2020, construction start date. **Mitigation Action(s)** / **FC Date** / **%** Continued communication with Ecology to facilitate the early approval of the TA. / Ongoing / N/A **Mitigation Assessment**: This risk has been identified as a key risk for FY2020. The CSA RCRA Part B Permit went into effect in March. This risk is no longer a threat to the project and has been closed. It will be removed from the stoplight chart prior to April reporting.
WSD-CSA-013: 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**: Medium (26% to 74%) **Worst Case Impacts**: $100K, 48 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. CSA construction is forecast to commence in March 2020. **Mitigation Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment**: No significant changes in March. This risk has been identified as a key project risk for FY2020. This risk has been accepted, as the project has taken great precaution to plan the location of the CSA away from any potential contamination. In the unlikely event that contamination is detected within the CSA site location, project costs and a schedule delay will be accepted, and shipping the contaminated soil to ERDF for disposal will proceed.
WSD-W135-31: Canyon Crane Non-Functional/ Not Serviceable	The WESF crane is put back into limited usage for the W-130 Project; however, the crane is found to be unserviceable or fails during the W-135 construction and or operational activities. **Risk Handling Strategy**: Control **Probability**: Medium (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. / 08/31/20 / 0 Procure critical spares. / 9/30/21 / 0 **Mitigation Assessment**: No significant changes in March. This risk has been identified as a key risk for FY2020. Facility personnel will complete crane PMs in FY2020. Critical spares will be evaluated and procured prior to the end of FY2021.

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
WSD-IDF-11: Discovery of Unplanned Site Conditions	Unexpected site conditions are encountered during soil excavation activities, resulting in recovery actions. **Risk Handling Strategy**: Accept **Probability**: Low (10% to 24%) **Worst Case Impacts**: $240K, 16 days			**Risk Trigger Metric**: During excavation activities within the established Waste Information Data System site, the project encounters unplanned contamination, debris, legacy waste (drums) or utilities. **Mitigation Action(s)** / **FC Date** / **%** Site walk downs as needed. / Ongoing / N/A Review of historical as-built drawings. / Complete / 100 Radiological surveying, as needed. / Ongoing / N/A **Mitigation Assessment**: This risk has been identified as a key project risk for FY2020. Detailed reviews of existing drawings, site walk downs and continuous site radiological surveys throughout excavation efforts are being executed as best practices, and included in the baseline; therefore, this risk is accepted with residual probability and consequences.
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified in March.				

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	13.9	18.9	18.8	5.1	36.7%	0.2	0.9%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Performance (+$5.1M/+36.7%)

The CM positive schedule variance is due to March baseline change request (BCR) BCR-013-20-009R0, *Revise W-135 CSA Schedule to Align with Subcontract Award*, which implemented the CSA construction contractor's schedule to allow for more accurate reporting of performance, resulting in a current period adjustment. In addition, March BCR-013-20-101R0, *Cask Storage System Fabrication Schedule Incorporation*, implemented the CSS subcontractor's schedule resulting in a current period adjustment. Also contributing was an early start on progress for CSS material receipt in the current period.

The CM positive schedule variance is schedule recovery due to IDF mobile office installation being planned over a six-month duration, but performance accounted for only after being received. The current period experienced delivery and partial assembly of the six-wide and two-wide mobile offices.

CM Cost Performance (+$0.2M/+0.9%)

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	1,566.4	1,561.7	1,477.7	(4.8)	-0.3%	83.9	5.4%	1,681.2	1,596.4	118.7	84.8

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance (-$4.8M/-0.3%)

The CTD schedule variance is within threshold.

CTD Cost Performance (+$83.9M/+5.4%)

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 (CAS) 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 (SWITS).

Variance at Completion (+$84.8M/+5.0%)

The favorable VAC is primarily the 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/radiation area monitors 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 the SWOC.

- Reducing dedicated resources for CAS 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 SWITS.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

	FY2020		
RL-0013 Solid Waste Stabilization and Disposition	**Projected Funding**	**Spending Forecast**	**Variance**
Waste Stabilization and Disposition	202.7	201.4	1.3
Management of Cesium and Strontium Capsules (Line Item)	14.3	0.8	13.5
RL-0013 – Total	217.0	202.2	14.8

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis

The current FY2020 projected funding level of $217.0 million reflects the final FY2020 project management baseline annual update submitted to RL in September FY2019, with updates through fiscal month March, to include a $3.9 million increase in February to align the funding with the RL Assistant Manager for River and Plateau FY2020 execution Integrated Priority List, Revision 2A. Line item funding reflects FY2019 carryover and FY2020 new funding targets. The spending forecast of $202.2 million reflects a decrease of approximately $1.2 million from February, primarily due to scope that pushed into FY2021 due to schedule delays, as well as labor and usage based service reductions to align with trending.

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-091-03N	TPA M-091-03N Submit Revision of TRUM Waste and Mixed Low-level Waste to Ecology	9/30/2020		9/30/2020	On schedule
M-091-44T	Submit Change Request to Establish Schedule for Achieving Offsite Shipment of All TRUM Waste	9/30/2020		9/30/2020	On schedule
M-091-49A	Submit a Change Request to Establish a Schedule for Achieving the Retrieval of RSW	9/30/2020		9/30/2020	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-HQ on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the Carlsbad Field Office.	No WIPP shipments are planned within the remaining contract period of performance.

DOE ACTIONS/DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
CSA – RL: Review/Approve PDSA (first FY)	5/16/2019(A)	6/15/2020
RL Review WESF Safety Design Strategy Revision 3	3/24/2020	4/29/2020
RL Approve IDF Final Hazard Categorization	6/2/2020	6/16/2020
RL Review of Project W-135, WESF Modifications, CD-2/CD-3 Documentation	6/8/2020	10/9/2020

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

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

M. A. Wright
Vice President for
Project Technical
Services

March 2020
CHPRC-2020-03 Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress continued in March on the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) remedial process documentation for the River Corridor and Central Plateau. The project team continued to operate groundwater pump and treat (P&T) facilities in a safe and compliant manner. Groundwater treatment and well drilling (including development) that was completed includes the following:

Treatment Facility	Million Gallons Treated		Chrome (kg)		Carbon Tet (kg)		Tech-99 (pCi)		Uranium (kg)	
	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD	CM	FYTD
DX (P&T)	32.4	182.7	1.8	10.1						
HX P&T	19.4	131.7	2.6	18.4						
KR-4 P&T	13.2	74.7	0.2	0.6						
KW P&T	13.1	77.1	0.6	7.7						
KX P&T	36.7	228.9	2.3	12.5						
200 West P&T	98.8	614.8	0.2	3.0	183.0	1,004.0	1.11×10^{11}	8.44×10^{11}	4.4	49.2
Combined	**213.5**	**1,309.8**	**7.6**	**52.3**	**183.0**	**1,004.0**	1.11×10^{11}	8.44×10^{11}	**4.4**	**49.2**
FY2020 Gold Metric	--	**2,200.0**	--	**80.0**	--	**1,800.0**	--	**N/A**	--	**90.0**

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

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

EMS Objectives and Target Status

Objective Action Plan #	Objective	Due Date	Status
20-SGRP-OBJ-1-P1	With the suspension of biological treatment, carbon tetrachloride concentrations will be monitored in the air emissions for measuring granulated activated carbon loading and meeting regulatory limits.	7/30/2020	50%
20-SGRP-OBJ-2-P1	The number and types of spills at the Soil and Groundwater Remediation Project (S&GRP) will be tracked, the workforce will be briefed on spill prevention, and if needed, a plan for reducing spills will be created.	9/30/2020	26%
20-SGRP-OBJ-3-P1	S&GRP operates six P&T facilities that remove contaminants from groundwater at the Hanford Site. The goal is to treat and remediate a total of 2.2 billion gallons of groundwater.	9/30/2020	60%
20-SGRP-OBJ-4-P1	Utilization of the new Centralized Groundwater CERCLA Waste Storage Area will lead to simplification of waste management and reduction in greenhouse gas emissions from operations vehicles.	9/30/2020	46%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	3	N/A
First Aid Cases	0	7	N/A
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

River Corridor

100-HR-3 Operable Unit (OU)

- Completed drilling the first of nine 100-HR-3 wells; construction and development of the first well is ongoing.

100-KR-4 OU

- Completed winter operation of the KW groundwater infiltration gallery and resumed normal P&T operations on March 10, 2020, with concurrence from the U.S. Department of Energy (DOE), Richland Operations Office (RL). Completion of winter operations concluded Phase 2 of the soil flushing treatability test. The total volume of water sent to the infiltration gallery between May 28, 2019 and March 10, 2020 was about 60 million gallons.
- Completed the final two of three planned wells within the 100-KR-4 OU on March 9, 2020.

100-NR-2 OU

- Provided the Interim Action Waste Management Plan for the 100-NR-2 Operable Unit, DOE/RL-2000-41, Revision 2 Decisional Draft to RL for review.
- Provided a revised Technical Impracticability (TI) waiver portion of the Draft B remedial investigation/feasibility study (RI/FS) (DOE/RL-2012-15, *Remedial Investigation/Feasibility Study for the 100-NR-1 and 100-NR-2 Operable Units)* to RL for review.

300-FF-5 OU

- Completed an internal draft and initiated an internal review of the 300-FF-5 Stage B STOMP and Geophysical model Environmental Calculation Files.
- Initiated the preparation of Chapter 6 of the 300-FF-5 Stage B uranium sequestration completion report and began assembling all report chapters and appendices in preparation for internal review.

Central Plateau

200-BP-5/PO-1 OUs

- Received U.S. Environmental Protection Agency (EPA) Headquarter administrator approval to issue the proposed plan for the interim action 200-BP-5/PO-1 Groundwater OUs. The proposed public review is May 4, 2020, through June 8, 2020.
- Provided the 200-BP-5/PO-1 Sampling and Analysis Plan (SAP) for drilling interim action wells to RL for review on March 16, 2020.

200-ZP-1 OU

- Received agreement from EPA on the proposed analytical approach and Data Quality Objective (DQO) steps 5-7 for the 200-ZP-1 OU Optimization SAP on March 23, 2020.

200-CP-1 OU

- Established the main points and issues that will be addressed on a chapter-by-chapter basis in a storyboarding session for the RI/FS work plan with RL on March 16, 2020.

Groundwater Sciences

- Prepared the internal review draft of the *Hanford Site Groundwater Report for 2019* (DOE/RL-2019-66). The report will undergo internal review starting in late March 2020.
- Prepared the internal review draft sections of the 100 Area and 200 Area P&T reports for 2019. The internal drafts will undergo internal review in early April 2020.

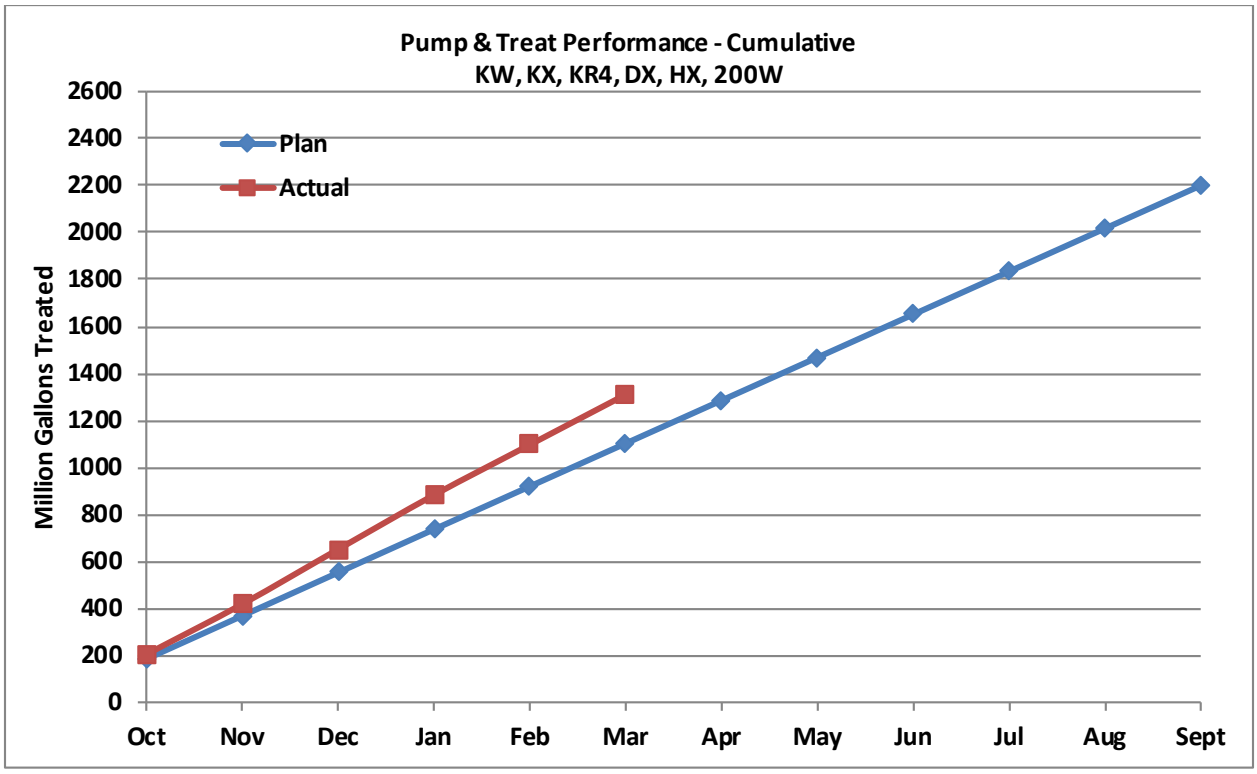
Groundwater P&T Facilities

200 West P&T

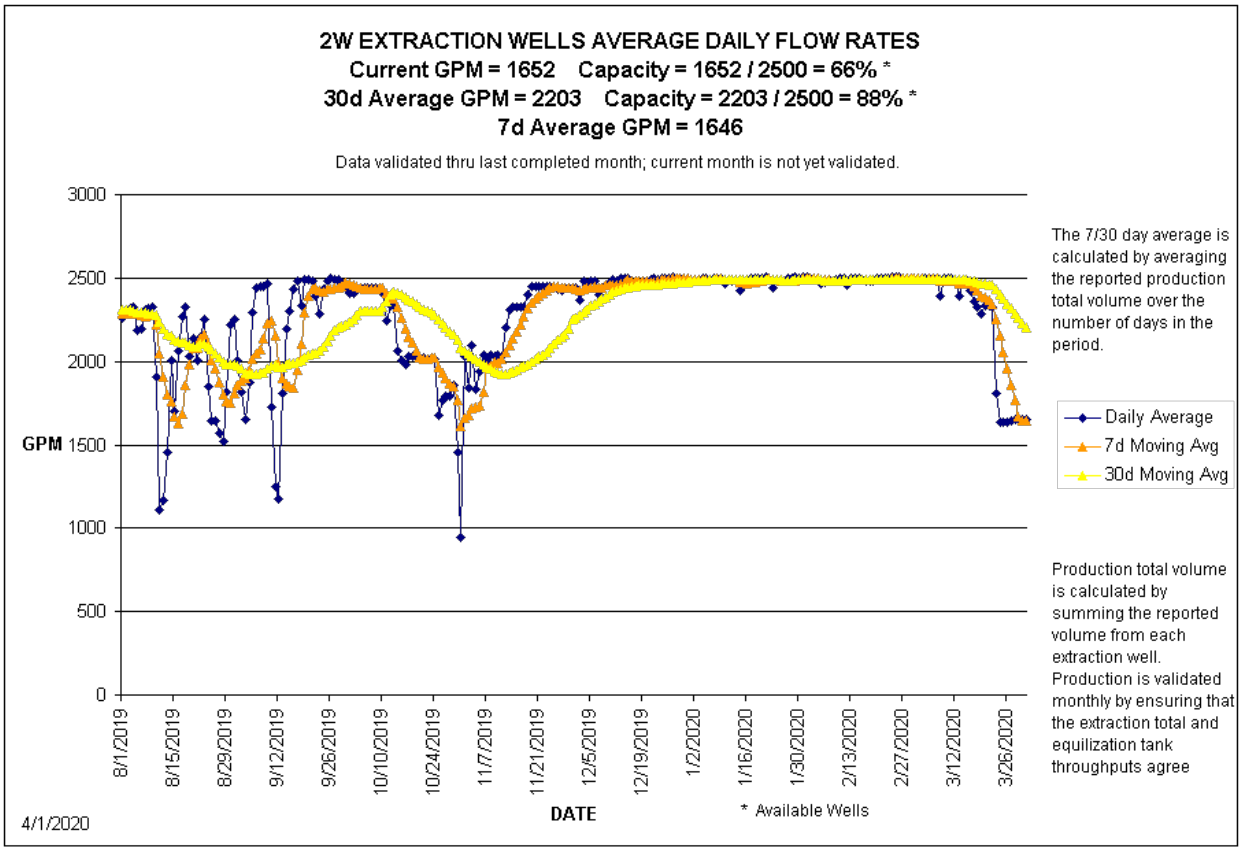
- Operated the 200 West P&T at an average of 1,650 gallons per minute (gpm).
- Continued progress on activities supporting the optimization at the 200 West P&T.
  - The first phase of construction for the air stripper installation was completed in March. This phase ran HDPE from the location of the future air stripper at 200W P&T to Injection Transfer Building 2, including a road crossing, a pipe vault and major piping supports.
  - Continued progress on the development, review and approval of system work packages supporting nitrate treatment system optimization.

100 Area P&Ts

- Operated the DX P&T at 726 gpm, below the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 295 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 293 gpm, below the facility capacity of 330 gpm.
- Operated the KX P&T at 821 gpm, below the facility capacity of 900 gpm.
- Operated the HX P&T at 436 gpm, below the facility capacity of 900 gpm.



FY2020 P&T Operations



200 West P&T Operations

MAJOR ISSUES

None.

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: The following updates where made to the monthly stoplight chart: 1. Risk recovery actions and assessments where updated for the (4) 216 Closure Plan risks to reflect the updated risk posture as of fiscal month March. 2. Risk *SGW-009: Key Environmental Modeling Hardware Failure* was moved from the realized risk section down to the fiscal year (FY) 2020 key risk section to continue tracking the progress toward implementing a virtual server as a valid mitigation action. 3. Risk *SGW-170: Lack of Qualified Drilling Contractors* probability was reduced from medium to low to reflect FY2020 second quarter risk posture.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
SGW-216B-02: 216-B-63 Closure Plan Atypical Comments	Atypical 216-B-63 comments result in multiple rounds of comment resolution that require additional effort and duration. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $174.0K, 80 days			**Risk Event**: RL's 216-B-63 Closure Plan comments provided in June 2019 requested removal of the pipeline for consistency with the 241-CX Tank System Closure Plan and because they were being addressed in the 200-IS-1 OU. CH2M HILL Plateau Remediation Company (CHPRC) was coordinating with both RL and the Washington State Department of Ecology (Ecology) to resolve this comment 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**: Ecology concurrence on language for the 216-B-63 Closure Plan is anticipated in April 2020. Similar comments on other closure plans will be addressed in the same approach as decided in this closure plan. Once resolution on 216-B-63, 216-S-10 and 216-A-29 is achieved, CHPRC will pursue certification.
SGW-216S-01: 216-S-10 Closure Plan Atypical Comments	Atypical 216-S-10 comments result in multiple rounds of comment resolution that require additional effort and duration. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $174.0K, 80 days			**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 their "confirm comment capture" task. Additional comments were received via the 216-B-63 Closure Plan review. **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 initiated comment resolution based on the approach agreed to by RL and Ecology for completing the 216-B-63 Closure Plan comments. If additional Ecology comments are not identified, comment resolution is expected to complete by mid-May.

<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>SGW-216A-01:
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: Likely (75% to 90%)
Worst Case Impacts: $174.0K, 80 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 also with an informal statement that the other certified or frozen closure plans may also need to be revised according.

<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: The resolution of comments for 216-B-63, and the description for conveyances in 216-B-3, will likely cause the need for revision of the currently frozen 216-A-29 Closure Plan. These revisions are needed to provide consistency between 216-B-63, 216-B-3, 216-A-29 and 216-S-10 Closure Plans, as all four closure plans will be certified in one package. Text revisions for the 216-A-29 ditch are expected to complete by mid-May.</td></tr>
<tr><td>SGW-KR4-05:
FS (Feasibility Study) – Greater Than Expected Comments from RL or Regulators</td><td>Atypical RL or regulator review comments result in multiple rounds of comment resolution and/or are global in nature, requiring additional time for comment incorporation and/or rework.

