

Monthly Performance Report

March 2018

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



**P.O. Box 1600
Richland, Washington 99352**

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APPROVED

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L. Ty Blackford
President and Chief
Executive Officer

Monthly Performance Report

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March 2018
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EXECUTIVE SUMMARY

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

- **Plutonium Finishing Plant (PFP) Closure Project:** At PFP, workers continue to ship previously packaged waste to the Central Waste Complex (CWC). Work planning is underway on a proposed approach to phased demolition for lower-risk and higher-risk work.
- **618-10 Burial Ground Remediation Project:** The 618-10 Burial Ground team celebrated the huge accomplishment of completing the backfill of the former hazardous burial ground. Backfilling was one of the last steps before finishing the 618-10 Project.
- **Soil and Groundwater Remediation Project (S&GRP):** The S&GRP team completed characterization fieldwork activities for the 200-DV-1 Operable Unit (OU). As of March month-end, more than 1.25 billion gallons of water has been treated – more than halfway toward the 2.2-billion-gallon goal for fiscal year (FY) 2018.
- **Waste and Fuels Management Project (W&FMP):** The W&FMP team at the Canister Storage Building (CSB) completed a Multi Canister Over Pack (MCO) sampling operational proficiency using a mockup/simulator designed by the team. This new concept provides workers the opportunity to use the mockup to train and validate operational readiness without sampling a MCO loaded with actual spent fuel.
- **K Basins Operations and Plateau Remediation Project (KBO&PR):** Workers at KBOPR completed backfilling 17 waste sites near the Columbia River. Workers also backfilled a sedimentation basin that was once used to provide water to the 100 K East Reactor during operations. This took more than 200,000 cubic yards of clean soil to fill the areas where workers removed contaminated soil earlier this year. In addition, Sludge Removal Project personnel completed the Contractor Operational Readiness Review (ORR) and are addressing pre-start findings in preparation for the start of the DOE ORR on April 9, 2018.
- **324 Building Disposition Project:** Geotechnical drillers at the 324 Building Disposition Project have completed drilling and backfilling the fourth and final borehole at the 324 Building. The Mockup Transfer Mechanism and Group Delivery System were delivered to the Mockup.
- **Plutonium Uranium Extraction Plant (PUREX) Tunnel:** Workers recently removed and reinstalled the first inspection plug at PUREX Tunnel 2. This work is necessary to ensure the tunnel can accommodate the proposed engineering design for grouting.

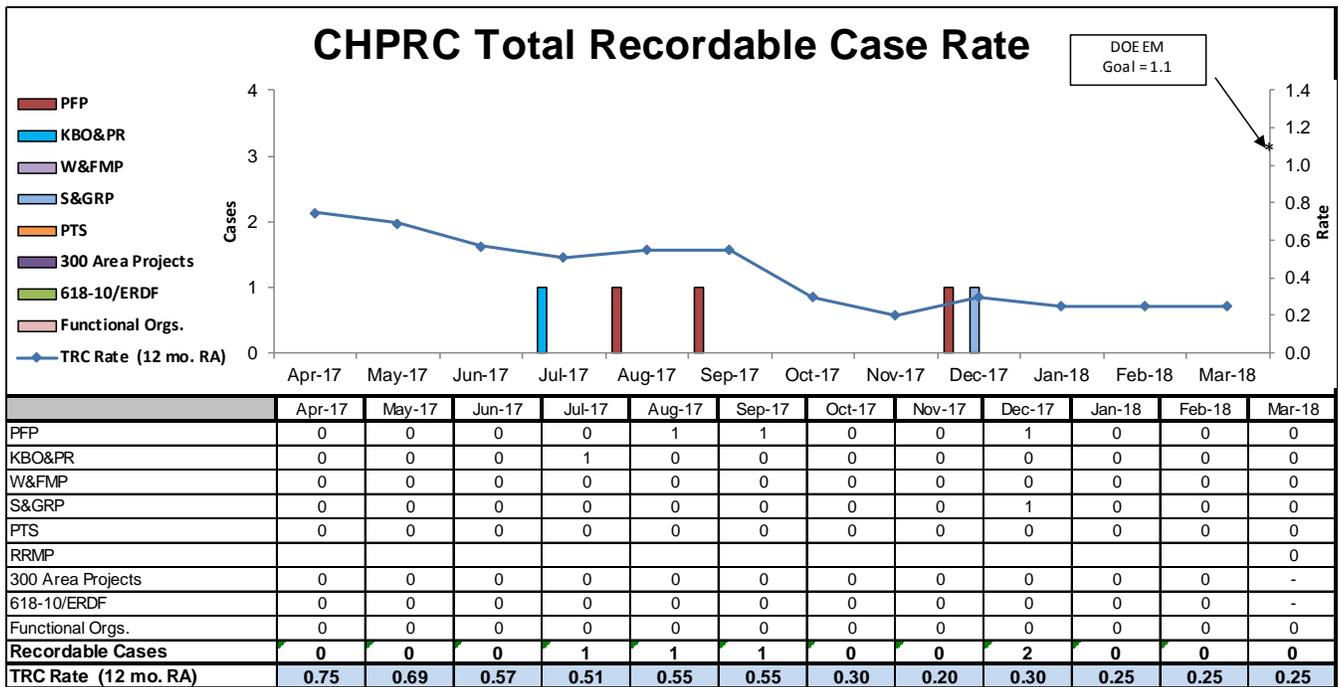


Workers removed and reinstalled the first inspection plug at PUREX Tunnel 2.

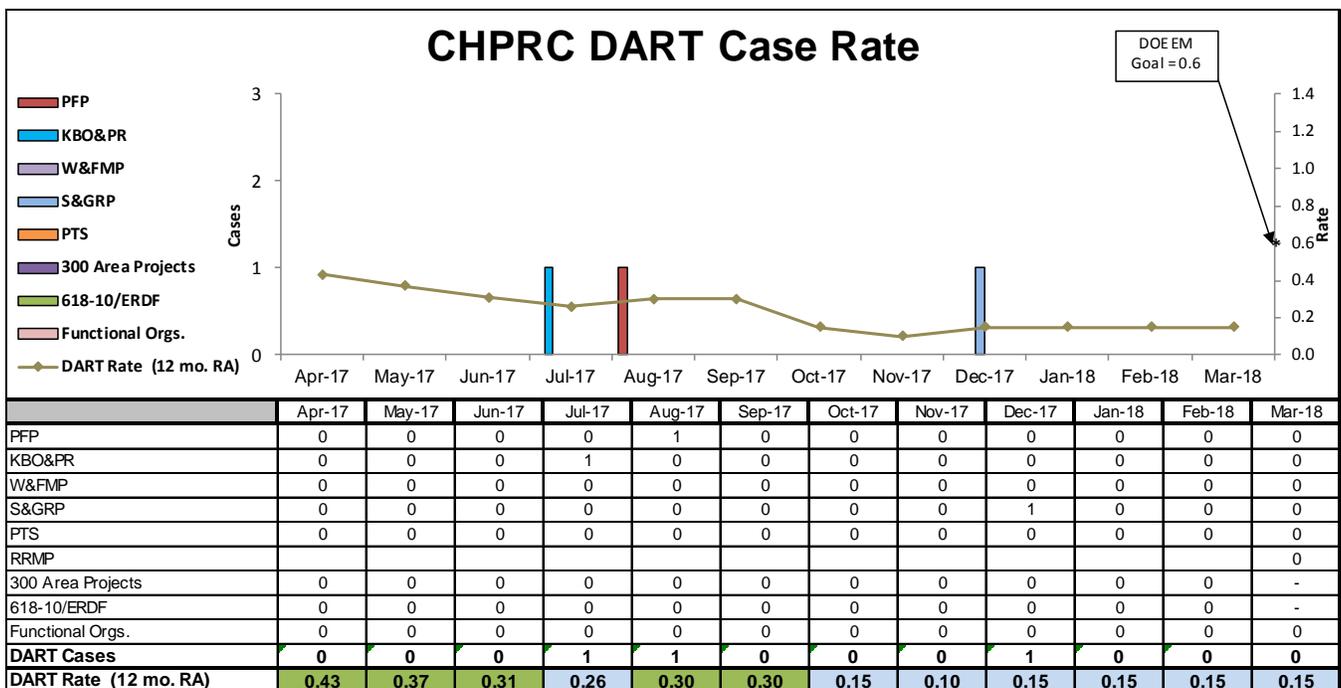
- The President's Zero Accident Council (PZAC) meeting for March was hosted by Project Technical Services (PTS). The three main ideas were:
 - o Follow your instructions.
 - o Balance Safety, Quality, and Production.
 - o Never be the most senior person to know about an issue.
- Four "Thinking Target Zero" (TTZ) bulletins were published to convey important occupational, safety, health, and environmental messages:
 - o Rest for Safety.
 - o Windy Conditions.
 - o Voluntary Protection Program (VPP) Safety Connect.
 - o Eye Wellness.
- *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
 - o Four Lessons Learned:
 - OPEX – Safety Bulletin/Alert Fatality Narrative – Carpenter falls from ladder (2015).
 - Lawrence Livermore National Laboratory (LLNL) offsite.
 - Staff member requires surgery to hand after cutting zip ties with pocket knife (PNNL).
 - Use of powered pipe threader hand injury.
 - o Injuries.
 - o Weekly Ethics Moments.
 - o Vehicle events.
 - o Personal medical supplies.
 - o Ladder safety.
 - o Return to Work process.
 - o Reporting suspicious activity.
 - o Pedestrian safety reminder.
 - o HPMC medical appointments.
 - o Conduct of Work – STAR.
 - o Before you print....
 - o Digital eye strain/Eye strain prevention.