Risk Handling Strategy: Control

Probability: Likely (75% to 90%)
Worst Case Impacts: $120.0K, 48 days</td><td>  </td><td>  </td><td>Risk Event: Early collaborative reviews of the decisional draft FS by the EPA has resulted in a change of approach in the alternatives evolution that created rework of the FS during preparation of the Draft A version.

<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Develop a standardized approach to quickly evaluate and categorize comments for resolution.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Conduct routine meetings to address agency comments and to remain current on the influences from agencies.</td><td>Ongoing</td><td>N/A</td></tr></table>
Recovery Assessment: No significant changes in March. Continue collaborating with EPA to help reduce the number of comments during their review.</td></tr>
<tr><td>SGW-ZP1-03:
Air Stripper Phase 1 Installation Design Maturity</td><td>Air Stripper Phase 1 installation final design is more complex than planned, resulting in increased project cost.

Risk Handling Strategy: Accept

Probability: Very Likely (>90%)
Worst Case Impacts: $2,400K, 0 days</td><td>  </td><td>  </td><td>Risk Event: Phase 1 installation design matures and the project experiences in-scope, unplanned work resulting in significant cost growth in FY2020.

<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>None identified at this time.</td><td>N/A</td><td>N/A</td></tr></table>
Recovery Assessment: The Phase 1 installation activity was added to the performance measurement baseline without identifying discrete scope. Design activities have progressed enough to determine that Phase 1 must include preparatory fieldwork, receipt of tower and bolt to ground. The forecast cost based on the clarified requirements is $2.2 million over budget. No mitigation actions have been identified; however, the current forecast underrun in the stripper tower procurement offsets the anticipated overrun in installation. Since no viable recovery actions have been identified, the realized risk posture will be accepted, and this risk will be removed from the stoplight chart, in the next reporting period.</td></tr>
<tr><td>SGW-169-ZP1:
ZP1 – Increase in Sampling & Analysis Requirements</td><td>Increased sampling requirements due to additional analysis requests or changes from the DQO/Sample Analysis Plan for the five planned 200-ZP-1 extraction wells and two planned Ringold A monitoring wells.

Risk Handling Strategy: Accept

Probability: Very Likely (>90%)
Worst Case Impacts: $510K, 0 days</td><td>  </td><td></td><td>Risk Event: Additional characterization was identified during the DQO/SAP development process for the Ringold A monitoring wells and 200-ZP-1 extraction wells. Additional characterization is needed to adequately understand the subsurface conditions.

<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>None identified at this time.</td><td>N/A</td><td>N/A</td></tr></table>
Recovery Assessment: The characterization SAPs have been finalized, and this risk has been realized. The estimate to complete has been revised to reflect the anticipated increase in sampling costs; therefore, this risk will be removed from the stoplight chart in the next reporting period and tracked within the risk database.</td></tr>
</table>

Risk Title	Unmitigated Risk Impacts	Assessment Month	Assessment Trend	Comments
RL-0030/WBS-030				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)				
No Critical Risks identified in March.				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No High Risks identified in March.				
FY2020 Key Risks				
SGW-009: Key Environmental Modeling Hardware Failure	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**: Medium (26% to 74%) **Worst Case Impacts**: $350K, 25 days			**Risk Event**: A primary node of the Gaia Environmental modeling super computer server fails. This failure results in delays to Composite Analysis and Cumulative Impact Evaluation (CIE) work activities, and requires the purchase and validation of new components. **Mitigation Action(s)** / **FC Date** / **%** Implement the use of a virtual server for modelling activities. / TBD / 0 **Mitigation Assessment:** Mitigation action that is being pursued is the use of a virtual server to prevent the impact of future system component failures. Once a viable mitigation action is agreed upon between stakeholders, this risk will be removed from the stoplight chart.
SGW-BP5-02: BP5 – IX Skid Uncertainty	Installation design differs from planning assumptions, causing impacts to cost and schedule. **Risk Handling Strategy**: Accept **Probability**: Likely (26% to 74%) **Worst Case Impacts**: $1,226.9K, 12 days			**Risk Event**: RL has expressed a desire for an effluent concentration as low as reasonably possible (less than maximum contaminant level and previous targets). This request may result in design changes that differ from the planning assumptions. The design is 98 percent complete, so the outcome of the desired design changes may require rework and result in design criteria that is more expensive and takes longer than planning assumptions. **Mitigation Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment**: Weekly meetings are being held with RL to work through revised design requirements. The design has not been finalized due to pending DOE comments.
SGW-170: Lack of Qualified Drilling Contractors	Availability of qualified drilling bidders to perform the FY2020 drilling scope becomes hindered, resulting in cost and schedule impacts. **Risk Handling Strategy**: Accept **Probability**: Low (10% to 25%) **Worst Case Impacts**: $1,509.7K, 0 days			**Risk Event**: Due to an exodus in the nuclear environmental remediation business, qualified drilling contractors are difficult to find, resulting in higher subcontracting cost or potential impacts to performing work within schedule. **Mitigation Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment**: Drilling subcontracts for FY2020 have been released with no significant cost impacts. One drilling subcontract remains to be issued with no anticipated impacts; therefore, this risk is considered low threat and will be removed from the stoplight chart next reporting period.
SGW-171: Increase in Routine Sampling & Analysis Requirements	Sampling and characterization requirements increase above planning assumptions due to changes from DQO/SAP sessions and/or other requested changes to analyses, resulting in cost impacts. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $1,792.0K, 0 days			**Risk Event**: During review of the completed SAPs for multiple well locations, it is determined that an increase in the number of samples or complexity of sample type is above the baseline planning. **Mitigation Action(s)** / **FC Date** / **%** None identified at this time. / N/A / N/A **Mitigation Assessment**: No significant changes in March. Although a Sampling Change Board has been formed to review and validate the sampling requirements for optimization, some of the SAPs were not completed during development of the FY2020 baseline budget. For that reason, budgets may not reflect required sampling, and in-scope unplanned work may not be mitigated.
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified in March.				

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	10.2	10.0	8.0	(0.2)	-2.2%	2.0	19.9%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Performance (-$0.2M/-2.2%)
The current period schedule performance is within reporting thresholds.

CM Cost Performance (+$2.0M/+19.9%)
The CM favorable cost variance is due to the delivery of the 200 West Area Groundwater P&T Facility air stripper package raw materials from the subcontractor for less than planned. The fixed price contract for air stripper support was awarded for much less than the previous stripper tower procurement, which was used as a cost basis for the current work. In addition, the CIE execution team experienced a positive cost variance by performing like activities supporting the Hanford Site Disposition Baseline and Scenario Generator and Saturated Zone Transport Grid Resolution simultaneously, generating an economy of scale.

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	1,686.5	1,681.7	1,630.3	(4.8)	-0.3%	51.4	3.1%	1,756.2	1,702.9	72.6	53.3

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance (-$4.8M/-0.3%)
The CTD negative schedule variance is within reporting thresholds.

CTD Cost Performance (+$51.4M/+3.1%)
The CTD positive cost variance is within reporting thresholds.

Variance at Completion (+$53.3M/+3.0%)
The variance at completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

RL-0030 Soil and Groundwater Remediation	FY2020 Projected Funding	FY2020 Spending Forecast	FY2020 Variance
Spending Forecast	126.0	117.2	8.8

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis

Projected fiscal year FY2020 funding in March is $126 million, an $8.8 million decrease from last month. The funding change directed by RL aligns funding with the DOE Assistant Manager for River and Plateau FY2020 Execution Integrated Priority List (IPL) Revision 2A. The spending forecast of $117.2 million reflects a reduction of $6.8 million from last month, primarily for fee moved to project breakdown structure (PBS) RL-0040 to support funding shortfalls within the Central Plateau control point.

Critical Path Analysis

Critical path analysis will be provided upon request.

MILESTONE STATUS

The following table is a one-year look ahead of PBS RL-0030, *Hanford Federal Facility Agreement and Consent Order* (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 dispute resolution
M-015-98	Complete Remedial Investigation of U Plant Related Waste Sites located in 200-WA-1	6/30/2019		TBD	In dispute resolution
M-085-70	Submit to Ecology a Remedial Investigation/Feasibility Study Work Package for 200-CB-1	9/30/2019		TBD	In dispute resolution
M-015-99	Complete Remedial Investigation of Plutonium Finishing Plant (PFP) Related Waste Sites Located in 200-WA-1	12/31/2019		TBD	In dispute resolution
M-024-58M	Initiate Discussions of Well Commitments	6/1/2020		6/1/2020	On schedule
M-024-71-T01	Conclude Discussions of Well Commitments Initiated under M-024-58	8/1/2020		7/30/2020	On schedule

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-085-80	Submit Remedial Investigation/Feasibility Study Work Plan for 200-CP-1 to Ecology	9/30/2020		9/28/2020	On Schedule
M-015-112	Submit Draft B 200-IS-1 RFI/CMS/RI/FS Work Plan to Ecology with Schedule Dates	11/30/2020		1/25/2022	At risk
M-016-110-T02	Take Actions Such that Hexavalent Chromium Meets Drinking Water Standards	12/31/2020		12/31/2020	On schedule
M-016-119-T01	Operational System in Place to Contain GW Plumes in 200 NPL Area	12/31/2020		10/23/2020	On schedule
M-024-71	Complete the Construction of All Wells Listed for CY20 and Before	12/31/2020		12/31/2020	On schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS*

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review of 200-BP-5 Waste Management Area (WMA) C Drilling SAP Draft	3/16/2020A	4/15/2020
RL and Ecology Review of Low-Level Burial Ground WMA 2 Engineering Evaluation Report Regulator Review Draft	3/23/2020	4/10/2020
RL Review of Biomobilization/Biointrusion Root Characterization Decisional Study Plan	3/28/2020	4/26/2020
RL Review DOE/RL-2009-124, 200-ZP-1 Operations and Maintenance (O&M) Plan - Remove Bio Treatment, Decisional Draft, Revision 6	4/1/2020	4/8/2020
RL Review DOE/RL-2009-124, 200-ZP-1 O&M Plan - Remove Bio Treatment, Decisional Draft, Revision 6	4/10/2020	05/24/2020
RL Review of Draft Annual Groundwater Report	4/10/2020	05/9/2020
RL and Ecology Review of the Draft West Groundwater Monitoring Plan in Support of *Resource Conservation and Recovery Act of 1976* (RCRA), Revision 9 Permit Modification	4/13/2020	04/24/2020
RL Transmit Central Plateau Tracer Study Sample Analysis Plan (SAP) Draft, Revision 0 to Regulators for Review	4/16/2020	04/16/2020
RL Transmit 100-HR-3 Remedial Design (RD)/Removal Action Work Plan (RAWP) Draft, Revision 0 to Regulators for Review	4/21/2020	04/21/2020
RL Review of 100-D/H Waste Site Closeout Package B	4/27/2020	05/07/2020
RL Review of KW Soil Flushing Treatability Test Report Decisional Draft	5/7/2020	06/5/2020
RL Transmit 100-KR-4 FS Draft B for EPA Review	5/7/2020	05/21/2020
RL Review of Draft 100 Area P&T Annual Report	5/15/2020	6/13/2020
RL Review of 100-D/H Waste Site Closeout Package C	5/20/2020	6/3/2020

Description	CHPRC Delivery Date	Expected RL Due Date
RL Transmit 200-UP-1 Performance Monitoring Plan, Revision 1 to EPA for Approval	5/20/2020	5/26/2020
RL Transmit 200-BP-5 WMA C Drilling SAP Draft A to Regulator for Review	5/21/2020	6/3/2020
RL Review of 100-KE Soil Flushing Explanation of Significant Difference Draft	5/22/2020	6/20/2020
RL Review of 100-KR-4 FY21 Drilling SAP Addendum Draft	5/22/2020	6/20/2020
RL Review of Draft 200 Area P&T Report	5/22/2020	6/20/2020
RL Transmit 200-ZP-1 O&M Plan Draft A to EPA for Review	5/25/2020	6/8/2020
RL Transmit 100-KR-4 RI, Revision 0 to Regulators for Review	5/27/2020	6/8/2020
RL Certify and Submit to Ecology 216-S-10 Pond and Ditch Addendum	5/27/2020	6/9/2020
RL Transmit 200-EA-1-RI/FS Work Plan Draft, Revision 0 to Regulators for Review	5/29/2020	6/11/2020
RL Review of 100-KR-4 Waste Management Plan, Revision 7	6/5/2020	7/4/2020
RL Transmit Final 100-HR-3 RD/RAWP, Revision 0 to Ecology	6/9/2020	6/23/2020
RL and Ecology Concurrent Review of the Draft East Single-Shell Tank Groundwater Monitory Plan in Support of RCRA, Revision 9 Permit Modification	6/9/2020	6/22/2020
RL Transmit Draft Revision I RD/RAWP to Regulators for Check Review	6/10/2020	6/23/2020
RL Review Technical Implacability Applicable or Relevant and Appropriate Requirement Waiver Request Document, Decisional Draft	6/16/2020	7/15/2020
RL Approve 100-HR-3 RD/RAWP, Revision 0	6/23/2020	6/23/2020
RL Transmit KW Soil Flushing Treatability Test Report to EPA for Review	6/26/2020	6/29/2020
RL Review 200-BP-5/200-PO-1 IA RD/RAWP, Decisional Draft	7/7/2020	8/5/2020
RL Transmit 100-KE Soil Flushing Explanation of Significant Differences Draft to EPA for Review	7/8/2020	7/22/2020

*This table identifies key DOE actions/decisions only.

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

CH2MHILL
Plateau Remediation Company
a Jacobs company

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

March 2020
CHPRC-2020-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Central Plateau Risk Management (CPRM) crews abated 438 feet of steam line asbestos insulation and loaded out the equivalent of 141 feet of steam line waste in the 200 East Area. At the 224B Facility, personnel completed the electrical investigation and subsequent cold and dark work package. At Plutonium Uranium Extraction Plant (PUREX) North, crews completed electrical isolations on 2701AB and mechanical isolations on 214A and 2714A. Personnel submitted the Time Critical Removal Action (TCRA) to temporarily stabilize 216-Z-9, 241-Z-361, and 216-Z-2 in the 200 West Area. At Reduction and Oxidation (REDOX), crews completed installation of walkways to the loading dock and CONEX boxes, as well as completed ground and topography surveys for excavation of the air tunnel. Finally, crews performed electrical investigations to ensure electrical safety on 10 facilities on the Central Plateau.

EMS Objectives and Target Status

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

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	0	14	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

REDOX Canyon Risk Mitigation

- Completed double-wide and shower trailer connections.
- Installed double-wide door in the new step-off pad (SOP) trailer.
- Completed the removal of obstructions on the loading dock on the west end of REDOX to support the entry/exit pathway into building from the SOP trailer.
- Built framework for the entry/exit pathway that leads from the SOP trailer to REDOX.
- Placed four CONEX boxes in the north yard at REDOX to support the SOP trailer.

- Finalized and approved the work package for the subcontractors to perform the delivery road and concrete slab work to support the future delivery of the temporary exhaust system at REDOX.
- Completed ground scans and topography surveys to support the excavation to expose the wind tunnel and construct a waste ramp to the north side of REDOX.

224B Facility Demolition Preparation

- Completed installation of additional personnel trailers at B Plant.
- Completed installations of the Hanford Local Area Network and office equipment for personnel trailers MO1106 and MO2181.
- Completed the 224B Facility electrical cold and dark work package to allow for electrical isolation of the facility.

PUREX North

- Completed electrical isolation index for 2701AB.
- Completed mechanical isolation index for 214A and 2714A. Isolations are complete and will need to develop Validation of Hazardous Energy Isolations.
- Modified radiological postings, established radioactive material area for Environmental Restoration Disposal Facility waste loadout and set up the SOP to support 203A characterization entries.
- Finalized sampling authorization form and sampling instructions for the 2701AB roof in support of demolition.

Steam Line Asbestos Removal

- Completed processing and loadout of waste debris associated with the remaining 141 linear feet of asbestos insulated steam lines west of Baltimore Street in the 200 East Area.
- Abated 438 linear feet of asbestos-insulated steam line from Leg 18, east of Atlanta Avenue, in the 200 East Area. This brings the total amount abated on Leg 18 to 993 linear feet (out of total 1,460 linear feet).

Aging Structures

- Submitted the TCRA to the U.S. Department of Energy (DOE), Richland Operations Office (RL) for stabilization of 216-Z-2, 215-Z-9 and 241-Z-361.
- Released revision 3 of the Documented Safety Analysis for 216-Z-9.

MAJOR ISSUES

Issue

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

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

Status

With engagement from REDOX personnel, REDOX management identified a path of improving the infrastructure at REDOX that includes moving the SOP outside the facility. Procurement and activities are complete to improve the SOP. REDOX management and personnel have completed work package reviews and procedure reviews to address the future work scope. The fieldwork installation of the double-wide and shower trailer connections are completed and the double-wide door in the SOP trailer has been installed and will be operating by mid-April. The development of a work package to install temporary power and lighting within REDOX is expected to finish in June to ensure that Phase II activities can begin after the completion of Phase I.

Issue

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

Corrective Action

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

Status

Development of Energized Electrical Work Permits (EEWP) for each facility continued and as each EEWP was released for work, the corresponding electrical investigation was performed. To date, 10 facilities have been investigated and cleared of a legacy electrical hazard.

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: There are no major changes to the stoplight chart in the month of March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
224B-007: Cold & Dark Latent Condition	During cold and dark activities, an unexpected condition (e.g.. higher-than-expected radiological readings; inaccuracies in historical drawings and documentation; and discovery of unidentified electrical, mechanical or sewer/water utilities/configuration) results in unplanned work resulting in cost and schedule impacts to the project. **Risk Handling Strategy**: Control **Probability**: Medium (26% to 74%) **Worst Case Impacts**: $100K, 24 days			**Risk Event**: The risk event was due to exposed electrical wires discovered during an electrical safe condition being performed, thus posing a potential electrical risk. This was identified for all CPRM legacy facilities that are currently being electrically investigated for potential electrical risk. **Risk Recovery Action(s)** / **FC Date** / **%** Complete electrical isolations. / April 2020 / 10 **Recovery Action Assessment**: No major changes in March. Electrical isolations are ongoing to complete cold and dark of the 224B Facility. A lockout/tagout (LOTO) was placed on the 224B Facility and had an electrical investigation completed. It was determined the facility will operate on a LOTO status until the facility is electrically cold and dark. Based on the exposed electrical discovery at 224B, CPRM has performed an Extended Condition Verification across other potential aging facilities that may have the same potential risk factor.
224B-008: Impacted by OHC (Other Hanford Contractors) or Other CHPRC Projects	Delays by OHC or other CH2M Hill Plateau Remediation Company (CHPRC) projects impact the schedule and technical approach due to inconsistencies with CHPRC execution, resulting in recovery actions. **Risk Handling Strategy**: Control **Probability**: Low (10% to 25%) **Worst Case Impacts**: $30K, 12 days			**Risk Event**: Mission Support Alliance, LLC (MSA) Electrical Utilities (EU) impacted the 224B Facility electrical deactivation. The need for unforeseen electrical isolations due to an asbestos event at 2101M removed the EU planner from completing the work package to support 224B. **Risk Recovery Action(s)** / **FC Date** / **%** Mitigate OHC delays. / Ongoing / N/A **Recovery Action Assessment**: No major changes in March. Asbestos issues continue to impact the MSA EU organization.
REDOX-07: Building Accessibility due to Water Intrusion	Extensive leaks are experienced in the galleries due to the current state of the annex areas and silo roof, resulting in schedule delays to the project. **Risk Handling Strategy:** Control **Probability:** Likely (75% to 90%) **Worst Case Impacts:** $45K, 32 days			**Risk Event:** Leaking roofs have allowed water to accumulate in limited access areas of the facility. Due to electrical concerns, REDOX personnel have been unable to access the west end of the North Sample Gallery. **Risk Recovery Action(s)** / **FC Date** / **%** Procure a contractor to patch the annex roof. / June 2020 / 10 Develop plans to remove annexes. / September 2020 / 5 **Recovery Action Assessment:** No major changes in March. Project workers continue to repair minor roof defects. The new leak discovered in August continues to be evaluated to identify a path forward. Two plans are being developed and are currently under review to address the leaking roofs at REDOX. Maintenance crews are prepared to procure a contractor to repair the roofs on the annexes where the leaks are expected to occur. The other plan is looking into the demolition of the annexes at REDOX once personnel from other projects are available and the work is authorized.

<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>REDOX-09: Concerned Citizen</td><td>Delays caused by public concern (i.e., stakeholders, other Hanford Site workers, and concerned citizens) impact the project schedule and technical approach, resulting in recovery actions and causing unplanned, in-scope work.