TARGET ZERO PERFORMANCE

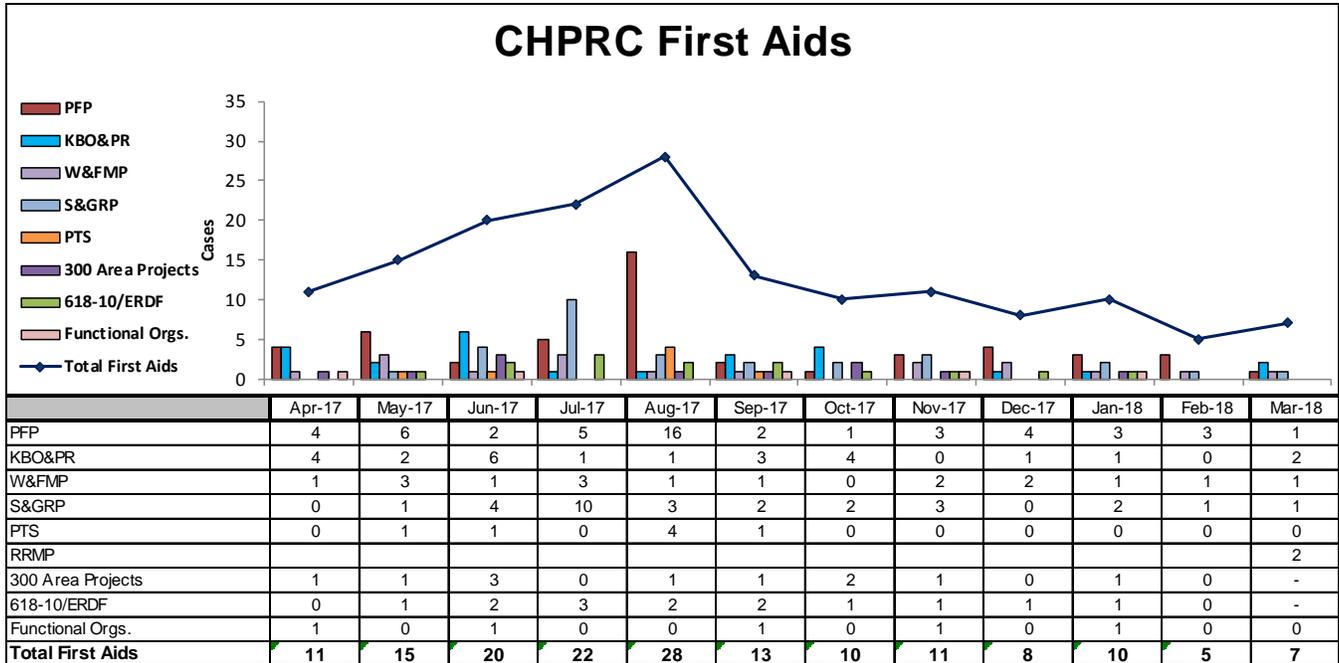
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.25 is based on a total of five Recordable injuries. March had no reported Recordable cases.



Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.15 is based on a total of three Days Away cases. March had no reported DART cases.



First Aid Case Summary: CHPRC reported seven First Aid cases in March. The contributors were four sprains/strains/pains, one abrasions/bruises/contusions, one undescribed/precautionary and one misc. (burns, rashes, repetitive motion, etc.) injury. In addition, one self-treat case was reported in March.

KEY ACCOMPLISHMENTS

Projects

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

Project Services and Support

- Refer to the Appendix B section of this report for specific overhead support (which is reported quarterly) and Sections A through G, as well as Appendix C of this report, for specific project support.

MAJOR ISSUES

Issue:

Significant Contract Change Management is ongoing and must be resolved to retain PRC alignment for fiscal year FY2017-2018.

- As of March month-end, there was a backlog of 52 undefinitized change proposals (CPs), requests for equitable adjustments (REAs), rough order magnitudes (ROMs), and responses to requests for proposals (RFPs) – totaling approximately \$385 million in net value with fee.

Corrective Action:

- Work with RL to reach agreement on PRC FY2017-2018 alignment and support RL evaluation and determination of the disposition of undefinitized CHPRC CPs/REAs.

Status:

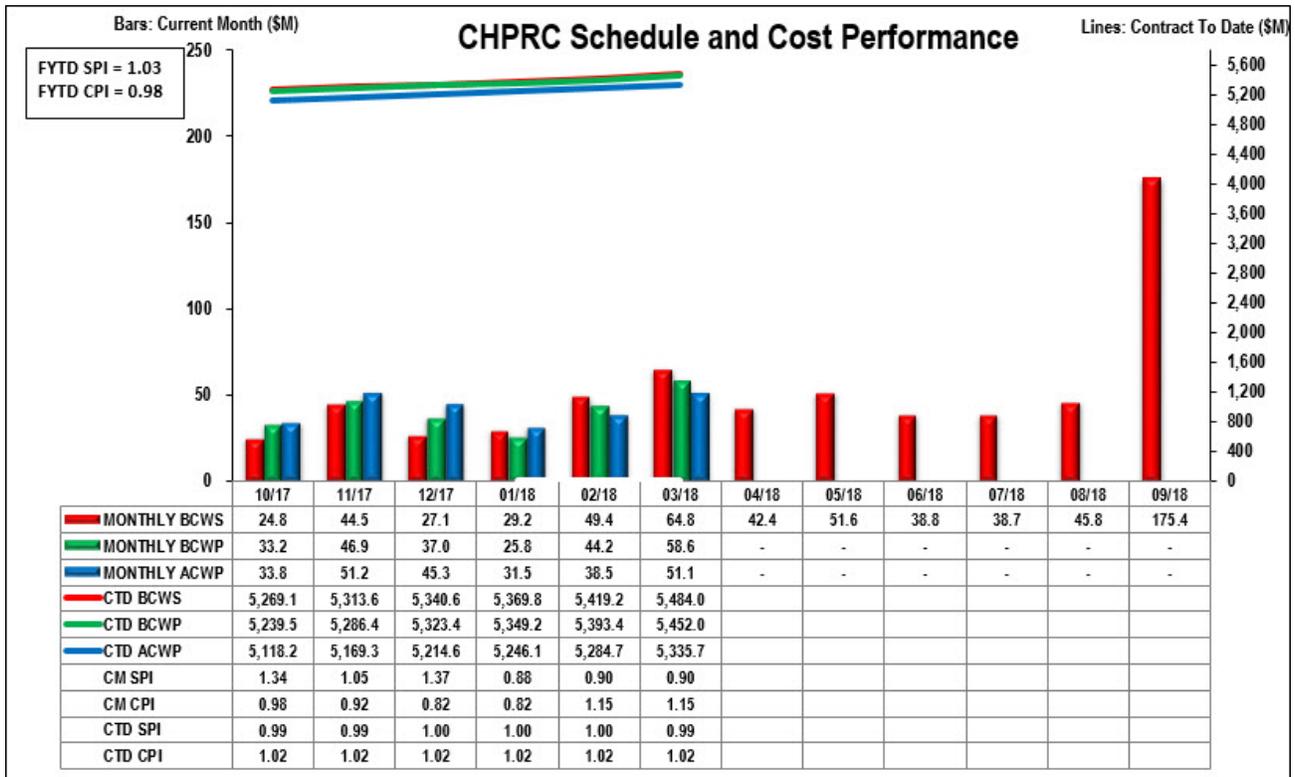
- CHPRC continues to discuss proposed alignment strategy with RL.
 - Negotiate in-process changes.
 - Realign remaining contract cost for scope consistent with FY2018 Budget Guidance.