Risk Handling Strategy: Control

Probability: Likely (75% to 90%)
Worst Case Impacts: $0, 16 days</td><td>  </td><td>  </td><td>Risk Event: A concerned citizen called a stop work, which caused delays and unplanned work necessary to address the required action.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Procure and install the SOP trailer.</td><td>March 2020</td><td>90</td></tr><tr><td>Create and implement a phased approach to address identified concerns.</td><td>June 2020</td><td>50</td></tr><tr><td>Upgrade temporary power/lighting and localized ventilation.</td><td>June 2020</td><td>5</td></tr></table>
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. The SOP trailer was delivered in January, and final electrical connections are pending.</td></tr>
<tr><td>REDOX-16: Facility Integrity</td><td>Problems with aging building systems and components (such as 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: Medium (26% to 74%)
Worst Case Impacts: $0, 0 days</td><td>  </td><td>  </td><td>Risk Event: A leaking roof results in unsafe working conditions for personnel.

<table><tr><th>Risk Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Perform cold and dark activities to shut off building power.</td><td>August 2020</td><td>40</td></tr><tr><td>Repair minor roof defects.</td><td>Ongoing</td><td>N/A</td></tr></table>
Recovery Action Assessment: No major changes in March. Integrity failures could lead to water issues within radiologically contaminated areas, causing a hazard to personnel. Going cold and dark 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. The delivery of the substation was delayed due to manufacturer backups. Minor repairs to leaking parts of the roof can significantly reduce water intrusion, and the project workers continue to repair minor roof defects.</td></tr>
<tr><td colspan="5">Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)</td></tr>
<tr><td>REDOX-05: Collapse of Sand Filter</td><td>Due to the close proximity of equipment in operation (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: Control

Probability: Very low (<10%)
Worst Case Impacts: $260K, 48 days</td><td>  </td><td>  </td><td>Risk Triggers: Due to the close proximity of equipment in operation (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>August 2020</td><td>50</td></tr><tr><td>Implement a communication plan between OHCs and other CHPRC projects.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No major changes in March. 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 May 2020. In turn, this delay pushed the forecast dates for mitigation actions to establish the sand filter access boundary. Based on this information, the current plan would move any excavation work near the sand filters to summer 2020.</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 colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td>ZSS-008:
Greater Than Expected Comments from Regulators</td><td>Comments from RL, regulators or stakeholders on documents submitted for approval are excessive, need multiple rounds of resolution or change requirements that result in increased schedule and labor requirements, causing cost and schedule impacts to the project.

Risk Handling Strategy: Control

Probability: Likely (75% to 90%)
Worst Case Impacts: $100K, 16 days</td><td>  </td><td>  </td><td>Risk Triggers: As regulatory documents are developed to obtain final decisions, the regulator comments impose additional cleanup requirements than what are currently expected, resulting in rework and increased scope. Excessive comments from RL or regulators result in schedule delays during comment resolution.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Develop a standardized approach to quickly evaluate and categorize comments for resolution.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Conduct routine meetings to address agency comments and to remain current on the influences from agencies.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. CHPRC hired a subcontractor with substantial experience in developing quality documentation for such regulatory paths in an effort to minimize comments. CHPRC is also actively meeting weekly and interfacing throughout the week with the RL federal project director to coordinate the document development in anticipation of regulatory questions and comments along with developing multiple informative documents to support this effort. In the event that regulator comments become excessive and start to impact project schedule negatively, RL may use their emergency authority under the Atomic Energy Act.</td></tr>
<tr><td colspan="5">FY2020 Key Risks</td></tr>
<tr><td>BOS-003:
Facility Integrity</td><td>Problems with aging buildings, systems or components (e.g., roofing and structures, etc.) result in inoperability or recovery actions, causing unplanned in-scope work (e.g., unscheduled maintenance and outages).

Risk Handling Strategy: Control

Probability: Likely (75% to 90%)
Worst Case Impacts: $1M, 0 days</td><td>  </td><td>  </td><td>Risk Triggers: The project experiences problems with aging building systems and components (e.g., cribs, roofing and structures, etc.) during routine S&M activities. Scheduled maintenance activities must then be performed in addition to unplanned recovery actions.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Perform lifecycle evaluations of critical structures, systems and components.</td><td>8/1/2020</td><td>85</td></tr></table>
Mitigation Assessment: No major changes in March. This risk was identified as a key project risk for FY2020. Structural analysis of 231-Z is under contract negotiation and expected to be awarded in April. The contract work is expected to begin in June/July 2020. Routine S&M activities continue to be performed to mitigate risk.</td></tr>
<tr><td>REDOX-VS-001:
Changes to Stack & Stack Monitoring Requirements Affect the Project Schedule</td><td>Additional stack and stack monitoring requirements are issued by the regulators, resulting in cost impacts and schedule delays to the project.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $1.5M, 96 days</td><td>  </td><td>  </td><td>Risk Triggers: Regulators issue additional stack and stack monitoring requirements that mandate significant changes to the current plan. The supplemental ventilation unit is currently identified in the air monitoring plan, as well as the associated monitoring requirements for the existing stack.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Negotiate changes to the air monitoring plan with regulators.</td><td>September 2020</td><td>0</td></tr></table>
Mitigation Assessment: No major changes in March. Project management identified this as a key risk for FY2020.</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 March.</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	4.9	3.5	5.3	(1.3)	-27.4%	(1.8)	-50.0%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Performance: (-$1.3M/-27.4%)
The current month unfavorable schedule variance is partially attributed to the discovery of a potentially hazardous electrical configuration at the 224B Facility. The facility was placed on a restricted access, causing a delay to the completion of characterization and sampling field activities. Exposed electrical wires were discovered during an electrical safe condition, which led to the launch of an electrical investigation. After the electrical investigation, LOTO was performed so that the system would not be re-energized until isolations were completed. The restricted access placed 224B fieldwork on hold until the facility is electrically cold and dark. Other legacy facilities within the Central Plateau are currently restricted as well until each facility can be individually investigated of any potential hazardous energy.

Furthermore, on March 17, 2020, CHPRC issued a stop work on all fieldwork not associated with Technical Safety Requirements, Environmental Compliance, or Emergency Response to address employee concerns, including construction forces, regarding COVID-19 response management. The impact of CHPRC's stop work extended through fiscal month end on March 22, 2020, resulting in the loss of three working days.

Additionally, the unfavorable schedule variance is attributed to the consolidation of subcontractor responsibilities and the contracting approach for the stabilization efforts of 216-Z-2 and 241-Z-361. The baseline planned for separate contracts to demonstrate the grout mix buoyancy proof of design in addition to demonstrating the grout flow ability proof of design for the second mix and fabricating the conveyance and ventilation system for both 216-Z-2 and 241-Z-361. However, from a cost savings, risk reduction and efficiency standpoint, the project evaluated and consolidated these activities into a single master contract for stabilization. The request for proposal for the master contract was planned to be awarded at the end of March, however, due to further review and the requirement for a public press release from RL and DOE-Headquarters prior to approval of the contract award, the contract award was delayed until April 13.

Finally, trailers at B Plant and PUREX were baselined to be installed in March, however, due to efficiencies in delivery from the vendor, the installation was completed in February. The double-wide trailers have obtained occupancy, and crews are housed to support fieldwork at PUREX North.

CM Cost Performance: (-$1.8M/-50.0%)
The current month unfavorable cost variance is partially attributed to the discovery of a potentially hazardous electrical configuration at the 224B Facility. The facility was placed on a restricted access, causing a delay to the completion of characterization and sampling field activities. Exposed electrical wires were discovered during an electrical safe condition being performed on the facility, which led to the launch of an electrical investigation. After the conclusion of the electrical investigation, LOTO was performed so that the system would not be re-energized until isolations were completed. The restricted access to the facility placed 224B fieldwork on hold until the facility is electrically cold and dark.

Resources were diverted to resolving the problem, rather than working on remediation scope as baselined. Other legacy facilities within the Central Plateau are currently restricted as well until each facility can be individually investigated of any potential hazardous energy.

In addition, on March 17, 2020, CHPRC issued a stop work on all fieldwork not associated with Technical Safety Requirements, Environmental Compliance, or Emergency Response to address employee concerns, including construction forces, regarding COVID-19 response management. The impact of CHPRC's stop work extended through fiscal month end on March 22, 2020, resulting in the loss of three working days.

Finally, due to the management-directed stop work that was issued October 3, 2019, all non-regulatory work inside 202S (REDOX) could not continue. However, work outside the REDOX could continue and work scope was sequenced in a manner that would allow work to continue on the exterior. This includes Phase I action items, which include the procurements of a double-wide trailer and a contractor to install the trailer. Additionally, the subcontractor for the REDOX exhauster discovered design issues while completing the final design for the temporary exhaust system for REDOX, which resulted in a significant redesign effort. The electrical components for the exhauster system needed to be redesigned to ensure that maintenance personnel would be able to compile with the Hanford site LOTO procedure. The modeling determined the existing stack at REDOX would not be capable of supporting the back flow dampers and would require the backflow dampers be excluded in the new exhaust system. Resolving these issues now, although an increase in design costs, will significantly reduce future maintenance costs and ensure worker safety during maintenance activities.

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	592.7	584.7	570.2	(8.0)	-1.3%	14.5	2.5%	642.0	624.4	54.1	17.6

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance: (-$8.0M/-1.3%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (+$14.5M/+2.5%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (+$17.6M/+2.7%)

The VAC is within reporting thresholds.

Contract performance report formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

RL-0040 Nuclear Facility D&D	FY2020 Projected Funding	FY2020 Spending Forecast	FY2020 Variance
Spending Forecast	93.3	90.8	2.4

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis

The FY2020 projected funding of $93.3 million remains unchanged from last month. The FY spending forecast of $90.8 million includes action anticipated to achieve funding targets. FY2020 funding aligns with the RL Integrated Priority List. The reduction of forecasted costs for the remainder of FY2020 represents impacts associated with the Hanford Site partial stop work associated with the COVID-19 impacts, partially offset with addition of fee moved from RL-0030 to support funding shortfalls in the Central Plateau control point.

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* (Tri-Party Agreement)-enforceable milestones, non-enforceable target due dates and commitments.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-256	Complete Removal of All Waste Sites for FY2019 as updated or modified in M-16-17-01	9/30/2019		TBD	In dispute resolution. In negotiations with RL to adjust the schedule.
M-016-250E	Submit to Ecology a 3-Year Rolling Prioritized Schedule to Implement Waste Site Removal Actions	9/30/2020		9/30/2020	TPA change control form M-16-20-02 changed due date to 9/30/2020.
M-037-10	Complete Closure for 6 Specified TSD Units	9/30/2020		TBD	In abeyance.
M-085-100	Submit Removal Action Work Plan for 224T to EPA	9/30/2020		5/7/2020	On schedule.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
Regulator Approval 224B (B Plant) Removal Action Work Plan (RAWP) (2017-34)	8/16/2017(A)	02/12/2020(A)
Regulator Review Tier 2 PUREX Sampling Analysis Plan (SAP) (2016-46)	06/10/2019(A)	04/30/2020
RL and Ecology Review PUREX North Closure Plan (2015-72)	07/18/2019(A)	04/02/2020
Regulator Review Tier 2 PUREX RAWP (2016-47)	07/23/2019(A)	04/25/2020
Regulator Approval and Issuance B Plant Engineering Evaluation/Cost Analysis (2016-14)	10/02/2019(A)	04/15/2020
RL Review Decisional Draft 224T SAP (2019-37)	11/19/2019(A)	05/19/2020
Regulator Review PUREX Action Memorandum (AM) (2016-53)	12/22/2019(A)	07/01/2020
Regulator Review Z Cribs TCRA, AM	01/31/2020(A)	04/16/2020
RL Review Decisional Draft 224T RAWP (2019-36)	02/14/2020(A)	04/07/2020

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

CH2MHILL
Plateau Remediation Company

a Jacobs company

R. M. Geimer
Vice President for
K Basin Operations

T. L. Hobbes
Vice President for
River Risk Management Project

M. A. Wright
Vice President for
Project Technical Services

March 2020
CHPRC-2020-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

K Basin Operations (KBO):

The KBO Project continued safe operations of the Hazardous Category 2 105 KW Facility in addition to project work prior to the CHPRC directed partial stop work due to the novel coronavirus (COVID-19). The Closure Operations Team finished loading floor sparging debris from the vertical pipe casings (VPCs) footprint into containers, and continued with dosing and relocating of fuel cans in center bay. The team also installed a grouting assembly into Engineering Container 210 to facilitate use as a collection bin for debris on the basin floor. The offsite vendor for the VPC continued fabrication of the VPC high dose components. Final approval of the pole tool removal work package was received. Work packages to support investigation of the North Load-Out Pit and settler tubes, conditioning of the small fuel specimens, VPC installation at KW Basin, replacement and modification of grating, removal of the Integrated Water Treatment System (IWTS) strainer, and the VPC mockup at the Maintenance and Storage Facility (MASF), are being drafted to support the associated work.

The KBO project continued to prepare the Interim Safe Storage (ISS) support trailer location to be ready for future trailer installation during March. The ground scan was revised to support the trailer location in response to underground equipment issues. A walk down with Mission Support Alliance, LLC (MSA) Electrical Utilities Engineering was performed for the power connection to be installed for the new trailer. The site drawing was revised to incorporate steel and soil laydown areas and the trailer location. The Hanford Site Fire Marshall's comments were incorporated into the Fire Hazard Analysis for the 105KE Reactor ISS, and it was reissued for final review. The ISS/Safe Storage Enclosure (SSE) Construction request for proposal were issued for contractor proposals.

Demolition preparations for the 165KE Facility and the demolition of 166KE fuel storage bunker continued. Fabrication of the tools to be utilized for sampling to determine the quantity of residual oil in the heel remaining in the 166KW fuel storage bunker were completed and delivered to Soil and Ground Water personnel.

The 100K Soil Remediation subcontractor made reasonable progress prior to the COVID-19 partial stop work. The overburden removal was completed at 100-K-47:2, making way for soil and pipeline removal to proceed in the near future. The subcontractor also installed security fencing, a temporary queue, and proceeded to remove railroad rails and ties at 100-K-60.

River Risk Management Project (RRMP):

The 324 Building Disposition Project performed routine inspections and maintenance. In support of resumption of project work, advanced radiological training was completed for all primary workers, modifications to the mockup for training were initiated, and the field test of FRHAM Stay Clean coverall suit completed. Crews completed the following to support future resumption of project work at the 324 Building: performed remote excavator arm/hydraulic power unit (remove excavator arm [REA]/hydraulic power unit [HPU]) layup maintenance, performed beryllium sampling in Room 308/309A, and completed modification of lid spacers in the container transfer area (CTA).

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
20-EMS-KBO-OBJ1-P1	Evaluation of upcoming 100K Area work activities, which involve water discharge to the ground at the 100K Area.	Evaluate upcoming work from the Hanford Fire Department to ensure decontamination and decommissioning (D&D) and soil remediation activities at the 100K Area follow the water discharge to ground requirements per DOE/RL-97-67, Revision 3, *Pollution Prevention and Best Management Practices Plan for State Waste Discharge Permits ST4508, ST4509, and ST4510*, and 100K-STD-OP-52370, *Discharges to Ground*.	9/30/2020	50%
20-EMS-KBO-OB2-P1	Improve compliance/pollution and spill prevention.	Evaluate the status of spill prevention, use of secondary containment, universal waste and other recycling compliance, and waste reduction opportunities for compliance with CHPRC procedures.	9/30/2020	48%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Months	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	0	13	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

100K Basin Operations

- 100K Closure Project:
  - 100K West Basin Deactivation
    - Received final approval of work package K-19-00505, *Removal & Disposal of Pole Tools.*
    - Continued to support preparation of work packages for the North Loadout Pit and settler tubes, conditioning of the small fuel specimen, VPC installation at KW Basin, replacement and modification of grating, and removal of the IWTS strainer, and the VPC mockup at MASF,.
    - Prepared site for ISS support trailer, steel and soil laydowns, and utility installation.
  - 100K Soil Remediation
    - The subcontractor completed overburden removal on 100-K-47:2 and started site preparation to support excavation activities on 100-K-60 with the installation of excavation boundary fencing and the removal of railroad ties and rails.
    - Completed load-out of 137 roll-off boxes filled with contaminated soil to ERDF for disposal in March.

RRMP, 324 Building Disposition Project

The design, procurement and fabrication of the following equipment continued:

- Cell dams for the 324 Building.
- Universal cutting tool.
- Water delivery system for the airlock.
- Concrete box for soil waste bins.
- Modified airlock rail.
- Waste bins and waste containers for the 324 Building.
- Modified shielded lids and frames (sets at acquisition verification services being inspected).
- Self-leveling lifting device.
- B Cell 10T Crane.

- Miscellaneous:
  - Performed 324 exterior safety inspection.
  - Performed monthly elevator pit inspection.
  - Mobilized material to Room 22A in support of donning area setup.
  - Mitigated tripping hazard in men's change room.
  - Completed surveillance of 324 Building transient combustibles.
  - Completed monthly chemical management inventory.
  - Initiated tile repair in Room 123.
  - Performed maintenance on North Shoring Excavator.
  - Relocated man lifts for maintenance and disposal.
  - Sealed cracks in southwest concrete masonry unit wall.
  - Loaded man lifts on an Environmental Restoration Disposal Facility (ERDF) flat for disposal.
  - Removed abandoned conduit on old security fencing.
  - Completed the 324 Stack Radiological Function test.
  - Performed personal protective equipment (PPE) Evaluations.
  - Performed REA/HPU Layup Maintenance.
  - Performed monthly lubrication of supply & exhaust fans.
  - Completed monthly Ground-Fault Circuit Interrupter & Emergency Light Inspection preventative maintenance (PMs).
  - Performed Beryllium sampling in room 308/309A.

  - Completed modification of lid spacers in CTA.
  - Performed Employee Zero Accident Council Monthly Safety Walk Down.
  - Completed monthly 324 Building roof handrail inspections.
  - Performed field test of FRHAM Stay Clean coverall suit
  - Performed quarterly office/building inspections.
  - Completed monthly wire rope inspections.
  - Relocated man lift from trucklock to Room 147.
  - Placed ERDF can into trucklock.
  - Performed soft waste loadout.
  - Initiated 180 day damper inspections.
- North Shoring Installation – Structural Modifications:
  - Performed ground scans.
  - Performed Global Positioning System (GPS) Surveys.
- Mockup:
  - Supported a tour of Framatome subject matter experts (SMEs) to support excavation at the Mockup.
  - Completed excavating soil in support of the Room 18 mockup building.
  - Completed monthly crane PM.
  - Supported a tour for the United Kingdom Nuclear Decommissioning Authority.
  - Continued REA and equipment training.
  - Placed concrete to support Room 18 mockup floor plan.
  - Supported MSA Respiratory Development Team tour.
  - Prepped to install walls for Room 18 mockup.

Project Technical Support

- Training and procedures:
  - Completed final session of overview training course for 324 Building advanced radiological practices.
  - Worked with 324 Nuclear Safety personnel in gathering appropriate training and procedures attachments for the declaration of readiness, which authorized the 324 Building to begin operating per revision 4 of the Basis for Interim Operations.
  - Prepared and published new procedure 324-PRO-MN-54457, *Portable Eyewash Inspection and Maintenance*. Facility management made a decision to move the requirement to document inspections and maintenance of portable eyewash stations from a tickle file to a procedure.
- Operations Program:
  - Supported 324 Building Management by providing recommendations for re-entry to area with 240V electrical disconnect door found ajar.

MAJOR ISSUES

Issue

Task Cask Assembly-1 (TCA-1) is currently staged outside of the 105KW Facility and is awaiting disposition. TCA-1 was previously used to support transfer operations between 105KE and 105KW and is internally contaminated. Based on historical data, the cask contains residual amounts of basin water and sludge material. TCA-1 requires 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 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 through use of containments, temporary shielding and ventilation, and mockup training to complete the task. Engineering assessments along with advanced worker involvement will be necessary to plan the disposition of the TCA. Radiological engineering modeling indicates that if a dose rate measurement taken 10 inches above the bottom of the inner vessel exceeds 6 rem/hour, then the sludge heel will have to be removed and processed separately, most likely being directed to the north loadout pit VPC (if not grouted yet) or pumped into a separate approved container for disposition. If this condition does not exist, then the residual water and material can be solidified and the TCA transferred to ERDF for grouting and disposal.

Status

Results from a nondestructive assay (NDA) performed on a shielded ion exchange module staged west of 105 KW in December-January were evaluated as a test case to determine if NDA of TCA-1 is feasible for identifying specific radionuclide peaks in a shielded container. While the NDA of the ion exchange module was not deemed successful due to the complex configuration of the shielded module, actinide peaks were identified through the heavy shielding indicating it will be a viable method for determining if residual solids/sludge contained within TCA-1 need to be removed vs. solidified without performing intrusive characterization. A walk down was performed on March 19, 2020 to identify configuration of the NDA trailer and review general logistics for completing the NDA of TCA-1. Setup of the area and completion of the NDA will be scheduled once fieldwork resumes. Results of the NDA will be used to support FY2021 planning activities for dispositioning the TCA contents.

Issue

On November 14, 2019, an individual at the 324 Building Disposition Project was discovered with radiological contamination on the skin after egressing the airlock. The individual was decontaminated and cleared. However, due to the event, CH2M HILL Plateau Remediation Company (CHPRC) management suspended radiological work beyond minimum safe activities, pending identification and implementation of revised strategies and controls to reduce the potential of future contaminations.

Corrective Action

A team of SMEs from across CHPRC and Jacobs will review the strategies and controls in place and focus on identifying recommendations for improving radiological practices and controls in the building by taking a holistic look at the full spectrum of operations.

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: Completed recovery actions for risk *RCC-300-296-30: 300-296 Design Changes Result in Increased Subcontractor Change Order*(s)/ Claims and subcontractor submitted final design for 324 structural modifications.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
RCC-300-296-30, 300-296 Design Changes Result in Increased Subcontractor Change Order(s)/ Claims	Due to the uncertainty and evolution of developments, design changes may be required upon completion of all design phases. **Risk Handling Strategy**: Control **Probability**: Very likely (>90%) **Worst Case Impacts**: $3,318K, 136 days			**Risk Event**: The verification of the final structural modification design has been delayed due to realization of other risks (see Recovery Assessment, below) while performing soil verification and pilot holing, requiring additional design effort from the design subcontractor. **Recovery Action(s)** / **FC Date** / **%** Contractor prepares and submits a structure modification design - 30 percent to 60 percent (VE2810). / 8/15/18 / 100 Perform micropile demonstration and verification to support the structural modification design (VS1220A). / 1/24/19 / 100 Structural modifications design micropile comment resolution (VS1220C). / 5/13/19 / 100 Perform pilot holing for structural modifications (VS5010). / 9/7/19 / 100 Perform pit six soil verification testing/geotech (VS1220B). / 8/21/19 / 100 Contractor prepares and submits a structural modification design (VN1220). / 2/24/20 / 100 CHPRC/DOE Review and Issue Final Design / 4/2/20 / 75 **Recovery Assessment**: Delays for completing the final structural design have been incurred due to the realization of risks RCC-300-296-31, "300-296 Elevated Contamination Encountered While Performing Structural Modifications," and RCC-300-296-01, "Latent Conditions Impact Facility Modifications." The realization of these risks halted fieldwork activities that were supporting completion of the final design. Extensive comments were resolved and the final design was completed on February 24, 2020. However, CHPRC and DOE Review and Issuance of Final Design is forecasted to complete April 2, 2020.
RCC-300-296-07, 300-296 Failure of a Radiochemical Engineering Cells (REC) Cranes (B Cell, A Cell, A/D & Airlock, and/or CHA Cranes)	Major crane repair must be performed during operations. This in-scope, unplanned work results in cost and schedule impacts to the project. **Risk Handling Strategy**: Accept **Probability**: Likely (75% to 90%) **Worst Case Impacts**: $3,000K, 208 days			**Risk Event**: In August, the REC A/D Crane failed during operations. **Recovery Action(s)** / **FC Date** / **%** Determine B Cell replacement crane options / 3/19/19 / 100 Award contract – B Cell 10T crane – 324 Building / 6/20/19 / 100 Perform follow-up A Cell and A/D Crane investigation / TBD / 0 Procure/Fabricate A/D Crane parts / TBD / 0 Perform A/D Crane repair / TBD / 0 **Recovery Assessment**: No significant changes in March. It is anticipated that decontamination of the A/D Crane will be necessary prior to performing repairs. Procurement and fabrication of decontamination equipment has been initiated to decrease further impacts to the project. Procurement of spare parts has been delayed due to additional verification of components and measurements that cannot be acquired at this time due to realization of risk, RCC-300-296-36, "Contamination Experienced During REC Cell Operations." The forecasted completion date for completing crane investigation, procuring spare parts, and performing crane repairs will be addressed in the upcoming period, pending definition of revised practices and controls to minimize the potential of future radiological contamination.

<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>RCC-300-296-36, Contamination Experienced During Radiochemical Engineering Cells Operations</td><td>During REC cell cleanout (e.g., soil/debris removal, waste handling and facility modifications), the CHA, trucklock, or other support area becomes contaminated or background dose is elevated to a level that operations cannot continue as currently planned. Significant cost and schedule impacts are incurred.

Risk Handling Strategy: Control

Probability: Very likely (>90%)
Worst Case Impacts: $225K, 70 days</td><td>  </td><td>  </td><td>Risk Event: On November 14, 2019, low-level contamination was detected on an individual after exiting radiological step off pad.
<table><tr><th>Recovery Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Perform CHA floor scabbling and apply epoxy floor coating</td><td>7/17/19</td><td>100</td></tr><tr><td>Perform Project Resumption Activities – CA/CHA</td><td>6/9/20</td><td>25</td></tr><tr><td>Return to Room 18 Work - Resumption Actions</td><td>8/10/20</td><td>10</td></tr><tr><td>Return to Airlock Work - Resumption Actions</td><td>8/31/20</td><td>0</td></tr></table>Recovery Assessment: No significant changes in March. Resuming work scope in radiologically controlled areas within the building is pending resolution of recovery actions performed under three distinct group sets: general controlled area, Room 18, and airlock. Upon successful completion of resumption actions and training, each group 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 March.</td></tr>
<tr><td colspan="5">High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)</td></tr>
<tr><td>RCC-300-296-31, 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 result in contamination levels that are much higher or deeper or the material encountered is different than anticipated, an alternative approach will require the development and/or fabrication of equipment for contamination mitigation and control. These impacts will limit progress on fieldwork activities.

Risk Handling Strategy: Accept

Probability: Likely (75% to 90%)
Worst Case Impacts: $3,318K, 256 days</td><td>  </td><td>  </td><td>Risk Event: Unexpected contamination found while performing structural modification activities.
<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>This risk is accepted with no planned mitigation actions identified at this time.</td><td>N/A</td><td>N/A</td></tr></table>Mitigation Assessment: No significant changes in March. As low as reasonably achievable (ALARA) review evaluations for process improvements were completed in May. Increased PPE and additional control measures were successfully implemented. However, these controls have greatly reduced production rates than planned. The residual impacts of this risk are currently accepted with no further mitigation actions identified.</td></tr>
<tr><td>100K-SR-02, 100K Soil Remediation Subcontractor Equipment Is Contaminated</td><td>Subcontractor equipment used for soil remediation activities is contaminated and is not able to be decontaminated to a suitable level so that it can be released.

Risk Handling Strategy: Accept

Probability: Very likely (>90%)
Worst Case Impacts: $1,480K, 0 days</td><td>  </td><td>  </td><td>Risk Event: If radiological contamination is found within the excavation boundaries, subcontractor equipment could become contaminated and be unable to be released back to the subcontractor after soil remediation activities are complete. This action would result in the government having to purchase the equipment, resulting in cost impacts to the project.
<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>This risk is accepted with no planned mitigation actions identified at this time.</td><td>N/A</td><td>N/A</td></tr></table>Mitigation Assessment: No significant changes in March. CHPRC will attempt to perform comprehensive radiological surveys to validate if equipment or components are not contaminated. However, the ability to validate with 100 percent certainty that no contamination exist on an excavator before its introduced back into the general public is very difficult.</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-0041/WBS-041</td></tr>
<tr><td colspan="5">FY2020 Key Risks</td></tr>
<tr><td>RCC-300-296-01, 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/radiological control hazards), resulting in unplanned work and subsequently, cost and schedule impacts.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $294.5K, 128 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: Based on a similar event experienced on March 28, 2019, unexpected beta-gamma contamination was detected while performing clearance surveys at the 324 Building step-off pad. Sampling determined it to be beta contamination (suspected strontium-90) without a corresponding gamma component, resulting in project impacts.

<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 March. 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 preventive maintenance activities are in place to reduce the likelihood of occurrence.</td></tr>
<tr><td>RCC-300-296-08, 300-296 Failure of Cell Shield Door</td><td>Failure of shield door(s), or crane shield door(s), shuts down cleanout of REC cells/airlock, penetration sealing in the airlock, equipment installation and other activities for remote soil removal. It may not be possible to repair a shield door due to radiation dose rate and location, resulting in cost and schedule delays.

Risk Handling Strategy: Accept

Probability: Likely (75% to 90%)
Worst Case Impacts: $460K, 96 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: Cell shield door fails, resulting in a shutdown of cleanout activities until repairs can be completed, similar to the event that occurred in September 2019.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>No discrete mitigation actions have been identified. However, preventive maintenance activities are being conducted to assure reliability of REC shield doors.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. To maintain REC shield door operability, engineering evaluations were conducted, resulting in the implementation of monthly performance measures and the procurement of spare parts. These mitigation efforts will reduce the likelihood of cost and schedule consequences, as applicable.</td></tr>
<tr><td>RCC-300-296-15, 300-296 Cell Sealing, Micropile Installation, Interference Removal, Core Drilling and Soil Stabilization Takes Longer Than Planned</td><td>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: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $3,317.6K, 96 days</td><td>  </td><td>  </td><td>Risk Trigger Metric: The project experiences unexpected field conditions outside their control, impacting cell sealing, micropile installation, interference removal, core drilling, and soil stabilization more difficult than planned.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Mobilize and train second soil stabilization crew.</td><td>12/19/19</td><td>100</td></tr><tr><td>Perform pilot hole drilling to aid as a mitigation action for micropile installation.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No significant changes in March. Mitigation efforts have reduced the probability of risk occurrence from likely to medium. However, due to the uniqueness involved with the work scope, there is potential for unexpected delays and additional pilot hole drilling efforts. Mobilizing and training of a second soil stabilization crew was completed on December 19, 2019.</td></tr>
<tr><td>RCC-300-296-06, 300-296 Remote Equipment Failure During Operations</td><td>Failures of the following procured equipment, including the floor saw, master slave manipulators (MSMs) used in REC cells, Remote Excavator Arms (REAs), through supports, cell dams, transfer mechanism and cameras and lights.

Risk Handling Strategy: Control

Probability: Low (10% to 25%)
Worst Case Impacts: $1,336K, 90 days</td><td>  </td><td>  </td><td>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.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Procure MSM manipulators and storage carts</td><td>12/30/19</td><td>100</td></tr><tr><td>Procure universal cutting tool</td><td>12/16/20</td><td>14</td></tr></table>
Mitigation Assessment: No significant changes in March. Potential impacts continue to be monitored and assessed for mitigation as project evolutions continue. Estimate to complete is updated monthly to reflect potential impacts of risk being realized.</td></tr>
</table>

Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0041/WBS-041				
RCC-300-296-33, Increased Rad 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**: Control **Probability**: Low (10% to 25%) **Worst Case Impacts**: $240K, 36 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 use of increased shielding and ALARA controls / Ongoing / N/A Procurement of specialized containers - GC/44" Bins / 7/14/20 / 5 **Mitigation Assessment**: No significant changes in March. 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.
100K-SR-05, Unexpected Site Conditions	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**: Control **Probability**: Medium (26% to 74%) **Worst Case Impacts**: $760K, 32 days			**Risk Trigger Metric**: During soil excavation activities, different site conditions including underground utilities (i.e., wiring, fiber cable, pipes, asbestos, etc.), unknown construction material, and greater than expected quantities of contamination could be encountered, resulting in increased volume of remediated soil. In addition, the overburden soil planned for backfill contains contaminates, resulting in the need to create a new clean-fill pit. **Mitigation Action(s)** / **FC Date** / **%** Data Collection (includes review of Waste Information Data System information, review of historical drawings, identify contaminates of concern, civil survey, etc.). / Ongoing / N/A Ground Penetrating Radar / Ongoing / N/A Develop / Issue approved excavation permit before remediation begins. / Ongoing / N/A **Mitigation Assessment**: 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.
100K-SFGF-02, 105 KW SF & GF – Subcontractor Design Changes During Fab/Construction	During fabrication and installation, problems with design are encountered resulting in design changes, resulting in cost and schedule impacts. **Risk Handling Strategy**: Control **Probability**: Medium (26% to 74%) **Worst Case Impacts**: $400K, 32 days			**Risk Trigger Metric**: During installation of the Engineered Container Retrieval and Transfer System tie-in equipment in support of VPC installation and the GFMRS (Garnet Filter Media Removal System), design issues are identified that could not be determined during mockup testing at the MASF, resulting in design changes. This scenario would impact the firm fixed price construction contractor. **Mitigation Action(s)** / **FC Date** / **%** Integrated system testing/operator training in support of KW Basin garnet filter media removal. / Complete / 100 System constructability review and field walk downs will be implemented to reduce the risk. / Complete / 100 Perform construction acceptance testing on The Garnet Filter Media Removal System (GFMRS).S / 3/12/2020 / 100 **Mitigation Assessment**: Installation of the GFMRS is progressing as construction acceptance testing completed on March 12, 2020. All currently identified mitigation actions have been completed. This risk will continue to be monitored for additional mitigation or changes to the risk posture.
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified in March.				

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	3.8	10.0	11.3	6.2	165.3%	(1.3)	-13.4%

Numbers rounded to the nearest $0.1 million.

CM Schedule Performance ($+6.2M/+165.3%)

The favorable schedule variance is primarily attributed to implementation of BCR-041-20-002R0 - 324 Scope Alignment. This BCR was implemented to account for multiple contamination events, crane failures, and resumption corrective actions, which have had significant schedule impacts. In addition, the ability to perform the original FY2020 scope was greatly impacted. In order to accurately align with the current project trajectory, some scope needed to be removed from the FY2020 baseline. A favorable variance is the result of a point adjustment to Budgeted Cost of Work Scheduled (BCWS) in the current period to offset prior period BCWS that was planned. In addition, 100K personnel significant progress in waste site remediation, demolition preparation work at 165KE, and demolition of 166KE. Recovering approximately $500K of schedule variance.

CM Cost Performance (-$1.3M/-13.4%)

The unfavorable variance for the 324 Building Disposition Project was primarily related to the contamination event that occurred on November 14, 2019, which resulted in CHPRC management directed suspension of work beyond minimum safe activities pending implementation of revised strategies and controls to reduce the potential of future contamination. As a result, costs were experienced in the period without the ability to take performance. The negative cost variance for the 100K Area is due to planning, testing, and mockups to support 105KW debris waste disposition of below and above water debris, being more complex than planned. Higher-than-planned costs for GFMRS installation to support procedure development, leak testing standards and readiness activities, which were more complex than planned.

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	742.1	730.5	719.8	(11.5)	-1.6%	10.8	1.5%	809.9	802.5	82.7	7.4

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance (-$11.5M/-1.6%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance (+$10.8M/+1.5%)

The CTD cost variance is within reporting thresholds.

Variance at Completion (+$7.4M/+.9%)

The variance at completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST ($M)

	FY2020		
RL-0041 Nuclear Facility D&D – River Corridor	Projected Funding	Spending Forecast	Variance
RL-0041 Spending Forecast	150.9	150.2	0.6

Numbers are rounded to the nearest $0.1 million.

Funds/Variance Analysis

There was no change in the FY2020 expected funding of $150.9 million from January. The spending forecast decreased $0.4 million from February.

Critical Path Analysis

Critical path analysis can be provided upon request.

MILESTONE STATUS

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

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

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS/DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
DOE Independent Design Review – Issue for Construction Structural Modification	2/25/2020(A)	3/24/2020(A)
RL Approval Emergency Planning Hazards Assessment (EPHA) Final	3/12/2020(A)	3/26/2020

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

March 2020
CHPRC-2020-03, 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.

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

- Awarded contract to inspect water tanks 58 and 87.

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 replacing the diesel 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 the U.S. Department of Energy (DOE), Richland Operations Office (RL). Efforts to address the aging diesel engine fire pump P-28 is pending a fiscal month April baseline change request (BCR) to support budget requirements for this task.

RISK MANAGEMENT STATUS

None currently identified.

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

RL-0042 FFTF Closure	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)
Total	0.2	0.2	0.2	0.0	0.7%	0.0	6.3%

Numbers are rounded to the nearest $0.1 million.

CM Schedule Performance: (+$0.0M/+0.7%)

The CM schedule variance is within reporting thresholds.

CM Cost Performance: (+$0.0M/+6.3%)

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	30.2	30.2	25.5	(0.0)	-0.0%	4.7	15.5%	32.9	27.8	2.3	5.1

Numbers are rounded to the nearest $0.1 million.

CTD Schedule Performance: (-$0.0M/-0.0%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (+$4.7M/+15.5%)

The CTD favorable cost variance is due to reduction in S&M requirements at FFTF, as 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/+15.4%)

The VAC reflects efficient use of resources supporting deactivation activities.

Contract Performance Report Formats are provided in Appendix A.

FUNDS VS. SPEND FORECAST ($M)

RL-0042 FFTF Closure	FY2020 Projected Funding	FY2020 Spending Forecast	FY2020 Variance
Spending Forecast	4.8	3.9	0.8

Numbers are rounded to the nearest $0.1 million.

Funds Analysis

Fiscal year (FY) 2020 projected funding of $4.8 million includes support for electrical component failures and configuration challenges, interest by regulators requiring additional inspections and a recent failure of the water system/water piping. The spending forecast of $3.9 million aligns with the RL Integrated Priority List and reflects delays associated with the issuance of Perma-Fix Northwest's updated license to allow for treatment of the 400 Area's 19 interim storage area sodium drums. A BCR will be implemented in April to represent the treatability study being removed from FY2020.

Critical Path Analysis

Critical path analysis is not applicable to this project. The contract scope is the performance of interim surveillance and maintenance 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

March 2020
CHPRC-2020-03, 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 / 02 / 24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE	b. TO (YYYYMMDD) 2020 / 03 / 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	6,318,614	555,072	278,070	6,596,684	7,056,909	6,596,684	7,056,909	

6. ESTIMATED COST AT COMPLETION

	MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)
a. BEST CASE	6,730,474		
b. WORST CASE	6,814,855		
c. MOST LIKELY	6,778,838	6,873,686	94,848

7. AUTHORIZED CONTRACTOR REPRESENTATIVE

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

b. TITLE: Prime Contract Compliance Manager

c. SIGNATURE

d. DATE SIGNED (YYYYMMDD)

8. PERFORMANCE DATA

CAPN.PBS / ITEM (1)	CURRENT PERIOD: BUDGETED COST WORK SCHEDULED (2)	BUDGETED COST WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	VARIANCE SCHEDULE (5)	VARIANCE COST (6)	CUMULATIVE TO DATE: BUDGETED COST WORK SCHEDULED (7)	BUDGETED COST WORK PERFORMED (8)	ACTUAL COST WORK PERFORMED (9)	VARIANCE SCHEDULE (10)	VARIANCE COST (11)	REPROGRAMMING ADJUSTMENTS: COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	AT COMPLETION: BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
RL-0011 Nuclear Mat Stab & Disp PFP	232	3,471	4,596	3,239	-1,124	1,143,564	1,129,847	1,232,401	-13,717	-102,554	0	0	0	1,143,564	1,246,645	-103,081
RL-0012 SNF Stabilization & Disp	0	0	0	0	0	759,593	759,593	729,820	0	29,773	0	0	0	759,593	729,822	29,770
RL-0013 Solid Waste Stab & Disp	13,856	18,937	18,771	5,081	166	1,566,426	1,561,654	1,477,742	-4,772	83,913	0	0	0	1,681,206	1,596,442	84,763
RL-0030 Soil &Water Rem-Grndwtr/Vadose	10,246	10,017	8,021	-229	1,996	1,686,542	1,681,707	1,630,334	-4,835	51,373	0	0	0	1,756,151	1,702,897	53,254
RL-0040 Nuc Fac D&D - Remainder Hanfrd	4,867	3,534	5,301	-1,332	-1,766	592,692	584,698	570,214	-7,994	14,484	0	0	0	641,988	624,363	17,624
RL-0041 Nuc Fac D&D - RC Closure Proj	3,759	9,971	11,302	6,212	-1,331	742,059	730,535	719,762	-11,523	10,773	0	0	0	809,921	802,513	7,408
RL-0042 Nuc Fac D&D - FFTF Proj	233	235	220	2	15	30,209	30,207	25,534	-2	4,673	0	0	0	32,868	27,790	5,078
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	33,192	46,165	48,209	12,972	-2,045	6,521,085	6,478,242	6,385,807	-42,843	92,435	0	0	0	6,825,290	6,730,474	94,816
f. MANAGEMENT RESERVE														48,364		
g. TOTAL	33,192	46,165	48,209	12,972	-2,045	6,521,085	6,478,242	6,385,807	-42,843	92,435	0	0	0	6,873,654		
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																
a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE									-42,843	92,435				6,873,654	6,730,474	143,180