- o Develop configured contract change management basis for contract change entitlement and contract closeout.

Projects

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

EARNED VALUE MANAGEMENT



*September includes \$57.4 million of BCWS in planning packages and \$78.6 million of BCWS in undistributed budget.

	\$M						\$M					\$M		
	Current Period			Contract to Date			Contract to Date			Contract Period				
	Budgeted Cost	Actual Cost	Variance	Budgeted Cost	Actual Cost	Variance	Budgeted Cost	Actual Cost	Variance	BAC	EAC	Variance		
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost				
RL-0011 - Nuclear Materials Stab & Disp PFP	0.1	0.0	7.1	(0.1)	(7.1)	988.7	973.0	1101.9	(15.7)	(129.0)	988.7	1,174.9	(186.2)	
RL-0012 - SNF Stabilization & Disposition	3.5	3.5	4.8	0.0	(1.2)	723.0	722.7	692.1	(0.3)	30.5	744.5	718.2	26.3	
RL-0013 - Solid Waste Stab & Disposition	11.9	11.8	10.6	(0.1)	1.2	1251.2	1249.2	1166.3	(2.0)	82.9	1,363.4	1,276.3	87.1	
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	26.9	28.8	10.0	1.9	18.9	1468.0	1463.3	1419.0	(4.7)	44.3	1,562.9	1,503.5	59.4	
RL-0040 - Nuc Fac D&D - Remainder	3.5	2.3	3.9	(1.2)	(1.6)	473.6	470.2	445.0	(3.4)	25.2	504.6	484.8	19.8	
RL-0041 - Nuc Fac D&D - RC Closure Project	18.6	11.9	14.5	(6.7)	(2.6)	554.3	548.4	490.5	(5.9)	58.0	686.2	599.0	87.2	
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.2	0.2	(0.0)	0.0	25.3	25.3	21.0	0.0	4.3	26.5	22.7	3.8	
Total	64.8	58.6	51.1	(6.2)	7.5	5,484.0	5,452.0	5,335.7	(32.0)	116.3	5,876.8	5,779.4	97.5	

(Values are rounded to the nearest \$0.1M)
(Values do not have UB breakout)

*Per e-mail direction received December 6, 2017, from the RL Contracting Officer, CHPRC is authorized to incorporate the value of proposed changes into the baseline, as well as remove work that is not authorized from our execution plan. When a contract alignment settlement is reached, baseline change requests (BCRs) will be processed to align the Performance Measurement Baseline (PMB) with the settlement values.

Performance Summary

CHPRC continues to track completion of the contract scope within budget and is currently projecting a corrected VAC of \$71.6 million, with \$56.7 million of management reserve (MR), for a total positive variance of \$128.3 million. For March, the project was 9.5 percent behind schedule and 12.9 percent under planned cost. Contract to date (CTD), the project was 0.6 percent behind schedule and 2.1 percent under planned cost.

The current month (CM) negative schedule variance is primarily due to PBS RL-0041 delays at the 300-296 project, in procurement/fabrication of the 324 equipment resulting from design changes and fabrication difficulties, and delays in 324 interference removal, penetration sealing, and hot cell cleanout activities due to a high alpha reading stop work in the airlock.

Also contributing to the negative schedule variance is PBS RL-0040 due to impacts from other site priorities affecting the project's ability to maintain a full contingent of resources planned for REDOX Risk Mitigation field entries, which reduced the amount of sample gallery and silo scope completed during the fiscal month of March. Additionally, the Balance of West IA Non-Subsequent Units for Individual Determination (SQUID) Specific Structures project yielded an unfavorable schedule variance due to unexpected ecology requirements needed for the removal of the steam lines.

The negative schedule variance was partially offset by the March 2018 implementation of Baseline Change Request (BCR) BCR-030-18-017R0 – *Incorporate FY2018 Additional Scope Deductions – RL-0030*, which removed prior year activities associated with 200-ZP-1 monitoring well drilling and 100-NR-2 permeable reactive barrier expansion from the performance measurement baseline (PMB) and placed the deducted values in Unfunded Budget (UB) until anticipated offsetting scope additions are authorized by DOE-RL. This BCR action resulted in a negative current period budgeted cost of work scheduled (BCWS) associated with the replanned activities and generated a corresponding positive schedule variance in the current period.

The CM positive cost variance is primarily due to the implementation of BCR-030-18-013R0 – *Incorporate Additional Scope Changes – RL-0030*, in which budget for work performed in FY2016 and FY2017 was incorporated into the baseline in the current period. Because the actual cost of the work performed (ACWP) was recorded in a prior period, and the performance was earned upon implementation of the subject BCR, a positive current period cost variance was generated.

The CM positive cost variance created by PBS RL-0030 was partially offset by PBS RL-0011 recovery actions and implementation of the new demolition requirements associated with a December 2017 contamination event. This includes fixative applications, performance of radiological surveys, and stabilization activities to support resumption of demolition of PFP. Assignment of Jacobs Engineering corporate resources and reassignment of CHPRC personnel to support the root cause analysis (RCA) and programmatic assessments have also contributed to the negative PBS RL-0011 cost variance. In addition, the resulting delay in demolition activities from the contamination event are causing an extension of unplanned project management, min-safe, and support resources. Also partially offsetting the PBS RL-0030 positive cost variance were the previously noted PBS RL-0040 and RL-0041 performance issues and higher than planned cost for sludge retrieval readiness preparation activities under PBS RL-0012.

Note: The \$97.5 million Variance at Completion (VAC) increased \$23.2 million from February to March reporting. The change is primarily due to \$13.9 million associated with the move of the Environmental Restoration Disposal Facilities (ERDF) from project breakdown structure (PBS) RL-0041 to PBS RL-0013, in which only the removal of the estimate to complete was removed from RL-0041, while the offset was not added to RL-0013. Additionally, a system entry of \$12 million was not processed to offset the Undistributed Budget. Both issues will be corrected in April. A corrective action has been initiated to ensure system entries are not missed at month-end closing.

FUNDING ANALYSIS

FY2018 Funds vs. Fiscal Year Spend Forecast (\$M)

PBS	Project	FY2018		Variance
		Projected Funding	Spending Forecast	
Estimate at Complete				
RL-0011	Nuclear Materials Stabilization and Disposition	80.0	79.1	0.9
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	41.9	38.8	3.1
RL-0012	15-D-401 Sludge Retrieval Project	18.8	17.8	1.0
RL-0013	Waste and Fuels Management Project	144.3	154.4	(10.2)
RL-0013	Management of Cesium and Strontium Capsules	6.5	1.4	5.1
RL-0030	Soil, Groundwater and Vadose Zone Remediation	121.9	114.4	7.4
RL-0040	Nuclear Facility D&D, Remainder of Hanford	69.0	41.3	27.7
RL-0041	Nuclear Facility D&D, River Corridor	143.6	140.9	2.8
RL-0042	Fast Flux Test Facility Closure	4.0	2.5	1.5
Total Estimate at Complete		630.0	590.7	39.3
Incremental Scope Pending Change Management				
RL-0011	Nuclear Materials Stabilization and Disposition	0.0	0.0	0.0
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	0.0	0.4	(0.4)
RL-0012	15-D-401 Sludge Retrieval Project	0.0	0.0	0.0
RL-0013	Waste and Fuels Management Project	0.0	(30.0)	30.0
RL-0013	Management of Cesium and Strontium Capsules	0.0	0.0	0.0
RL-0030	Soil, Groundwater and Vadose Zone Remediation	0.0	0.7	(0.7)
RL-0040	Nuclear Facility D&D, Remainder of Hanford	0.0	18.3	(18.3)
RL-0041	Nuclear Facility D&D, River Corridor	0.0	2.7	(2.7)
RL-0042	Fast Flux Test Facility Closure	0.0	0.0	0.0
Total Incremental Work Scope		0.0	(7.9)	7.9
Total Fiscal Year Spend Forecast				
RL-0011	Nuclear Materials Stabilization and Disposition	80.0	79.1	0.9
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	41.9	39.2	2.7
RL-0012	15-D-401 Sludge Retrieval Project	18.8	17.8	1.0
RL-0013	Waste and Fuels Management Project	144.3	124.5	19.8
RL-0013	Management of Cesium and Strontium Capsules	6.5	1.4	5.1
RL-0030	Soil, Groundwater and Vadose Zone Remediation	121.9	115.1	6.7
RL-0040	Nuclear Facility D&D, Remainder of Hanford	69.0	59.6	9.3
RL-0041	Nuclear Facility D&D, River Corridor	143.6	143.5	0.1
RL-0042	Fast Flux Test Facility Closure	4.0	2.5	1.5
Total		630.0	582.9	47.1

Funds/Variance Analysis

For March FY2018 expected funding of \$617 million was adjusted to \$630 million, based on revised guidance from RL following passage of the FY2018 Omnibus. The spending forecast was revised to reflect the Environmental Restoration Disposal Facility (ERDF), April through September, in RL-0013, moving out of RL-0041. Additionally, RL-0040 increased significantly for anticipated PUREX Tunnel 2 work scope.