**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 / 02 / 24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 03 / 22
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO: ; X YES *(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					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)
34 - Env Program & Strategic Plng	1,253	1,662	1,066	409	596	107,013	104,396	97,426	-2,617	6,969	0	0	0	112,820	105,079	7,741
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	0	0	0	1,111	1,111	492	0	618	0	0	0	1,111	492	618
37 - Resource Mgmt & Strategic Intg	105	105	82	0	23	9,200	9,200	6,096	0	3,104	0	0	0	9,926	6,825	3,101
38 - Project Technical Services	0	0	0	0	0	118,497	118,497	99,132	0	19,364	0	0	0	118,497	99,132	19,364
3B - PFP Closure Project	434	3,696	4,716	3,262	-1,020	1,055,714	1,042,055	1,151,576	-13,659	-109,521	0	0	0	1,076,154	1,183,007	-106,853
3C - Waste & Fuels Management Project	9,390	13,677	13,073	4,287	604	1,373,258	1,369,726	1,290,697	-3,531	79,030	0	0	0	1,461,681	1,382,383	79,297
3D - Soil & Groundwater Remediation	8,966	8,328	6,933	-638	1,395	1,477,677	1,475,459	1,425,102	-2,218	50,357	0	0	0	1,541,297	1,489,831	51,466
3G - K Basin Oper & Plateau Remediation Project	5,246	5,714	6,587	468	-873	1,015,729	1,012,566	979,317	-3,162	33,249	0	0	0	1,050,171	1,016,619	33,553
3H - River Risk Management Project	2,926	9,464	10,371	6,538	-907	352,728	343,127	366,624	-9,601	-23,497	0	0	0	412,142	438,725	-26,583
3K - Central Plateau Risk Reduction	4,872	3,518	5,382	-1,353	-1,864	533,281	525,227	515,750	-8,054	9,477	0	0	0	564,614	554,786	9,827
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)*	33,192	46,165	48,209	12,972	-2,045	6,521,085	6,478,242	6,385,807	-42,843	92,435	0	0	0	6,825,290	6,730,474	94,816
f. MANAGEMENT RESERVE														48,364		
g. TOTAL	33,192	46,165	48,209	12,972	-2,045	6,521,085	6,478,242	6,385,807	-42,843	92,435	0	0	0	6,873,654		

March 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: 2020/02/24
b. LOCATION:	b. NUMBER: RL14788	b. PHASE	b. TO: 2020/03/22
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	$2,006,247	$6,318,614	$555,072	$6,873,686	$6,873,654	$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	9/30/2020	9/30/2020	9/30/2020

6. PERFORMANCE DATA

BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)

ITEM	BCWS CUM TO DATE	BCWS FOR REPORT PERIOD	SIX MONTH FORECAST +1 Apr-20	+2 May-20	+3 Jun-20	+4 Jul-20	+5 Aug-20	+6 Sep-20	FY09-13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	UNDISTRIB BUDGET	TOTAL BUDGET
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
a. PM BASELINE																		
(BEGIN OF PERIOD)	**6,487,893**	**41,265**	**54,005**	**43,093**	**41,161**	**53,345**	**41,069**	**50,988**	**3,391,477**	**391,653**	**471,323**	**504,826**	**485,028**	**470,649**	**563,065**	**535,767**	**0**	6,813,787
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																		
BCR-013-20-009R0 - Revise W-135 CSA Schedule to Align with Subcontract Award																**(0)**		(0)
BCR-013-20-010R0 - Cask Storage System Fabrication Schedule Incorporation																**9,533**		9,533
BCR-013-20-013R0 - RL-0013 Scope Reductions																**(4,568)**		(4,568)
BCR-013-20-015R0 - W-135 Incorporation of new WBS for MASF Mockup Preps																**(0)**		(0)
BCR-013-20-016R0 - Removal of T-Plant Permacon Scope																**(784)**		(784)
BCR-PRC-20-011R0 - Update FY2020 Level 1 WBS Dictionaries																**0**		0
BCR-030-20-011R0 - Incorporate RL-0030 Scope Reductions																**(2,502)**		(2,502)
BCR-040-20-004R0 - RL-0040 D&D and Demolition Readiness Scope Additions																**19,471**		19,471
BCR-040-20-007R0 - RL-0040 Add scope for UPR-600-12																**90**		90
BCR-040-20-008R0 - RL-0040 REDOX and PUREX Ventilation System Scope Reductions																**(3,371)**		(3,371)
BCR-041-20-002R0 - Revise 300-296 Baseline to Incorporate Contamination Events																**(7,405)**		(7,405)
BCR-041-20-007R0 - Update to 100K Backfill Campaign WBS Dictionary and BOE																**0**		0
BCR-PRC-20-010R0 - Initiate 200-CP-1 RI FS WP																**1,040**		1,040
BCRA-PRC-20-009R0 - HPIC Updates March FY2020																**0**		0
c. PM BASELINE (END OF PERIOD)	**6,521,085**	**33,192**	**56,088**	**45,286**	**45,134**	**56,896**	**44,629**	**56,173**	**3,391,477**	**391,653**	**471,323**	**504,826**	**485,028**	**470,649**	**563,065**	**547,270**	**0**	**6,825,290**
7. MANAGEMENT RESERVE																		**48,364**
8. TOTAL																		**6,873,654**

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 / 02 / 24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 03 / 22
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO:	X YES *(YYYYMMDD)* 2009 / 09 / 18

5. PERFORMANCE DATA

WBS.Resp Org Group	ACTUAL	ACTUAL	FORECAST *(Non-Cumulative)*											
			SIX MONTH FORECAST BY MONTH *(Enter names of months)*						ENTER SPECIFIED PERIODS					
ORGANIZATIONAL CATEGORY	CURRENT PERIOD	END OF CURRENT PERIOD *(Cumulative)*	+1 APR 2020	+2 MAY 2020	+3 JUN 2020	+4 JUL 2020	+5 AUG 2020	+6 SEP 2020	OCT 2020	NOV 2020	DEC 2020	JAN 2021	ATCOMPLETE	AT COMPLETION
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
300 - Office of the President	22	2041	14	14	16	16	16	16	0	0	0	0	0	2,131
303 - Internal Audit	4	621	4	5	5	5	5	5	0	0	0	0	0	650
304 - General Counsel	3	571	3	3	4	4	4	4	0	0	0	0	0	591
32 - Safety Health Security & Quality	64	8832	63	63	63	63	63	63	0	0	0	0	0	9,210
34 - Env Program & Strategic Plng	39	6051	41	42	45	46	47	42	0	0	0	0	0	6,315
35 - Business Services	57	8403	59	59	63	63	63	66	0	0	0	0	0	8,776
36 - Prime Contract & Proj Integr	39	4608	35	37	38	39	39	39	0	0	0	0	0	4,834
37 - Resource Mgmt & Strategic Intg	43	3562	41	41	43	45	45	45	0	0	0	0	0	3,821
38 - Project Technical Services	35	9009	38	39	40	40	40	40	0	0	0	0	0	9,245
3B - PFP Closure Project	180	54804	175	174	187	167	175	157	112	34	0	0	0	55,985
3C - Waste & Fuels Management Project	411	60630	403	405	409	404	404	404	20	8	3	2	8	63,100
3D - Soil & Groundwater Remediation	263	44248	261	266	274	281	265	262	29	8	1	1	0	45,895
3G - K Basin Oper & Plateau Remediation Project	219	35649	208	221	214	220	212	199	32	22	9	2	11	36,999
3H - River Risk Management Project	228	10197	228	228	229	229	228	228	23	21	19	10	157	11,800
3K - Central Plateau Risk Reduction	245	21366	255	252	254	257	253	249	1	1	0	0	0	22,890
g. TOTAL DIRECT	1,853	270,592	1,829	1,849	1,884	1,877	1,857	1,819	217	94	32	16	177	282,242

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

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT
FORMAT 5 - EXPLANATIONS AND PROBLEM ANALYSES

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 (YYYY/MM/DD) 2020/02/24
b. LOCATION (Address and ZIP Code) Richland, WA 99354	b. NUMBER DE-AC06-08RL14788		b. PHASE Base	b. TO (YYYY/MM/DD) 2020/03/22
	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:	33,192	46,165	48,210	12,972	39.1%	(2,045)	-4.4%	1.39	0.96
Cumulative:	6,521,085	6,478,242	6,385,806	(42,843)	-0.7%	92,436	1.4%	0.99	1.01
	BAC	EAC	VAC in $	VAC in %	TCPI				
At Complete:	6,825,290	6,730,473	94,817	1.4%	1.01				

Explanation of Variance/Description of Problem:

Current Period Schedule and Cost Variance:
The current month (CM) positive schedule variance reflects the implementation of several baseline change requests (BCR) that removed baseline scope that will not be performed in FY2020 based on RL guidance. This scope removal resulted in a large CM positive schedule variance for the structural modifications at the 324 Building at RRMP. Furthermore, a BCR realignment of FY2020 scope within the MCSC project at W&FMP was profiled to match the subcontractor's baseline impacting the CM schedule variance. Finally, continued progress at PFP resulted in significant schedule recovery.

The CM cost variance is within thresholds.

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 actions 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 $94.8 million is projected, with an additional $48.4 million of management reserve (MR) for a total positive variance of $143.2 million. For March, the project was 39.1 percent ahead of schedule and 4.4 percent over planned cost. Contract to date, the project was 0.7 percent behind schedule and 1.4 percent under planned cost.

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

14 BCRs were implemented in the current period. They included:

BCR-013-20-009R0, Revise W-135 CSA Schedule to Align with Subcontract Award

BCR-013-20-010R0, Cask Storage System Fabrication Schedule Incorporation

BCR-013-20-013R0, RL-0013 Scope Reductions

BCR-013-20-015R0, W-135 Incorporation of new WBS for MASF Mockup Preps

BCR-013-20-016R0, Removal of T-Plant Permacon Scope

BCR-030-20-011R0, Incorporate RL-0030 Scope Reductions

BCR-040-20-004R0, RL-0040 D&D and Demolition Readiness Scope Additions

BCR-040-20-007R0, RL-0040 Add scope for UPR-600-12

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

BCR-040-20-008R0, RL-0040 REDOX and PUREX Ventilation System Scope Reductions
BCR-041-20-002R0, Revise 300-296 Baseline to Incorporate Contamination Events and A/D Crane Failure
BCR-041-20-007R0, 324 Scope Alignment
BCR-PRC-20-010R0, Initiate 200-CP-1 RI FS WP
BCR-PRC-20-011R0, Update FY2020 Level 1 WBS Dictionaries
BCRA-PRC-20-009R0, HPIC Updates March 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 +$94.8 million, +1.4% and is within reporting thresholds.

Format 1 and 3 Contract Data:

Contract Price Adjustments

CPs - In Process		
	Total Authorized Unpriced Work	$555,072
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
	Grand Total Adjustments	$555,072

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

Undistributed Budget Activity

BCR Number	Title	PBS	Fiscal Year	UB
N/A	*N/A*	N/A	2020	$0

There was no change to UB in March.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
N/A	*N/A*	N/A	2020	$0

There was no change in MR during March.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	*N/A*	N/A	2020	$0

There was no change to fee in March.

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 Control Staff	4/21/2020		

Appendix B
Project Services and Support
(WBS 000)

CH2MHILL
Plateau Remediation Company

K. A. Wooley
Vice President for
Safety, Health, Security
and Quality

M. A. Wright
Vice President for
Project Technical
Services

March 2020
CHPRC-2020-03, 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

R. R. Connolly
Vice President for
Resource Management
and Strategic Integration

PROGRAM SUMMARY

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

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
20-EMS-ADMIN-OBJ1-P1	Reduce energy intensity.	Increase facility occupancy rates to greater than 86 percent by compressing occupancy and vacating underutilized facilities. Occupancy compression to be maintained through disposition of buildings or square footage reduction.	9/30/2020	35%
20-EMS-PTS-OBJ1-P1	Spill prevention/waste minimization/pollution prevention.	Document quarterly surveillances on a work site assessment (WSA).	9/30/2020	50%
20-EMS-PTS-OBJ2-P1	Evaluate upcoming Project Technical Services (PTS) work activities that will involve water discharge to the ground in 200 East, specifically when water is used for dust suppression during PTS project activity.	Document discussion summary in email to PTS Project Manager. Report quarterly.	9/30/2020	25%
20-EMS-PTS-OBJ3-P1	Monthly Chemical Management Inspection/pollution and spill prevention.	Ensure chemical products are accurately tracked, maintained, and excessed/disposed. Perform quarterly assessments on chemical inventory locations.	9/30/2020	50%

TARGET ZERO PERFORMANCE

	Current Quarter	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	2	5	2/11/20: Employee was using a straight edge to guide an exacto knife. The blade slipped off the straight edge causing a laceration to the left index finger. Employee taken to HPMC for first aid. (25485) 3/16/20: Employee was transitioning from sitting to stand when the right arm of chair suddenly swiveled causing a sharp pain in upper right arm. Worker was seen at HPMC for first aid treatment. (25519)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

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

- There were two injuries reported during this quarter in the functional groups.
  - Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
    - Drafted PRC-MP-SH-54447, *CHPRC Occupational Safety Program Management Plan*.
    - Developed and published CHPRC-04290, *Industrial Hygiene Continuous Improvement and Sustainability Plan*.
    - Performed Senior Supervisory Watch (SSW) at the Plutonium Finishing Plant Closure Project (PFP).
    - Continued the CHPRC Winter Safety Campaign, #chprc-winter-safety-2019.
    - Provided update to CHPRC New Employee Orientation presentation to include discussion of CHPRC Vehicle Safety Policy.
    - Revised the CHPRC Industrial Hygiene Work Permit form.
    - Completed SHS&Q-2020-WSA-24044, "Annual Review of Permit Required Confined Space Entry Documentation."
    - Submitted to the U.S. Department of Energy (DOE), Richland Operations Office (RL), CHPRC-04319, *CHPRC Annual Voluntary Protection Program Self-Evaluation Report*.
    - Initiated revision to PRC-STD-TQ-54470, *Occupational Safety and Industrial Hygiene Training Program Description*.
    - Provided technical support to assist in off-site arc-rated flash testing on an arc-rated face shield with respiratory protection equipment.
    - Developed and issued special safety bulletin on bottled water concerns.

- Published PRC-MD-SH-54500, *COVID-19 Notification Response*.
- Supported RL in responding to Office of Inspector General Safety Equipment Audit pertaining to the Respiratory Protection Equipment Tracking System.
- Completed extent of condition assessment for all CHPRC Don/Doff/Locker Rooms, SHS&Q-2020-WSA-25918.

o Radiological Control accomplishments:

- Radiological Control Technician (RCT) Trainees –continued process to evaluate knowledge and skill retention.
- Supported Emergency Preparedness reviewing drill scenarios, and controller/evaluator duties at project drills.
- Supported projects in training and performing field surveys with Bladewerx Alpha Survey Meter.
- Continued to provide radiological work planning mentoring to the Central Plateau Risk Management (CPRM) Project.
- Conducted monthly RL 'Stoplight' meeting to discuss radiological control performance.
- Conducted monthly Radiological Control Managers' (RCM) presentations to RL.
- Continued providing periodic management observation program (MOP) support for PFP clearance survey and doffing processes.
- Continued support to projects with lapel sampler issues.
- Continued to work with Mission Support Alliance, LLC (MSA) to resolve Survey Simple software issues.
- Continued to provide program and project support to contamination control issues at 324 Building, including participation in development and commencement of advanced doffing training for radiological workers. Advanced training was evaluated and determined to be need at CPRM
- Continued evaluation for new sealed source control database in development.
- Implemented Smear, Air, Lapel (SAL) Tool revision.
- Continued with new alpha/beta continuous air monitor testing and evaluation at W&FMP.
- Completed review and update of all project points of contact and central technical authority qualification cards.
- Completed requirements flow down procedure verification.
- Supported "off-site" radiological response to the 324 Building hydraulic fluid tank removal.
- Presented new Partial Entry computer based training (CBT) at Facility Managers' Forum. Managers concurred with the path forward. CBT course 600329 development has been completed, and approved for use.
- Completed new Sentinel radiological work permit preparer's course and commenced training of personnel.
- Hired and completed initial qualifications for new Dosimetry Company Technical Authority.
- Conducted interviews with program and project RCMs and made offers to six Health Physicist needed to support program and project activities.
- Provided ongoing support for Sentinel and personnel access issues including completed testing of Sentinel to ensure ARACS data import in support of ARACS database shut down.
- Attended Environmental Restoration Disposal Facility mock-up for PFP waste place and cover.
- Initiated procedure and software changes to support approval of Hanford Forum verification survey technical position document.
- Supported CPRM Apparent Cause Evaluation for trend in elevated air sample results.
- Supported CPRM in interpretation of alpha/gamma energy analysis.

- Approved Technical Evaluations for 224T, 231Z, Z2/Z9 and 361 Settling Tank.
- Commenced writing Technical Evaluation for 203A Plutonium Uranium Extraction Plant (PUREX) acid pump house.
- Completed assessment for Conduct of Work Practices within the CHPRC Radiological Control Program (SHS&Q-2020-WSA-24055)
- Revised the Authorized Limits request (HNF-63904) through an Addendum in preparation to submit to RL for approval.
- Conducted industrial hygiene, environmental and radiological control evaluation of CC Doff to support use as a fixture during doffing activities.
- Completed calendar year 2020 annual thermoluminescent dosimeter exchange on schedule.
- Initiated Electronic Dosimetry Alarm Review
- Received approval on final proposal for Columbia Basin College Bachelors of Applied Science in Health Physics beginning Fall 2020.
- Created process for personnel on short term/long term disability to return dosimetry via self-addressed mailers.
- Commenced evaluation of missed bioassay appointments versus organizational no show charges from 2017 to present.
- Completed Microshield and MCNP validation of 324 Building dose models for soil underneath B Cell.
- Worked with PFP and Resource Management & Strategic Integration to establish radiological resource redeployment strategy.
- Supported 324 Building Apparent Cause Evaluation for potentially contaminated equipment leaving site.
- Transitioned Central Radiological Counting Facility from KBO to CPRM.

o Nuclear Operations Support & Compliance accomplishments:

- Correspondence transmitted to Department of Energy Richland Operations Office (RL):
  - Letter, CHPRC-2000265, *Submittal of the 2020 Annual Update of the 224-B Facility Safety Basis and the Unreviewed Safety Question Determination Summary,* dated January 22, 2020.
  - Letter, CHPRC-2000280, *Transmittal of the 2020 Annual Update to the CH2M HILL Plateau Remediation Company Safety Management Program, HNF-11724, Revision 16,* dated January 29, 2020.
  - Letter, CHPRC-1905187.1, *Withdraw of CHPRC's submittal of the Waste Encapsulation and Storage Facility Documented Safety Analysis, HNF-8758, Revision 13; and the Waste Encapsulation and Storage Facility Technical Safety Requirements, HNF-8759, Revision 13,* dated January 30, 2020.
  - Letter, CHPRC-2000746, *Submittal of the 2020 Annual Update of the Fast Flux Test Facility Safety Basis and the Unreviewed Safety Question Determinations Summary,* date February 24, 2020.
  - Letter, CHPRC-2000709, *Transmittal of the 2020 Annual Update to the Tank 241-Z-361 Documented Safety Analysis, HNF-20503, Revision 4; the Technical Safety Requirements for the Tanks 241-Z-361 Facility, HNF-20504, Revision 6; and the Unreviewed Safety Question Determinations Summary,* dated February 24, 2020.
  - Letter, CHPRC-2000280.1, *Transmittal of RL Reviewed and Comment Incorporated 2020 Annual Update to the CH2M HILL Plateau Remediation Company Safety Management Program, HNF-11724, Revision 16,* dated February 27, 2020.
  - Letter, CHPRC-2000793, *Transmittal of the Solid Waste Operations Complex Master Documented Safety Analysis, HNF-14741, Revision 12B, and the Technical Safety*

Requirements for the Solid Waste Operations Complex, HNF-15280, Revision 12B, dated March 19, 2020.
- Letter, CHPRC-2001295, *Request for Approval of the One-Time Request for Shipment for Sludge Transport from K West Basin to T Plant, CHPRC-03111, Revision 4*, dated March 31, 2020.

– Correspondence received from RL:
- Surveillance DOE-ASMT-2020-2610, Functional Area Performance Evaluation of Transportation (September 2019).
- Surveillance DOE-ASMT-2020-1716, Functional Area Performance Evaluation of Transportation (October 2019).
- Surveillance DOE-ASMT-2020-2205, Functional Area Performance Evaluation of Transportation (November 2019).
- Surveillance DOE-ASMT-2020-2200, Functional Area Performance Evaluation of Nuclear Safety (November 2019).
- Letter, 20-PFD-0009, *Approval of the Management of Cesium and Strontium Capsules Project (W-135) Safety Design Strategy, CHPRC-02236, Revision 2*, dated January 31, 2020.
- Letter, 20-NSD-0007_RL, dated, *Approval of RADIDOSE Version 3.0 Modeling Protoco* February 24, 2020.
- Letter, 20-NSD-0015_RL, *Transmittal of the 2020 Annual Update to the CH2M HILL Plateau Remediation Company Safety Management Program, HNF-11724, Revision 16*, dated March 6, 2020.
- Letter, 20-NSD-0014_RL, *Transmittal of the Hanford Site wide Transportation Safety Document, DOE/RL-2001-36, Revision 3, for RL Review and Approval*, dated March 6, 2020.
- Surveillance DOE-ASMT-2020-2561, Functional Area Performance Evaluation of Engineering (October 2019).
- Surveillance DOE-ASMT-2020-2571, Functional Area Performance Evaluation of Nuclear Safety (December 2019).
- Surveillance DOE-ASMT-2020-2574, Functional Area Performance Evaluation of Transportation (October 2019).

o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
– 661 Condition Reports (CRs) were screened:
- No significant issue identified.
- Eight adverse issue identified.
- 290 Track until Fixed issues identified.
- 149 Trend Only items identified.
- 203 Opportunities for Improvement (OFI) items identified.
- 11 Screened Out.

– 693 CRs administratively closed.
– 896 CRs actions administratively closed.
– Provided Course No. 600082, *CHPRC Responsible Manager Training, Issues Management*, to CHPRC personnel.
– Provided full time support to PFP Issues Management and Occurrence Reporting activities.
– Provided Occurrence Reporting support to the River Risk Management Project.
– Transmitted Occurrence Reporting and Resolution System (ORPS) report EM-RL--CPRC-GENLAREAS-2020-0001, *Personal Injury to Vendor Employee.*
– Submitted ORPS notification report EM-RL--CPRC-324FAC-2020-0001, *The Door On a 240VAC Disconnect Was Found Ajar.*

- Completed Apparent Cause Evaluation and submitted final report for EM-RL--CPRC-PFP-2020-0001, *Paper Towels Found Smoldering Next to Heat Lamp*.
- Conducted an Apparent Cause evaluation associated with EM-RL—CPRC-GENLAREAS-2020-0001, *Personal Injury to Vendor Employee*.
- Conducted an Apparent Cause evaluation associated with CR-2019-2659, *CPRM – Air Sampler Trend Identified at CPRM*.
- Transmitted Noncompliance Tracking System (NTS) report NTS-EM-RL-CPRC-324FAC-2020-0009963, *Repetitive Personal Contamination Events at the 324 Facility*.
- Provided on-going leadership in development of CHPRC Integrated Contractor Assurance System test environment.
- 76 documents were provided in response to DNFSB requests for information.
- Provided support to the DNFSB Hanford Site Resident Inspectors.
- Co-ordinated review and comment resolution of the Weekly Hanford Site Resident Inspector Report.
- Provided a CRRS overview session for the Human Resources organization. Positive feedback was received.
- Provided update of information in support of CHPRC project and program Transition Briefing Books.
- One internal Just-In-Time Report was submitted in OPEXShare: 2020-RRMP-0001, *Potential Contamination of System Components without Implementation of Appropriate Radiological Controls*.
- Published the monthly Contractor Assurance System Summary Report.

o Performance Oversight, Assessment, and Quality Assurance accomplishments:

- Issued final report for the 10 CFR 835 Subpart H, *Records*, assessment that was conducted September through December 2019. The assessment resulted in six Findings.
- Completed planning in-field activities, management out-brief and initiated writing draft report for the 10 CFR 835 Subpart M, *Radioactive Sealed Sources*, assessment. The report will be issued in April 2020.
- Issued final report for Surveillance SHS&Q-2020-SURV-24810, *Review of PRC-MP-QA-599 and the Alignment with 10 CFR § 830.121 & § 830.122 and DOE O 414.1D (CRD)*.
- Provided specific mentoring and feedback to assessors and responsible managers that conducted management assessments. Feedback was provided to help improve the quality, including clarity and readability of future reports. Provided specific assessment mentoring to KBO, CPRM, S&GRP, RRMP, W&FMP, PC&PI, Business Services, RM&SI, and SHS&Q organizations.
- Completed final revisions and issued procedures PRC-PRO-QA-9662, *Independent Assessment Process*, and PRC-PRO-QA-40090, *Work Site Assessment*.
- Developed a template for 324 Project Quarterly Fire Protection assessments that includes a combustible material walk down and analysis.
- Drafted Management Assessment plan and developed project specific Lines of Inquiry to support RM&SI-2020-MA-24813, *Annual Project Productivity and Efficiency Assessment*.
- Issued final report for SHSQ-2020-SURV-24797, *Design (W-135*).
- Issued final report for SHSQ-2020-SURV-24796, *MSA Annual Evaluated Supplier List (ESL) Assessment*.
- Preparation of OCRWM Audit Checklist for SHS&Q-2020-Audit-24760, *Annual Audit of the OCRWM Quality Assurance Program*.
- Completed and distributed SHSQ-2020-SURV-24695, *Monitor Supplier Performance*.
- Initiated annual review of PRC-MP-QA-599, Quality Assurance Program.

- Participated in weekly quality assurance (QA)/RL interface meetings.
- Issued final report for SHSQ-2020-SURV-25541, *Supervisor and Manager Qualification Evaluations*.
- Continued mentoring / cross-qualification of new and existing inspection personnel
- Provided QA support to CHPRC projects (subcontractor oversight plans, contractor submittal reviews, work packages and Statement of Work reviews).
- Continued in-process training to obtain multi-disciplined Level III Inspection certifications.

o Fire Protection (FP) accomplishments:

- Issued technical position on "Permissible Omission of Automatic Fire Sprinkler Protection for the Proposed Encapsulation of the 105KE Building" and obtained RL concurrence.
- Issued final report documenting tests of the CWC water supply loop to determine condition of system.
- Finalized and issued approved Waste Encapsulation and Storage Facility (WESF) fire hazard analysis (FHA) and Project W-135, Canister Storage Area, Pre-FHA.
- Issued response to RL request regarding facility fire system deactivation of five buildings managed by CHPRC.
- Completed quarterly TSR surveillance of several T Plant locations.
- Completed quarterly 324 Building combustible material surveillance.
- Completed REDOX combustible loading assessment.
- Completed Facility Fire Protection Assessment for numerous facilities.
- Supported planning effort for WRAP facility roof panel replacement.
- Developed and presented training material on Fire Protection requirements for program and project personnel.
- Issued 'Just In Time' safety bulletin and worked with radiological control management to improve safety of radiological smear drying process.
- Completed WSA of Fire Protection Inspection, Testing, and Maintenance, which resulted in four findings and five opportunities for improvement.
- Developed framework for transitional facility FHA.
- Fire Protection staff continue to perform numerous work package reviews and issue Hanford Fire Marshal permits in support of planned activities.
- Issued technical position on potential DOE-STD 1066 omissions of hydrants for non-building areas in nuclear Hazardous Category facilities and obtained RL concurrence.
- Prepared Fire Protection Functional and Operating Requirements for REDOX Exhauster and obtained RL Concurrence.
- Supported plant life extension capital improvement study for fire protection issues at W&FMP.
- Prepared FPE Team for transition to remote work status, tested communications tools and made interface contacts to Project Stakeholders to maintain commitments through site minimum safe status.
- Completed investigative phase of fire incident near-miss involving PFP heat lamp use.

o Fire Protection staff continue to perform in-progress review of FHA's and preparing updates to specific sections for three transitional facilities.

Environmental Program and Strategic Planning (EP&SP)

- **Environmental Protection**
  - o Initiated the revision process for the Criteria and Toxics calculation after the Washington Administrative Code (WAC) 173-460 update.
  - o Submitted Asbestos Notice of Intent (NOI) for 224B work scope prior to full transition to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
  - o Drafted the transmittal letter to RL for the Closure Certificate for the 276-BA Organic Storage Area.

- Supported development of aging structures time critical removal action (TCRA).
- Initiated and issued a National Environmental Policy Act of 1969 (NEPA) Categorical Exclusion (CX) B1.30 "Transfer Actions" with review and signature obtained from the RL NEPA Compliance Officer. This CX provides NEPA coverage for offsite shipments of CHPRC waste. .
- Supported development of PUREX CDI/200-CP-1 Remedial Investigation (RI)/ Feasibility Study (FS).
- Communicated Washington State Department of Ecology's (Ecology's) new Unknown Waste Policy to CHPRC projects, and began actions to update procedures accordingly.
- Identified and communicated that RL issued a letter stating that the universal waste accumulation time limit for the entire Hanford Site is one year, as opposed to one year in the field and one year at the MSA Centralized Consolidation/Recycling Center (CCRC). Identified that MSA has requested an accumulation limit of about 6 months in the field to accommodate about 6 months of accumulation at the CCRC. Began process of identifying and updating procedures and training.
- Provided support to applicable or relevant and appropriate requirement (ARAR) issue for 100-BC groundwater cleanup level.
- Drafted and distributed example compliance matrix and instructions for use during Washington State Department of Health (WDOH) radiological air emissions major stack inspections.
- Provided subject matter expert (SME) support and inputs to ongoing negotiations with Ecology regarding FFTF path forward
- Worked with 100K Soil Remediation Project and MSA to plan relocation of Near Field Air Monitor N575. Upcoming remediation of Waste Information Data System (WIDS) site 100-K-56:3 will require that the underground electrical cable (which supplies power to N575) be removed. The air monitor will be relocated adjacent to well 199-K-178, which has an available power receptacle.
- Provided support to the development of CHPRC Minimum Safe Compliance Plan.
- Provided support to the following inspection activities:
  - Ecology (seven inspections)
  - The WDOH (three inspections)

- **Environmental Compliance and Quality Assurance**
  - Assessment status
    - Completed surveillance of pollution prevention on January 14, 2020, that resulted in no findings and two OFIs.
    - Completed surveillance of the updated generator improvement rule, on January 29, 2020, that resulted in no findings or OFIs.
    - Completed surveillance of waste management plans on January 30, 2020, that resulted in two findings and four OFIs.
    - Completed management assessment of EP&SP contract closure documentation on March 12, 2020, that resulted in two findings and four OFIs.

- **Demonstrate active leadership and progress toward obtaining new Resource Conservation and Recovery Act (RCRA) Permit for the Hanford Site**
  - Facilitated and participated in the following meetings:
    - Weekly permit project management team meetings.
    - Weekly permit meeting for Hanford contractors.
    - Weekly schedule strategy discussions with Ecology.
    - Biweekly schedule status meetings with RL, DOE Office of River Protection (ORP), Ecology, and contractors.
    - Monthly Tier 2 meeting with RL, ORP, and Ecology senior management.
  - Maintained the Hanford Site RCRA permit schedule to reflect progress against the plan.

  - Provided a detailed monthly schedule report and analysis for progress on the permit to Ecology, RL, ORP, and the contractors.
  - Provided tracking and status of open issues that are preventing progression of the permit.
- Provided fulltime regulatory expertise and project management support.

- **Quality and timeliness of key documents submitted**
  From January through March 2020, 90 environmental documents supporting various CHPRC projects were completed through EP&SP Publication Services, established to provide a systematic process for performing technical editing and formatting of environmental documents.

Business Services

- **Supply Chain/Acquisitions:**
  - Completed award of amendments to the Cesium Strontium Storage contract with NAC International for manufacturing/production of key components.
  - Completed negotiations with Apollo Mechanical under the construction contract for 324 Building interference removal and structural modifications.
  - Worked with the CHPRC equipment custodians to identify rented industrial equipment and confirm its use in preparation for transition to a new prime contractor.
  - Issued an Expression of Interest to perform market survey/sources sought for firms to perform structural stabilization of the 216-Z-2 Crib, the 216-Z-9 Trench, and the 241-Z-361 Tank. Five responses were received.
  - Performed Buyer Update Training to complete recent corrective actions developed in response to a RL surveillance on CHPRC's procurement system associated with North America Industrial Classification System (NAICS) codes.
  - Assisted MSA in testing an internal control coding change in the Asset Suite system to control prime contractor data change capabilities.
  - Worked with W&FMP to develop a contract that will support the servicing of facility electrical breakers and train CHPRC workers to perform future maintenance activities.
  - Assisted the Pacific Northwest National Laboratory (PNNL) with utilization of the Integrated Contractor Purchasing Team (ICPT) Agreement for beryllium testing.
  - Completed all necessary corrective actions relating to the RL Surveillance of CHPRC Small Business Subcontracts/NAICS Codes.
  - Issued a communication to remind CHPRC subcontractors of the proper protocol for notifying CHPRC in the event a subcontractor employee is injured while working on the Hanford Site.
  - Implemented revised wage rate determinations for Service Contract Action and the Davis Bacon Act.
  - Implemented a reconciliation process with subcontractors that requires staff augmentation subcontractors to submit a certification that their timekeeping system is reconciled with that of the reports that are released from the Contracted Labor Time Recording System.
  - Completed updates to the Supply Chain Briefing Books to support future contract transition.
  - Completed evaluation of the Best and Final Offer for the consent package in support of the Building Trades Craft Support. CHPRC is awaiting Contracting Officer consent.
  - Continued to work with representatives of MSA and Washington River Protection Solutions (WRPS) on implementation of an apprentice utilization requirement for construction contracting. This is part of the ongoing effort by the Hanford Future Workforce Subcommittee to develop Hanford's future construction workforce. CHPRC will coordinate a meeting to discuss a path forward for implementation.
  - Assisted the Savannah River Site (SRS) with the identification of small business construction subcontractors that could propose on small job works at SRS.
  - Worked with suppliers of disposable coveralls to determine near-term supply impacts from the worldwide coronavirus concern.

- Worked with the Supply Chain Management Center in identifying proper quality-level designations for a complex-wide waste drum procurement action.
- Developed an acquisition strategy to acquire a lifting bail/grappling hook that will support the eventual loading/unloading of Low Activity Waste Containers at the Integrated Disposal Facility (IDF). WRPS is in the process of ordering the grapples with a proprietary design and CHPRC developed a method to cooperatively procure two additional grapples that will be needed at IDF.
- Continued the development of the Buyer Technical Representative Cost Acknowledgement (BCAS) Tool to include enhancements for delegation and automated email notifications. Tool used to acknowledge reasonableness of MSA/Prime billings.
- Identified potential sources for Independent Qualified Registered Professional Engineer (IQRPE) services for the ERDF project.
- Received annual purchasing card rebate in the amount of $106,493.88.
- Assisted the DOE/NNSA Supply Chain Management Center with identifying impact on safety supplies due to the coronavirus (COVID-19) pandemic.
- Completed negotiations with contractor senior management on outstanding changes that supported 324 Building Disposition Project.
- Assisted PNNL with identifying and developing Expression of Interest/Sources Sought for work being considered at the national laboratory.
- Flowed down CHPRC COVID-19 related notices to subcontractors for information and direction.
- Met with representatives from WRPS to discuss waste packaging support. It was agreed that CHPRC would review the WRPS request and coordinate a response to determine if CHPRC can support such an effort.
- Reviewed excusable delay language with staff to ensure they understand the parameters of force majeure.

- **Procurement:**
  - During the second quarter of Fiscal Year (FY) 2020, awarded/amended 399 contracts with a total value of $38 million. Additionally, awarded 523 new material purchase orders (PO) valued at $2.5 million to support ongoing project objectives.
  - At the end of 138 months of the CHPRC project, procurement volume has been significant: $3.0 billion in contract activity has been recorded with approximately 56.7 percent, or $1.73 billion, in awards to small businesses. These awards include 8,915 contract releases, 31,057 POs, and 347,083 PCard transactions.
  - Major contract awards:

Contract/ Release	Award Date	Awarded To	Title	Contract Type	Value ($M)
72295	12/26/19	Truvision Solutions LLC	REDOX Substation	FFP	$ .37
72435	1/9/20	DGR Grant Construction Inc.	IDF Infrastructure Upgrades - Leachate Collection Tank Domes	FFP	$ 1.67
48772-23	1/20/20	Stillwater LLC	Drilling Three Extraction Wells in the 200-ZP-1 OU, FY20	FFU	$ 1.21
61180-9	2/3/20	NAC International Inc.	Task 9 – Fab/Deliver Transfer Sys & Ancillary Equip Test	FFP	$ 4.44
48768-19	2/24/20	Carpenter Drilling LLC	Drill Four Monitoring Wells In the 200-ZP-1 OU, FY20	FFU	$ .99
73008	2/24/20	James Fisher Technologies LLC	REA Demolition Tool	CPF	$ .63
67048-16	2/24/20	Freestone Environmental Services, Inc.	200-CP-1 OU RI/FS Work Plan Preparation Support	T&M	$ .31
48768-20	3/2/20	Carpenter Drilling LLC	Drill Two Extraction Wells in the 200-DV-1 OU, FY20	FFP	$ .58

- **Facilities & Property Management:**
  - Completed installation/setup and occupancy of two double-wide mobile office (MOs) trailers on 275EA slab near PUREX.
  - Completed setup of two trailers north of REDOX.
  - Completed setup of double-wide, shower, and restroom at B Plant.
  - Continued planning for setup of a four-wide trailer south of B Plant.
  - Working COVID-19 response coordination with MSA.
  - Assisted with the development of a statement of work for the Immobilized Low Activity Waste Container Grappling Hook through WRPS interface.
  - FY2020 Inventory Campaign is 90.48 percent complete. CHPRC has 374 property items left to locate. The Federal Building support organizations, ERDF, and PTS have all reached 100 percent complete.

- **Finance:**
  - Continuing with the series of RL finance/contracting officer meetings to discuss and align topics identified in the CHPRC Incurred Cost Audit Corrective Action Plan for FY2009-2015 and RL Finance Surveillances.
  - January through March month ends were completed with no cost suspensions.
  - Submitted FY2019 Incurred Cost Report (ICR) to RL Finance.
  - Submitted the CY2019 Property Valuation Report.
  - Submitted the FY2020 first quarter reconciliation of RL's Accounts Payable – Accrued Liabilities account (#2110).
  - Submitted FY2020 Quarter 1 International Transaction Report.
  - Continued providing support for the FY2017 ICR Audit. Preliminary report indicates zero questioned costs.
  - Continued providing support for the FY2018 and FY2019 Invoice Assessments.
  - Continued to provide support for Accrual Assessment initiated by RL Finance.
  - Provided support for the ICR audit for FY2018.
  - Provided support for the CR 4202 Capital Determination assessment initiated by RL Finance.
  - Provided support for the contract labor time reporting assessment being conducted by RL.
  - Transitioned Finance group to telework environment due to COVID-19 issues.
  - Issued guidance on proper time charging during Essential Mission Critical operations.

- **Information Management:**
  - Processed 139,334 electronic records during the second quarter of FY2020 into the Integrated Document Management System (IDMS).
  - Partnered with MSA to augment IT Fairs held in testing and preparation for telework by CHPRC staff. Badge readers and assistance were provided from a Federal Building location to CHPRC team employees.

Prime Contract and Project Integration (PC&PI)

- **Project Management/Compliance Assessments (PM/CA):**
  - Supported the CHPRC Project Review Board (PRB) tasked with assessing the readiness of Project W-135, *Waste Encapsulation and Storage Facility Modifications*, Line Item readiness for the submittal for RL approval of DOE Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, Critical Decision (CD)-2, *Approve Performance Baseline*, and CD-3, *Approve Start of Construction/Execution*.
  - Continued to lead the implementation of the PC&PI FY2020 integrated assessment plan and completion of open actions in CRRS assigned to PC&PI. PC&PI's plan currently reflects the performance of 11 self-assessments in FY2020. As of the end of fiscal month March 2020, two assessments had been completed with none delinquent and PC&PI had three open CRRS actions with none of them delinquent.
  - Continued to support PMB change control by supporting the development of Baseline Change Requests (BCRs), providing review and input on proposed BCRs, and serving on the CHPRC Change Control Board when required.
  - Continued to serve as the PC&PI Transition Planning Lead. This included being responsible for coordination of PC&PI specific data and providing CHPRC crosscutting PMB planning and performance information for the draft CHPRC Transition Briefing Book.
  - Served as the PC&PI lead for input to the expedited effort to develop a CHPRC minimum-safe plan. This plan is being developed for the potential RL directed reduce operations to comply with Federal and State direction for social isolation in response to the World Health Organization declaring on March 11, 2020 that novel COVID-19 was a global pandemic and President Trump announcing on March 13, 2020, the National Emergency Declaration for COVID-19 pandemic.