BASELINE CHANGE REQUESTS

In March 2018, CHPRC approved and implemented 14 BCRs into the PMB. Nine of the 14 BCRs impacted the PMB. Each change request is identified in the table below:

Change Request #	Title	PBS	Summary of Change
BCR-012-18-004R0	<i>RL-0012 EVM Health Adjustments</i>	RL-0012	This BCR incorporated required changes for EVM compliance with DOE ECRSOP Schedule Health Checks. This BCR did not change the PMB value.
BCR-012C-18-005R0	<i>Reduce Duration of Schedule Margin for RL-0012 CAP Project</i>	RL-0012	This BCR revised schedule margin from 110 calendar days to 13 calendar days. This change is based on the Project Manager's evaluation of the remaining scope of the project, the reduced risk posture for the remaining scope of the project, and the remaining two risks. This BCR did not change the PMB value.
BCR-013-18-016R0	<i>Incorporate RL-0013 Scope Changes – M-091-53</i>	RL-0013	This BCR incorporated proposed scope changes that are additions to the PMB. The FY2018 Work Authorization was provided to CHPRC by RL. This BCR increased the PMB value by \$1,643K.
BCR-013-18-017R0	<i>RL-0013 NDA Campaign Re-Planning</i>	RL-0013	This BCR re-planned the unneeded scope in WBS 013.06.01.12.01 CWC Box NDA Campaign, for performing Non-Destructive Assays of large boxes to a Planning Package in September of 2018 and into a new WBS 013.06.01.12.04, Box NDA Campaign Planning Package. This BCR did not change the PMB value.
BCR-030-18-013R0	<i>Incorporate Additional Scope Changes – RL-0030</i>	RL-0030	This BCR incorporated scope changes into the PMB. This BCR increased the PMB value by \$20,072K.
BCR-030-18-014R0	<i>RL-0030 FY2018 Scope Prioritization</i>	RL-0030	This BCR moved lower priority scope items and placed them in planning packages in September of 2018. This BCR did not change the PMB value.
BCR-030-18-015R0	<i>MR Draw for 100-KR-4 Operable Unit TI Versus MNA Evaluation</i>	RL-0030	This BCR drew down management reserve (MR) for in-scope unplanned work associated with incorporating a Technical Impracticability (TI) waiver into the 100-KR-4 Operable Unit revised Decisional Draft Remedial Investigation Feasibility Study (RI/FS). This BCR increased the PMB value by \$158K.
BCR-030-18-016R0	<i>Incorporate CO 318, Re-Plan 200-WA-1 & 200-BC-1 Characterization</i>	RL-0030	This BCR re-planned Change Order 318 <i>200-WA-1 and 200-BC-1 Operable Units Characterization</i> activities, as part of the scope and Not-to-Exceed (NTE) value authorized via Contract Modifications Numbers 569 and 593 and NTE Increase via RL-Contracting Office email direction. This BCR decreased the PMB value by \$499K.
BCR-030-18-017R0	<i>Incorporate FY2018 Additional Scope Deductions – RL-0030</i>	RL-0030	This BCR incorporated the anticipated RL-0030 scope deductions from the CHPRC PMB. The incorporation of the scope deductions in this BCR will result in equal and offsetting transactions with scope additions incorporated once final authorization is received from RL. This BCR decreased the PMB value by \$2,722K.
BCR-041-18-014R0	<i>Incorporate Remaining FY2018 Scope (MASF Ops) for CO #319, Garnet Filter Media Removal</i>	RL-0041	This BCR incorporated the additional scope associated for Change Order (CO) 319, <i>Garnet Filter Media Removal</i> . The additional scope for CO 319 is incorporated into the PMB as Authorized Unpriced Work (AUW) as authorized by the RL-Contracting Officer. This BCR increased the PMB value by \$1,005K.
BCR-041-18-015R0	<i>Incorporate Remaining FY2018 Scope for CO #320, Sand Filter Media Removal</i>	RL-0041	This BCR incorporated the additional scope associated for Change Order (CO) 320, <i>Sand Filter Media Removal</i> . The additional scope for CO 320 is incorporated into the PMB as Authorized Unpriced Work (AUW) as authorized by RL-Contracting Officer. This BCR increased the PMB value by \$241K.

Change Request #	Title	PBS	Summary of Change
BCR-PRC-18-016R0	<i>Incorporate Remaining FY2018 Work Scope for CO #327 Accelerating the Shipment of Sludge</i>	RL-0012, RL-0013	This BCR incorporated the additional RL-0012 and RL-0013 scope associated with CO #327, <i>Accelerating The Shipment Of Sludge From 100-K West Basin To T Plant</i> . The additional scope for CO #327 is incorporated into the PMB as Authorized Unpriced Work (AUW) as authorized by RL-Contracting Officer. This BCR increased the PMB value by \$5,998K.
BCRA-PRC-18-018R0	<i>HPIC Updates March 2018</i>	RL-0011, RL-0012, RL-0013, RL-0030, RL-0040, RL-0041	This BCR incorporated March FY2018 Hanford Programs Integrated Control Module (HPIC) updates. This BCR did not change the PMB value.

The Allocated (Distributed) Budget increased by \$25,896K.

Undistributed Budget Activity

BCR Number	Title	PBS	Fiscal Year	UB
BCR-PRC-18-017R0	<i>Undistributed Budget Adjustments March 2018</i>	RL-0030	2018	\$-18,612K

The Undistributed Budget decreased by \$18,612K.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
BCR-030-18-013R0	<i>Incorporate Additional Scope Changes – RL-0030</i>	RL-0030	2018	\$170K
BCR-030-18-015R0	<i>MR Draw for 100-KR-4 Operable Unit TI Versus MNA Evaluation</i>	RL-0030	2018	\$-158K
BCR-030-18-017R0	<i>Incorporate FY2018 Additional Scope Deductions – RL-0030</i>	RL-0030	2018	\$-52K

Overall, there was a decrease in MR of \$39K during March.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2018	N/A

Overall, there was no change to the fee during March.