- **Prime Contract Compliance (PCC):**
  - January through March, PCC received and processed 21 contract modifications (704, 707, 709-714, 716-720, 723, 729-734 and 736) from RL.
  - The Correspondence Review Team received and determined the distribution and assignment for 194 incoming letters/documents. PCC reviewed 98 outgoing correspondence packages.

- **Project Integration:**
  - Project Support, Systems Integration & Schedule Integration
  - 000 Project EVM Support and Reporting:
    - Issued three months of CHPRC Monthly Performance Reports to RL.
    - Submitted the December, January, and February Gold Metrics to RL.
    - Completed safety hour reporting each month.
    - Compiled integrated project team and monthly project review packages for December, January, and February.
    - Participated in a two and a half day Earned Value Management (EVM) value stream mapping (VSM) workshop. Prepared EVM VSM out brief. This workshop identified future structured improvement activities and outlined a get to excellence plan to refine existing processes, systems/tools, and approaches.

- **Project Support Services:**
  - Risk Management:
    - Supported FY2021 PMB Planning Update. Attended Kickoff meetings and developed presentation for Estimating & Risk Roadshow.
    - Conducted second quarter risk register reviews and updates.
    - Continued supporting and testing new site wide risk register database for potential future use.
    - Completed Work Site Assessment on Enterprise Risk and Opportunity Management System, new site wide risk register database, for use at PRC.
    - Supported W-135 Project, WESF, DOE O 413.3B Line Item upcoming submittal for DOE approval of Critical Decisions 2 and 3. Including updating and revising risk registers.
    - Conducted monthly assessments of the status of key project risks and risk impacts associated with BCRs.
  - Estimating and Program Support (E&PS)
    - Reviewed 28 BCRs prior to implementation into the PMB during January, February, and March.
    - Provided estimating review and concurrence of four FY2020 Plant Force Work Reviews (PFWRs).
    - Provided estimating review of two Project FY2020 Inter-Entity Work Orders.
    - Created three rough orders of magnitude (ROMs) for Projects and management.
    - Provided estimating support to develop 16 Project specific estimates.
    - Developed seven Fair Cost estimates.

Resource Management and Strategic Integration (RM&SI)

- All contractual actions completed on or ahead of schedule.

- **Human Resources (HR):**
  - Implemented new Washington State Paid Family and Medical Leave (PFML).
  - Participated in the Office of Federal Contractor Compliance Programs (OFCCP) Early Resolution process.
  - Published 2020 approved salary structure for CHPRC.
  - Updated Human Resources compliance matrices with the new PFML.
  - Completed Affordable Care Act 1095C and 1095B reporting requirements.
  - Established a Leave of Absence phone number that will ensure back up and continuous coverage for questions and issues.
  - Published updated procedure PRC-PRO-HR-030, *Managing Employee Personnel File Information*, revised to include the creation and management of employee personnel files.
  - Completed the new Performance Improvement Plan form.
  - Published new Temporary Alternative Work Location (TAWL) Management Directive (PRC-MD-HR-54502).
  - Created TAWL Agreement in support of teleworking due to COVID-19 impacts.

- **Staffing and Development:**
  - Received certification in Discovery Leadership Profile (DLP) and Emerging Leadership Profile (ELP) 360 assessments for Development team.
  - Conducted internal equity analyses based on third-party regression for Office of Federal Contract Compliance Programs (OFCCP) review period, developed options, and submitted financial remedy proposal to OFCCP.
  - Developed job descriptions and compensation-related pre-closeout action plan activities for CHPRC Closeout Office.
  - Developed Job Description Pilot Project Plan.

- Updated Recruiting and Retention Incentive form to strengthen retention justification.
- Worked with MSA on updates to Performance Review Tool and Salary Planning Tool to improve functionality, efficiency, and accuracy.
- Completed 2020 Affirmative Action plans with narratives for three plan areas.
- Supported multiple Chiawana High School Highway to Hanford events.
- On-boarded three new Staffing and Development employees.
- Finalized Key Talent Development Framework.
- Developed and finalized Recruiting Plan for 2020.
- Processed and on-boarded 63 new hires.
- Submitted Compensation Increase Plan/Salary Increase Fund Calculation and Expenditure Report to RL.
- Documented methodology for compensation audits to include links, source files, and other necessary information to ensure consistency and transfer of knowledge.
- Created compensation and new recruiting process workflows and/or desk instructions.
- Participated in resume review and mock interviews at WorkSource; included senior leadership support.
- Developed senior management presentation with content to be presented at New Hire Orientation (NHO).
- Created and deployed a recruiting checklist to ensure consistency and help measure effectiveness of recruiting efforts.
- Established bi-weekly meeting to integrate Equal Employment Opportunity (EEO)/Affirmative Action compliance with recruiting efforts.
- Published annual EEO policy and Leadership Commitment letters.
- Created 2020 Affirmative Action leadership briefing.
- Held sessions with each project/program to implement the new Resume and Interview Evaluation tool.
- Conducted multiple mini resume and interviewing sessions as requested.
- Conducted mini "ART of Interviewing" session for JuMP network.
- Conducted kick-off sessions for mentors and mentees at PFP.

- **Labor Relations (LR):**
  - The following is a list of grievances in the arbitration process and the status:
    - Labor Relations worked with the union to close five arbitrations.
    - Arbitrations closed:
      - PRC-018-001 – Demobilization of equipment
      - PRC-018-011 – Tumbleweed Removal
      - PRC-018-026 – Tumbleweed Removal
      - PRC-018-024 – Demobilization of equipment
      - PRC-018-039 – Demobilization of equipment
    - Scheduled arbitrations:
      - PRC-017-042 – union grieving company's closure of the Plastic Shop at PFP. Status: Arbitration continuation scheduled for to be determined (TBD).
      - PRC-018-021 – applying fixative. Status: Arbitration scheduled for June 24, 2020.
      - PRC-019-019 Excessive Discipline. Scheduled October 1, 2020
    - The following grievance has been requested by Hanford Atomic Metal Trades Council to move to arbitration but pending arbitration date:
      - PRC-019-003 – Excessive Discipline
      - PRC-019-004 – Excessive Discipline
      - PRC-019-020 – Excessive Discipline
      - PRC-019-029 – Pay

- **Interface Management:**
  - Completed internal Quarterly review of received MSA loaned labor resources and assessed any changing needs for the balance of FY2020.
  - Completed the Annual Water Usage Forecast for MSA.
  - Completed TOC-AIA-PRC-00076, Administrative Interface Agreement (AIA) for Tank-Side Cesium Removal (TSCR) Waste Information Data System Site Modifications and Project Interfaces, October 10, 2019.
  - Completed Initial Release of TOC-AIA-PRC-00083, Rev. 0, TX Basin AIA.
  - Initiated Cancellation of Interface control document (ICD) HNF-23474, Revision 2 for PFP Steam Service.
  - Updated HNF-41306, Revision 3, Regulatory Agency Inspections AIA.
  - Released TOC-AIA-PRC-00078, Revision 0, Central Maintenance Facility AIA.

- **Strategic Management:**
  - Reached final agreement on FY2020 Assistant Manager for River and Plateau (AMRP) Integrated Priority List (IPL) Revision 2a (and subsequently revision 3) with DOE. IPL is now published on DOE's Project Data Management System site.
  - Developed initial telework estimates in response to RL Contracting Officer request.
  - Updated Minimum Safe Compliance Plan with Minimum Safe definition differences between DOE Budget Guidance/current operations and Minimum Safe Compliance Plan.
  - Developed draft FY2021 IPL in support of FY2021-2023 PMB annual update.
  - Conducted one-on-one sessions with CHPRC Vice Presidents regarding targets and scope for FY2021.
  - Prepared the updated Project Evaluation Matrix FY2019 Q4, and made it available as a pre-Public Release version for use in transition in addition to the approved June 2019 Matrix version.
  - Completed FY2020 Staffing Profile combined database using HR headcount, Open Requisitions report, attrition, and staff augmentation contract data. Finalizing process documentation.
  - Supported kick off meetings with projects on the process and expectations for FY2021 annual planning deliverable.
  - Developed ERDF Optimization analysis for CHPRC/RL Senior management that identified projected demolition volumes and potential contaminated soil sources.

Project Technical Services (PTS):

- **Training and Procedures**
  - Implemented new instructor-led *Application of Conduct of Work Principles*, course 600631, for non-Training Implementation Matrix (TIM) positions working in supporting roles.
  - Prepared a crosswalk table associating Enterprise Learning Management (ELM) Learner group names with new Success Factors Class names to enable a programming fix for Hanford Site Worker Eligibility Tool (HSWET) reports that were built using Learner Groups from ELM. Without this solution, HSWET reports built using Learner Groups would fail to function after the Learning Management System (LMS) transition to Success Factors.
  - Issued change to PRC-PRO-CN-14990, *Construction Management*, to require documentation of the craft safety orientation prior to commencing fieldwork, by using Site Form A-6006-763, *Construction Contractor Worker – Craft Safety Orientation*. This helps ensure that all construction subcontractors receive the same information for smooth project startup.
  - Completed the last planned session of S*ystem Isolation Fundamentals* associated with improving company-wide recognition and performance of hazardous energy isolation activities by providing the training to all Field Work Supervisors (FWS) and Lockout/Tagout (LOTO) Controlling Organization Administrators (COA).
  - Issued a change to PRC-STD-OP-54266, *Hazardous Energy Control*, to update the roles and responsibilities of Primary Controlling Organization Administrators (for Lockout/Tagout), and

clarify the requirement for facility/project management to review non-routine LOTO prior to release of work.
  - Issued a new Procurement System Qualification Card, course 600346. This will provide a base level knowledge for new procurement staff members.
  - Teamed with program subject matter experts to update PRC-PRO-WM-52692, *Waste Planning, Packaging, and Labeling*, to incorporate significant change regarding radiological and non-radiological determination decisions, and reviewer comments. A new site form, A-6007-745, *Non-Radiological Waste Assessment*, was developed for an advanced Radiological Control screening to determine non-radiological status.
  - Issued a change to PRC-POL-TP-53828, *Federal Motor Carrier Safety Administration Drug and Alcohol Policy*, to include a new subsection called "DOT Drug and Alcohol Clearinghouse." Hanford Site contractors operating any commercial motor vehicles (CMV) are now required to enroll in the Washington State Department of Transpiration (DOT) Drug and Alcohol Clearinghouse, perform annual employee records reviews, and report any DOT Drug and Alcohol violations for their Commercial Driver's License (CDL) operators.
  - Completed initial testing of custom Crystal reports for use with the new Learning Management System (LMS) and provided the programmers with comments for use in making edits where necessary.
  - Added a Safe Vehicle Operation section to CHPRC General Employee Training (CGET) to help implement the company's policy PRC-POL-SH-54212, *Vehicle Safety Policy*. This brief lesson was added in response to requests from CHPRC senior management and the Hanford Site vehicle traffic safety committee for improving safety, compliance to state laws, and awareness of site contractor policies.
  - Initiated a series of periodic Training Program reviews with program managers including Project Technical Services (PTS), Engineering, Staffing & Development, and Labor Relations. Follow-up meetings will be conducted over the course of 2-3 months to initiate and complete requested actions.
  - Issued a new management directive PRC-MD-SH-54500, *COVID-19 Notification*, per Department of Energy direction, to ensure managers understand the Novel COVID-19 notification process and that any CHPRC response aligns with the other Hanford contractors.

- Operations Program
  - Updated PRC-PRO-MN-19304, *Periodic Maintenance Process*, hazard review instructions for periodic reviews.
  - Updated and published all maintenance/work management reports for Central Plateau Cleanup Contract (CPCC) transition books.
  - Performed field interviews for assessment of DOE-0359, *Hanford Site Electrical Safety Program*, implementation.
  - Presented Conduct of Operations safety management program to the Executive Safety Review Board.
  - Participated in black belt challenge for work package development.
  - Drafted updated to CHPRC General Hazard Analysis to include the controls for Pandemic hazards. This revision is working through the review in comment phase with SHS&Q and the safety representatives. Additionally, interfacing with the other site contractors to ensure alignment between the contractors.
  - Revised PRC-PRO-WKM-079, *Job Hazard Analysis*, to elevate waiver of walk downs to the functional manager.
  - Performed review of and concurred with Lockout/Tagout Annual Assessment for Hanford site
  - Established telework ability for Work Control Group due to the DOE Partial Stop Work Order for the site.

- Readiness and Preparedness
  - Supported the implementation of one full up drill at WESF, two Incident Command Post limited drills (WRAP and 100K), an evacuation drill at S&GRP and a table top drill at ERDF.
  - Completed a rewrite of the Software Management Plan, Software Technical Specification, and Acceptance Test Plan, and performed Acceptance Testing of version 3.0.3 HotSpot bringing the current version in line with Software Management requirements. Future versions of Hotspot can now be easily tested and accepted for use in performance of hazard assessments for emergency preparedness purposes.
  - The Emergency Preparedness program supported the implementation of one full up drill at 324\F, one Tabletop drill at 324, and two Operational Drills (PFP and ERDF).
  - Developed the Minimum Safe Work Compliance plan in anticipation of COVID-19 impacts
  - Supported response to Partial Stop Work Order.
  - Supported the implementation of a full up drill at 100K, a limited scope drill at CPRM, a table top drill and no-notice drill at PFP.

Communications

- Supported RL in announcing the completion of demolition of the PFP Main Processing Facility.
- Drafted a video commemorating the employees of PFP, past and present.
- Produced postcards to commemorate PFP demolition, before and after.
- Supported in RL in communicating the efforts to stabilize three at-risk aging structures near PFP.
- Drafted 24 social media posts highlighting progress on the Hanford Site, including at the IDF, efforts to move cesium and strontium capsules to safer dry storage and groundwater treatment.
- Supported RL in five EM Newsletter stories on topics including progress at PFP, the WESF.
- Supported public involvement activities related to January 2020 and February 2020 Hanford Advisory Board briefings and planning for public comment related to the stabilization of aging structures near PFP.
- Supported RL and other Hanford contractors in planning communications related to COVID-19 pandemic.
- Drafted an animation in support of the stabilization of aging structures near PFP and the efforts to move cesium and strontium to dry storage.

MAJOR ISSUES

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

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

PROJECT BASELINE PERFORMANCE
Current Month
($M)

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)
Office of the President	0.2	0.2	0.4	0.0	0.0%	(0.2)	-113.5%
Engineering	0.1	0.1	0.1	0.0	0.0%	0.0	24.3%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	0.0	11.3%
General Counsel	0.1	0.1	0.1	0.0	0.0%	(0.0)	-12.9%
Communications & Outreach	0.1	0.1	0.1	0.0	0.0%	0.0	25.9%
Safety, Health, Security, and Quality	1.2	1.2	1.0	0.0	0.0%	0.1	11.5%
Environmental Program and Strategic Planning	0.4	0.4	0.3	0.0	0.0%	0.0	11.0%
Business Services	2.6	2.6	2.4	0.0	0.0%	0.2	6.7%
Prime Contract and Project Integration	0.7	0.7	0.6	0.0	0.0%	0.1	16.1%
Resource Management and Strategic Integration	0.6	0.6	0.5	0.0	0.0%	0.0	2.3%
Project Technical Services	0.6	0.6	0.5	0.0	0.0%	0.1	15.3%
Indirect WBS 000 Total	**6.6**	**6.6**	**6.2**	**0.0**	**0.0%**	**0.4**	**6.4%**

Numbers are rounded to the nearest $0.1 million.

Indirect WBS 000

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

CM Cost Performance: ($0.4M/6.4%)
The variance is within reporting thresholds.

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

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance ($)	Schedule Variance (%)	Cost Variance ($)	Cost Variance (%)	Budget at Completion (BAC)
Office of the President	1.0	1.0	1.6	(0.0)	-4.3%	(0.6)	-62.3%	2.3
Engineering	0.7	0.7	0.8	0.0	0.0%	(0.2)	-22.6%	1.5
Internal Audit	0.4	0.4	0.4	0.0	0.0%	0.0	18.6%	1.0
General Counsel	0.6	0.6	0.8	0.0	0.0%	(0.2)	-44.7%	1.2
Communications & Outreach	0.6	0.6	0.5	0.0	0.0%	0.0	12.1%	1.2
Safety, Health, Security and Quality	6.8	6.8	7.4	0.0	0.0%	(0.6)	-9.4%	14.9
Environmental Program and Strategic Planning	2.2	2.2	2.0	0.0	0.0%	0.2	7.1%	4.8
Business Services	15.1	15.1	16.4	0.0	0.0%	(1.2)	-8.0%	33.2
Prime Contract and Project Integration	3.7	3.7	3.3	0.0	0.0%	0.1	11.1%	8.4
Resource Management and Strategic Integration	3.2	3.2	3.1	0.0	0.0%	0.1	5.0%	7.1
Project Technical Services	3.7	3.7	3.3	0.0	0.0%	0.4	11.4%	8.1
Indirect WBS 000 Total	**38.0**	**37.9**	**39.5**	**(0.0)**	**-.01%**	**(1.6)**	**-4.2%**	**83.8**

Numbers are rounded to the nearest $0.1 million.

Indirect WBS 000
FYTD Schedule Performance: (+$0.0M/+0.0%)
The variance is within reporting thresholds.

FYTD Cost Performance: (-1.6M/-4.2%)
The variance is within reporting thresholds.

FY2020 G&A Analysis
($M)

WBS 000 Project Services and Support	FY 2020 FY 2020 BCWS	FY 2020 FY 2020 Forecast	FY 2020 FY 2020 Variance (O)/U
General & Administrative (G&A)	**83.8**	**86.6**	**(2.8)**
Office of the President	2.3	3.4	(1.2)
Engineering	1.5	1.5	(0.0)
Internal Audit	1.0	0.9	0.1
General Counsel	1.2	1.4	(0.2)
Communications	1.2	1.0	0.2
Safety, Health, Security and Quality	14.9	16.5	(1.6)
Env. Program & Strategic Planning	4.8	4.6	0.2
Business Services	33.2	34.6	(1.4)
Prime Contract and Project Integration	8.4	7.5	1.0
Resource Mgmt & Strategic Intg	7.1	7.0	0.1
Project Technical Services	8.1	8.2	(0.0)

	FY 2020
G&A Distribution	**(82.8)**
G&A Liquidation (Over)/Under	**3.8**

Liquidation Analysis
For fiscal year 2020, application of the G&A rate has under-liquidated total to date G&A costs by $3.0 million. The FY2020 year-end projected under-liquidation is $3.8 million.

Consistent with CHPRC prospective Cost Accounting Disclosure Statement, under liquidations would be distributed to users at a minimum, when the combined projected year-end under liquidation is equal to or greater than $4 million. Over liquidations would be distributed to users at a minimum, when the combined projected year-end over liquidation is equal to or greater than $6 million. Variances may be liquidated to users at lower thresholds if variances are determined to be significant to cost control. All remaining variances will be distributed at fiscal year-end. CHPRC has been authorized to distribute G&A at 16.5 percent. Finance is evaluating the trend for year-end liquidation to consider the impact of a distribution.

Appendix C
Capital Asset Projects

CH2MHILL
Plateau Remediation Company

a Jacobs company

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

March 2020
CHPRC-2020-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

Appendix C.1
Capital Asset Project
RL-0011.C1 - PFP D&D
(Removal of 174 Gloveboxes from 234-5Z)

CH2MHILL
Plateau Remediation Company
a Jacobs company

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

March 2020
CHPRC-2020-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In December 2019, the Plutonium Finishing Plant's (PFP) Closure Project team safely completed removal and size reduction of the final glovebox from the 234-5Z Building. In February, the project submitted critical decision (CD)-4, *Approve Project Completion*, documentation to the U.S. Department of Energy (DOE), Richland Operations Office (RL), for approval and forwarding to DOE-Headquarters (HQ). The project is complete pending CD-4 approval. No update for March 2020.

The following are key metrics associated with this capital asset project (CAP).

Key Metrics	*Current Month Plan*	*Current Month Actuals*	*Cumulative Plan*	*Cumulative Actuals*
COMPLETE Glovebox/Hood Removed	-	0	174	174
COMPLETE KPP Rooms/Areas Ready for Demo	-	0	72	72

KEY ACCOMPLISHMENTS

RL-0011_C1 Accomplishments:

- The project has completed all actions pending approval from RL.

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

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011/WBS-011.05.01.01.06 (CAP.1)				
Explanation of major changes to the project monthly stoplight chart: No major changes to the stoplight chart in March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in March.				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)				
No critical risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in March.				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No high-risk threats identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in March.				
Unassigned Risks (Pending ownership of identified risks/opportunities)				
No unassigned risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in March.				

CRITICAL PATH ANALYSIS

The remaining PFP critical path schedule related to the RL-0011.C1 – PFP Deactivation and Decommission Project consists of finalizing documentation for a CD-4 declaration for the PFP CAP 1 Project.

SCHEDULE MARGIN/MANAGEMENT RESERVE

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

CRITICAL DECISION MILESTONE STATUS

Number	Title	Due Date*	Forecast Date†	Status/ Comment
CAP.1	Removal of 174 gloveboxes from 234-5Z	July 2020	04/20/2020	The current CAP 1 Project forecast completion date is April 20, 2020, to allow receipt of approval from DOE-HQ.

*Due date reflects CD-4 due date with RL contingency.
†Forecast date reflects CD-4 due date without RL contingency.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Nothing to report at this time.

DOE ACTIONS/DECISIONS

Working with RL to complete CD-4 closure actions.

Appendix C.1
RL-0011.C1 – PFP D&D
(Removal of 174 Gloveboxes from 234-5Z)
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

March 2020
CHPRC-2020-03, 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_C1 - PFP D&D (ARRA/Base)	a. FROM (YYYYMMDD) 2020 / 02 / 24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE	b. TO (YYYYMMDD) 2020 / 03 / 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	330,987	0	9,878	340,865	344,858	340,865	344,858	

6. ESTIMATED COST AT COMPLETION

	MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)
a. BEST CASE	332,587		
b. WORST CASE	334,980		
c. MOST LIKELY	334,980	330,987	-3,993

7. AUTHORIZED CONTRACTOR REPRESENTATIVE

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

b. TITLE: Prime Contract Compliance Manager

c. SIGNATURE

d. DATE SIGNED (YYYYMMDD)

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_C1.02 Maintain Safe & Compliant PFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RL_0011_C1.05 Disposition PFP Facility	0	0	0	0	0	235,514	235,514	259,800	0	-24,286	0	0	0	235,514	259,800	-24,286
RL_0011_C1.06 Project Management & Support	0	0	0	0	0	11,990	11,990	12,477	0	-487	0	0	0	11,990	12,477	-487
RL_0011_C1.90 Usage Based Services Distributions -PBS RL-11	0	0	0	0	0	7,221	7,221	7,731	0	-510	0	0	0	7,221	7,731	-510
RL_0011_C1.98 Ramp-up and transition	0	0	0	0	0	19,399	19,399	19,253	0	147	0	0	0	19,399	19,253	147
RL_0011_C1.99 PBS RL-11 UBS, G-n-A, Direct Distrib	0	0	0	0	0	41,028	41,028	33,328	0	7,700	0	0	0	41,028	33,328	7,700
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	0	0	0	0	0	315,152	315,152	332,587	0	-17,435	0	0	0	315,152	332,587	-17,435
f. MANAGEMENT RESERVE														2,393		
g. TOTAL	0	0	0	0	0	315,152	315,152	332,587	0	-17,435	0	0	0	317,545		
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																
a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE									0	-17,435				317,545	332,587	-15,042

*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 RL_0011_C1 - PFP D&D (ARRA/Base)	a. FROM *(YYYYMMDD)* 2020 / 02 / 24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 03 / 22
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO:	X YES *(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)
35 - Business Services	0	0	0	0	0	60,427	60,427	52,580	0	7,847	0	0	0	60,427	52,580	7,847
3B - PFP Closure Project	0	0	0	0	0	254,725	254,725	280,007	0	-25,282	0	0	0	254,725	280,007	-25,282
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET														0	0	0
e. SUBTOTAL *(Performance Measurement Baseline)*	0	0	0	0	0	315,152	315,152	332,587	0	-17,435	0	0	0	315,152	332,587	-17,435
f. MANAGEMENT RESERVE														2,393		
g. TOTAL	0	0	0	0	0	315,152	315,152	332,587	0	-17,435	0	0	0	317,545		

CLASSIFICATION (When Filled In)

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: 2020/02/24
b. LOCATION:	b. NUMBER: RL14788	b. PHASE	b. TO: 2020/03/22
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)
$330,987	$0	$330,987	$0	$330,987	$317,545	$13,442

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	9/30/2020	9/30/2020	9/30/2020

6. PERFORMANCE DATA

BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)

ITEM	BCWS CUM TO DATE	BCWS FOR REPORT PERIOD	SIX MONTH FORECAST +1 Apr-20	+2 May-20	+3 Jun-20	+4 Jul-20	+5 Aug-20	+6 Sep-20	FY09-13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	UNDISTRIB BUDGET
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
a. PM BASELINE																	
(BEGIN OF PERIOD)	**315,152**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**302,288**	**4,109**	**7,749**	**890**	**116**	**0**	**0**	**0**	**0**
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																	
None at this time																**0**	**0**
c. PM BASELINE (END OF PERIOD)	**315,152**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**302,288**	**4,109**	**7,749**	**890**	**116**	**0**	**0**	**0**	**0**
7. MANAGEMENT RESERVE																	
8. TOTAL																	

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_C1 - PFP D&D (ARRA/Base)	a. FROM *(YYYYMMDD)* 2020 / 02 / 24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 03 / 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 APR 2020 (4)	+2 MAY 2020 (5)	+3 JUN 2020 (6)	+4 JUL 2020 (7)	+5 AUG 2020 (8)	+6 SEP 2020 (9)	ENTER SPECIFIED PERIODS OCT 2020 (10)	NOV 2020 (11)	DEC 2020 (12)	JAN 2021 (13)	ATCOMPLETE (14)	AT COMPLETION (15)
35 - Business Services	0	17	0	0	0	0	0	0	0	0	0	0	0	17
3B - PFP Closure Project	0	15,442	0	0	0	0	0	0	0	0	0	0	0	15,442
g. TOTAL DIRECT	0	15,459	0	0	0	0	0	0	0	0	0	0	0	15,459

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 MPB - RL_0011_C1 - PFP D&D (ARRA/Base)		a. FROM (YYYYMMDD) 2020/02/24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2020/03/22
	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:	0	0	0	0	0	0	0	0	0
Cumulative:	315,152	315,152	332,587	0	0.0%	-17,435	-5.5%	1.00	0.95
	BAC	**EAC**	**VAC in $**	**VAC in %**	**TCPI to BAC**	**TCPI to EAC**			
At Complete:	315,152	332,587	-17,435	-5.5%	0	0			

Explanation of Variance/Description of Problem:
Current Period:
Schedule Variance: The schedule variance is within threshold.
Cost Variance: The current month cost variance is within threshold.

Cumulative To Date:
Schedule Variance: Within Threshold
Cost Variance: Within Threshold

Impact:
Impact: The RL-011.C1 Plutonium Finishing Plant (PFP) project baseline completion date is November 19, 2016. The current forecast schedule reflects a completion date of April 20, 2020.

Corrective Action:
None at this time

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 February. The Total Allocated Budget (TAB) is based on the DOE-HQ approved DOE PBS RL-0011-C1 Project Execution Plan Appendix D. The Appendix D table established a total project value of $330.9M, based on a mix of actuals to-date (through ~FY2014) and a to-go forecast for project completion. The total project value reflected in the DOE PEP exceeded the Contract Budget Base (CBB) reflected in Plateau Remediation Contract (PRC) due to negative cost performance through ~FY2014 against the PRC negotiated cost for the C1 project. DOE elected to not incorporate the total project value reflected in the DOE PEP into the PRC to maintain the negative cost variance reported by CHPRC. This created the continuing difference between the TAB and CBB which is currently ~$13.4M.

1. Schedule Margin Analysis: There is no schedule margin associated with the RL-011.C1 capital asset account.
2. IMS Data dictionary Changes: None in the month of March.
3. Forecast Schedule with No Baseline: None in the month of March.
4. UB Balance: None in the month of March.
5. Negative Actual Cost of Work Performed (ACWP): None in the month of March.
6. Earned Actual Cost (EAC) Analysis: Best Case = $332,587; Most Likely = $332,587; Worst Case = $332,587. 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 Cost Variance (CV) > Variance at Completion (VAC): Scope to perform size reduction efforts on the high gram glovebox removal efforts was estimated to be completed in a much shorter time frame with much fewer resources than originally planned causing the large cost variance. The EAC is reflective of the current approach to perform the remaining work scope.
8. Management Reserve Transactions: None in the month of March.
9. Freeze Period Changes: None in the month of March.
10. Retroactive Changes: None in the month of March.
11. Earned Value Types Changes: None in the month of March.

Prepared by: Jason Knowlton **4/14/2020** **Approved by:** **Date:**

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

March 2020
CHPRC-2020-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In March, the Plutonium Finishing Plant (PFP) Closure Project team continued Plutonium Reclamation Facility (PRF) rubble loadout, shipped 33 containers of final phase demolition debris to the Environmental Restoration Disposal Facility (ERDF) for permanent disposal, including 26 Contaminated Equipment – Special Package Authorization shipments of containers. Crews also prepared for and began demolition of the steam line that ran from the 234-5Z Building to 234-5A-BA, which included support poles and structures.

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:

- Crews continued PRF rubble loadout. Crews also completed process modifications as identified by crews, including rerouting roads around the debris pile and direction of the loadout.
- Work teams installed a new container transfer area (CTA) and waste container-loading pad in the north trailer village across from the 212-Z Lag Yard. The additional CTA will help expedite container preparation activities during PRF loadout.
- Shipped 33 containers of final-phase demolition debris to ERDF for permanent disposal, including 26 containers of PRF rubble debris.

MAJOR ISSUES

Issue
The project's fiscal year (FY) 2020 forecast reflects spending approximately $7.7 million more than the entire allotted funding carryover balance. Although RL-0011 was allocated a supplemental $4.9 million, additional funding is required in FY2020 to complete PFP demolition. The forecast reflects that the current projected funding would not be exceeded until about May 2020.

Corrective Action
Resolve funding shortfall.

Status
CH2M HILL Plateau Remediation Company (CHPRC) is working with the U.S. Department of Energy (DOE), Richland Operations Office (RL), to address this issue and anticipates resolving it prior to May 2020 so that funding limitations will not impact project completion.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

- Increased Confidence
- No Change
- Decreased Confidence

	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0011/C.2				
Explanation of major changes to the project monthly stoplight chart: Risk PFP-P3-003, *Weather Impacts During 234-5Z Demolition* was removed from the stoplight chart in March.				
Realized Risks (Risks that are currently impacting project cost/schedule)				
No realized risks identified in March.				
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed.)				
No critical risks identified in March.				
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)				
No high threat risks identified in March.				
FY2020 Key Risks				
PFP-P4-002: Weather Impacts During 236-Z Demolition	Inclement weather, including moderate winds, low or high temperatures, and above average snowfall or thunderstorms will result in in-scope unplanned work and schedule impacts to the project. **Risk Handling Strategy**: Control **Probability**: Low (10% to 25%) **Worst Case Impacts**: $0, 30 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 March. Wind events continue to impact the project, including three days of work control zone restrictions due to high winds or expected high winds in March.

<table>
<tr><th></th><th>Unmitigated Risk Impacts</th><th colspan="2">Assessment</th><th>Comments</th></tr>
<tr><th></th><th></th><th>Month</th><th>Trend</th><th></th></tr>
<tr><td colspan="5">RL-0011/C.2</td></tr>
<tr><td>PFP-P-004:
Stop Work From Concerned Workers</td><td>Concerned workers can implement a stop work to address off-normal or safety issues. The work cannot be restarted until the implementation of corrective actions is completed, resulting in schedule impacts to the project.

Risk Handling Strategy: Control

Probability: Medium (26% to 74%)
Worst Case Impacts: $0, 16 days</td><td>  </td><td>  </td><td>Risk Trigger: During PFP demolition activities, an increase in stop works could result in delays.

<table><tr><th>Mitigation Action(s)</th><th>FC Date</th><th>%</th></tr><tr><td>Update communications as positions change.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Provide new maps with entry/exit instructions when boundaries are revised.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Encourage additional worker involvement.</td><td>Ongoing</td><td>N/A</td></tr><tr><td>Increase frequency of post-job reviews.</td><td>Ongoing</td><td>N/A</td></tr></table>
Mitigation Assessment: No major changes in March. 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. One stop work was called in March related to powered air purifying respirator failures, which was resolved the following day based on providing an employee additional information and concurring on a path forward to prevent failures. Additionally, COVID-19 concerns caused two stop works for the PFP Project.</td></tr>
<tr><td colspan="5">Unassigned Risks (Pending ownership of identified threats/opportunities)</td></tr>
<tr><td colspan="5">No unassigned risks identified in March.</td></tr>
</table>

CRITICAL PATH ANALYSIS

The PFP critical path schedule begins with the completion of 236-Z Canyon loadout, anticipated by June 29, 2020, meeting the requirements for the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) Milestone M-083-00A, "Plutonium Finishing Plant (PFP) Facility Transition and Selected Disposition Activities." Demolition completion will be followed by site stabilization and demobilization, turnover to surveillance and maintenance, and project closeout activities, completing by September 24, 2020, 92-day change from last month, which reflects the slower-than-planned loading and disposal of the 236-Z rubble pile; worker-initiated stop works associated with COVID-19 pandemic worker concerns; the CHPRC senior management-directed companywide stop work to address worker COVID-19 concerns, and the March RL-directed Hanford Site wide partial stop work for up to 30 days associated with COVID-19.

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	09/24/2020	The project began 236-Z rubble disposition in February, with completion forecasted for June. The overall forecast completion date slipped 92 days from the June 24, 2020, reported in February. This delay is due to the longer duration than planned for the disposition the PRF rubble pile; worker-initiated stop works associated with COVID-19 pandemic safety concerns; the CHPRC senior management company wide stop work to address worker COVID-19 safety concerns, and the RL directed Hanford Site partial stop work related to COVID-19 for up to 30 days.

*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

March 2020
CHPRC-2020-03, 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 / 02 / 24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO (YYYYMMDD) 2020 / 03 / 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	114,414	24,864	5,000	119,414	185,531	119,414	185,531	

6. ESTIMATED COST AT COMPLETION

	MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)
a. BEST CASE	179,958		
b. WORST CASE	182,274		
c. MOST LIKELY	180,531	139,278	-41,253

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 Control Account.PARS 2 WBS (2) ITEM (1)	CURRENT PERIOD: BUDGETED COST WORK SCHEDULED (2)	BUDGETED COST WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	VARIANCE SCHEDULE (5)	VARIANCE COST (6)	CUMULATIVE TO DATE: BUDGETED COST WORK SCHEDULED (7)	BUDGETED COST WORK PERFORMED (8)	ACTUAL COST WORK PERFORMED (9)	VARIANCE SCHEDULE (10)	VARIANCE COST (11)	REPROGRAMMING ADJUSTMENTS: COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	AT COMPLETION: BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
RL-0011 Nuclear Mat Stab & Disp PFP																
RL_0011_C2.05 Disposition PFP Facility	54	3,469	3,740	3,415	-270	138,704	125,406	168,402	-13,298	-42,996	0	0	0	138,704	179,958	-41,253
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	54	3,469	3,740	3,415	-270	138,704	125,406	168,402	-13,298	-42,996	0	0	0	138,704	179,958	-41,253
f. MANAGEMENT RESERVE														573		
g. TOTAL	54	3,469	3,740	3,415	-270	138,704	125,406	168,402	-13,298	-42,996	0	0	0	139,278		

9. RECONCILIATION TO CONTRACT BUDGET BASELINE

a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE									-13,298	-42,996				139,278	179,958	-40,680

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 / 02 / 24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 03 / 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	54	3,469	3,740	3,415	-270	138,704	125,406	168,402	-13,298	-42,996	0	0	0	138,704	179,958	-41,253
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)*	54	3,469	3,740	3,415	-270	138,704	125,406	168,402	-13,298	-42,996	0	0	0	138,704	179,958	-41,253
f. MANAGEMENT RESERVE														573		
g. TOTAL	54	3,469	3,740	3,415	-270	138,704	125,406	168,402	-13,298	-42,996	0	0	0	139,278		

CLASSIFICATION (When Filled In)

March 2020

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE		DOLLARS IN THOUSANDS	Form Approved OMB No. 0704-0188
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA	2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:	3. PROGRAM RL_0011_C2 PFP Demolition Capital Asset Project a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009	4. REPORT PERIOD a. FROM: 2020/02/24 b. TO: 2020/03/22

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	$62,730	$114,414	$24,864	$139,278	$139,278	$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	9/30/2020	9/30/2020	9/30/2020

6. PERFORMANCE DATA

ITEM	BCWS CUM TO DATE	BCWS FOR REPORT PERIOD	BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE) SIX MONTH FORECAST +1 Apr-20	+2 May-20	+3 Jun-20	+4 Jul-20	+5 Aug-20	+6 Sep-20	FY09-13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	UNDISTRIB BUDGET	TOTAL BUDGET
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
a. PM BASELINE																		
(BEGIN OF PERIOD)	**138,650**	**2,526**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,090**	**29,182**	**19,407**	**628**	**66,598**	**16,800**	**0**	**138,704**
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																		
None at this time																**0**	**0**	**0**
c. PM BASELINE (END OF PERIOD)	**138,704**	**54**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6,090**	**29,182**	**19,407**	**628**	**66,598**	**16,800**	**0**	**138,704**
7. MANAGEMENT RESERVE																		**573**
8. TOTAL																		**139,278**

CONTRACT PERFORMANCE REPORT
FORMAT 4 - STAFFING
Dollars in: FTE

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR	2. CONTRACT		3. PROGRAM	4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract		a. NAME RL_0011_C2 PFP Demolition Capital Asset Project	a. FROM *(YYYYMMDD)* 2020 / 02 / 24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO *(YYYYMMDD)* 2020 / 03 / 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 APR 2020 (4)	+2 MAY 2020 (5)	+3 JUN 2020 (6)	+4 JUL 2020 (7)	+5 AUG 2020 (8)	+6 SEP 2020 (9)	ENTER SPECIFIED PERIODS OCT 2020 (10)	NOV 2020 (11)	DEC 2020 (12)	JAN 2021 (13)	ATCOMPLETE (14)	AT COMPLETION (15)
3B - PFP Closure Project	142	4,964	127	114	106	52	41	1	-	-	-	-	-	5,405
g. TOTAL DIRECT	142	4,964	127	114	106	52	41	1	-	-	-	-	-	5,405

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) 2020/02/24
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788		b. PHASE	b. TO (YYYYMMDD) 2020/03/22
	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:	54.1	3,469.4	3,739.5	3,415.3	6312.3%	-270.1	-7.8%	64.12	0.93
Cumulative:	138,704.4	125,406.1	168,402.1	-13,298.3	-9.6%	-42,996.0	-34.3%	0.90	0.74
	BAC	**EAC**	**VAC in $**	**VAC in %**	**TCPI to BAC**	**TCPI to EAC**			
At Complete:	138,704.4	179,957.7	-41,253.3	-29.7%	0	1.15			

Explanation of Variance/Description of Problem:

Current Month:

Schedule Variance: The favorable schedule variance is due to progress on 236-Z rubble debris loadout in the current period, which was scheduled to be complete in December 2019. Rubble loadout of 236-Z began in February 2020. The behind schedule condition is due to delays in sizing 234-5Z rubble, weather events and a conservative approach to demolition and loadout. The current positive performance is offset by the unearned BCWS associated with not completing RL-11.C2 CD-4 and project closeout as planned.

Cost Variance: The unfavorable cost variance is due to slower than planned performance on 236-Z debris disposition. Due to the conservative approach to debris loadout, weather events and concerns due to COVID-19, progress has been hindered.

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 June 2020. The TPA Milestone TPA-083-00A, complete PFP facility transition and selected disposition activities of November 30, 2017, was not met.

Cost Impact: A negative VAC is reflective of impacts associated with recovery efforts from a contamination event that occurred on December 15, 2017.

Corrective Action:

Demolition and load out activities are progressing at an effective speed to mitigate potential safety and stop work concerns. The current forecast slab on grade date is June 29, 2020.

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

There was no change in the difference between the Contract Budget Base and the Total Allocated Budget on Format 3 for the month of March.

The following items are addressed, as applicable:

1. Schedule Margin Analysis: No drawdowns of schedule margin were made in the month of March.
2. Data dictionary Changes: No change in the month of March.
3. Forecast Schedule with No Baseline: No change in the month of March.
4. UB Balance: No change in the month of March.
5. Negative Actual Cost of Work Performed (ACWP): No change in the month of March.
6. Earned Actual Cost (EAC) Analysis: Best Case = $179,958; Most Likely = $180,531; Worst Case = $182,273. 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 March.
8. Management Reserve Transactions: No change in the month of March.
9. Freeze Period Changes: No change in the month of March.
10. Retroactive Changes: No change in the month of March.
11. Earned Value Type Changes: No change in the month of March.

Prepared by: Jason Knowlton **Date: 4/14/2020** **Approved by:** **Date:**