See the Format 3 Report in Appendix A for a listing of the specific change requests that had an impact on the PMB budget by FY. The PMB values of change requests are summarized by FY in the tables below (dollars in thousands).

March 2018 Summary of Changes

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY: 2014-2018	Contract Period Total	Total PMB
February 2018 Estimate									
PMB	3,391,477	391,653	471,323	504,826	485,028	625,226	2,478,055	5,869,531	5,869,531
MR	0	0	0	0	0	56,717	56,717	56,717	56,717
Fee	155,504	14,325	14,501	27,804	10,612	18,860	86,101	241,605	241,605
Total	3,546,981	405,978	485,824	532,630	495,639	700,803	2,620,873	6,167,854	6,167,854
March 2018 Change									
PMB									
Change to PMB	0	0	0	0	0	7,283	7,283	7,283	7,283
MR									
Change to MR	0	0	0	0	0	-39	-39	-39	-39
Fee									
Change to Fee	0	0	0	0	0	0	0	0	0
Total Change	0	0	0	0	0	7,244	7,244	7,244	7,244
March 2018 Estimate									
PMB	3,391,477	391,653	471,323	504,826	485,028	632,509	2,485,338	5,876,814	5,876,814
MR	0	0	0	0	0	56,678	56,678	56,678	56,678
Fee	155,504	14,325	14,501	27,804	10,612	18,860	86,101	241,605	241,605
Total	3,546,981	405,978	485,824	532,630	495,639	708,046	2,628,117	6,175,098	6,175,098

Changes to/Utilization of Management Reserve in March 2018

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	Total
February 2018 MR Totals								
RL-0011	0	0	0	0	0	7,499	7,499	7,499
RL-0012	0	0	0	0	0	10,258	10,258	10,258
RL-0013	0	0	0	0	0	6,185	6,185	6,185
RL-0030	0	0	0	0	0	20,159	20,158	20,158
RL-0040	0	0	0	0	0	382	382	382
RL-0041	0	0	0	0	0	12,047	12,047	12,047
RL-0042	0	0	0	0	0	189	189	189
Total	0	0	0	0	0	56,717	56,717	56,717
March 2018 MR Changes/Utilization								
RL-0011	0	0	0	0	0	0	0	0
RL-0012	0	0	0	0	0	0	0	0
RL-0013	0	0	0	0	0	0	0	0
RL-0030	0	0	0	0	0	(39)	-39	-39
RL-0040	0	0	0	0	0	0	0	0
RL-0041	0	0	0	0	0	0	0	0
RL-0042	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	-39	-39	-39
March 2018 MR Totals								
RL-0011	0	0	0	0	0	7,499	7,499	7,499
RL-0012	0	0	0	0	0	10,258	10,258	10,258
RL-0013	0	0	0	0	0	6,185	6,185	6,185
RL-0030	0	0	0	0	0	20,119	20,119	20,119
RL-0040	0	0	0	0	0	382	382	382
RL-0041	0	0	0	0	0	12,047	12,047	12,047
RL-0042	0	0	0	0	0	189	189	189
Total	0	0	0	0	0	56,678	56,678	56,678

SELF-PERFORMED WORK

Business structure information documents ongoing compliance with the requirements of the contract section H.20 clause entitled *Self-Performed Work*.

Contract-to-Date Actual Awards & Mods				Projection to FY2018	
10/1/2008 - 3/31/2018				Planned Subcontracting:	\$2,720,084,369
Reporting Category				Contract-to-date awards:	\$2,690,545,664
				Bal remaining to award:	\$29,538,705
	\$ Value	%	Goal %	Goal award\$	Bal to Goal
SB	\$1,515,574,912	56.33%	49.3%	\$1,341,001,594	-\$174,573,318
SDB	\$288,663,408	10.73%	8.2%	\$223,046,918	-\$65,616,489
SWOB	\$282,962,360	10.52%	7.5%	\$204,006,328	-\$78,956,032
HUB	\$76,553,925	2.85%	2.2%	\$59,841,856	-\$16,712,069
VOSB	\$218,056,261	8.10%	3.5%	\$95,202,953	-\$122,853,308
SDVO	\$131,851,149	4.90%	1.3%	\$35,361,097	-\$96,490,052
NAB	\$66,690,787	2.48%	N/A	PRC clause H.20 small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
Large	\$676,231,366	25.13%	N/A		
GOVT	\$4,240,695	0.16%	N/A		
GOVT CONT	\$483,188,609	17.96%	N/A		
EDUCATION	\$117,828	0.00%	N/A	CHPRC Contract Value:	\$5,732,255,464
NONPROFIT_	\$3,948,138	0.15%	N/A	17% rqmt:	\$974,483,429
FOREIGN	\$7,244,117	0.27%	N/A	SB actual:	\$1,515,574,912
Total	\$2,690,545,664	100.00%	N/A	Bal to rqmt	-\$541,091,483

Notes:

1. Since the CHPRC contract award in October 2008, CHPRC has subcontracted over \$2.6 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 is 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
CONTRACT			
J.12/C.2.2, C.2.3	PBS-11, Plutonium Finishing Plant Closure Project PBS-13, Solid and Liquid Waste Treatment and Disposal	Offsite Transportation of Radioactive Material: RL provides equipment and government drivers to transport transuranic (TRU) materials outbound/inbound between the Hanford Site and Perma-Fix Northwest (PFNW) locations. RL is the authorized shipper and acts as signatory on the shipping papers and ensures DOE Manual 460.2-1 is complied with. RL arranges for Commercial Motor Vehicle Safety Alliance (CVSA) level VI vehicle inspections and verifies that the government drivers meet the applicable 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 (TSD) requirements.	Ongoing
J.12/C.2.3.6	PBS-13, Transuranic Waste Certification	Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico: Provides shipping resources and manages the schedule for transportation of these containers to WIPP. The schedule is variable and the number of shipments is controlled by DOE-HQ on a complex-wide priority. Cost for shipment of TRU waste offsite is borne by the Carlsbad Field Office (CBFO).	No WIPP shipments are planned within the remaining contract period of performance.

DOE ACTIONS/DECISIONS

Refer to Sections A through G as well as Appendix C of this report for the project specific DOE Actions/Decisions.

Section A

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



K. A. Wooley
(Acting) Vice President for
Plutonium Finishing Plant
Closure Project

March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

On December 15, 2017, contamination was found outside of the established Plutonium Finishing Plant (PFP) radiological boundaries. On December 18, 2017, follow-up radiological surveys found additional contamination present in the administrative office area. Work was stopped after the second event, pending completion of a root cause analysis (RCA) and development of a recovery plan. CHPRC is continuing to work on finalizing the RCA and working with RL and regulators to develop a recovery plan to enable demolition activities to resume.

Key Metrics

<i>Key Performance Indicators</i>	<i>Current Month</i>	<i>Contract To Date</i>
COMPLETE Glovebox/ Hood Removed or Dispositioned in Place	0	232 gloveboxes/hoods
COMPLETE KPP Rooms/Areas Ready for Demo	0	72 rooms/areas
COMPLETE Asbestos/Asbestos Containing Material (ACM) 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	63 structures
Non-radioactive Waste Shipped	0 m ³	85 m ³
Transuranic/Transuranic Mixed (TRU/TRU-M) Shipped	713.58 m ³	3,905 m ³
LLW/MLLW Shipped	7 m ³	16,102 m ³

EMS Objectives and Target Status (Draft)

Objective #	Objective	Targets	Actions	Due Date	Status
18-EMS-PFP-OB1-T1	Minimize emissions resulting from demolition (including rubble management) of 234-5Z and 236Z.	Establish controls to minimize radioactive air emissions during PFP demolition activities and monitor the effectiveness of the controls.	Evaluate radioactive emissions on a weekly basis, identify if there are gaps in implementing the controls, and if the controls are effective when implemented. If problems are identified, ensure that prompt corrective actions are taken. Provide a monthly report on results and actions.		
			1. October Report	11/07/2017	100%
			2. November Report	12/07/2017	100%
			3. December Report	01/08/2018	100%
			4. January Report	02/07/2018	100%
			5. February Report	03/07/2018	100%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	N/A
Total Recordable Injuries	0	1	N/A
First Aid Cases	1	50	03/26/18 – Employee was using a manual post pounder to place T-posts. Employee woke up the next day and the palm of his right hand was hurting and his right arm felt numb. The employee reported this the next day to his supervisor and was taken to HPMC. The employee returned to work with no restrictions and was told if it did not get better in a few days to return to HPMC. (24765)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments

- Accomplishments to achieve stabilization following the December 2017 contamination event include:
 - o Application of fixative to trailers, remaining structures, and debris piles within the PFP Complex.
 - o Continued maintenance applications of fixative.
 - o Routine radiological surveys.
 - o Expanded the Radiological Buffer Area (RBA).
 - o Continued hauling of pit run and staging it on the east and west ends of the High Contamination Area (HCA)/Airborne Radioactivity Area (ARA).
 - o Extra radiological surveys when sustained winds were 20 miles per hour or greater.
 - o Installed new decontamination tent to support radiological surveys.
 - o Approximately 70 percent complete with installation of new trailer village outside the PFP RBA boundary.
 - o Completed Conduct of Operations Self-Assessments.
 - o All bio-assay results were received and communicated to individuals potentially affected by the contamination event.
 - o Electrical and water isolations were completed in the trailer village to support the revised work boundary.
- Initiated the implementation of new demolition requirements associated with the December 2017 contamination event. Efforts include:
 - o Developed and released the work package to perform Non-Destructive Assay (NDA) and relocate existing Plutonium Reclamation Facility (PRF) waste packages.
 - o Initiated implementation of bio-vector plan.
 - o Initiated sewer isolations within affected trailer village to support new radiological boundary implementation.

- o Initiated optioneering process to develop and implement new controls for the resumption of demolition activities at PFP.
- o Continued installation of High Density Polyethylene (HDPE) water loop to support dust suppression and contamination control.
- o Shipped 29 previously generated waste packages to the Central Waste Complex (CWC) or Waste Receiving and Processing (WRAP).

MAJOR ISSUES

Issue:

On December 15, 2017, contamination was found outside of the established PFP radiological boundaries. On December 18, 2017, follow-up radiological surveys found additional contamination present in the administrative office area. CHPRC is continuing to work on finalizing the RCA and working with RL and regulators to develop a recovery plan to enable demolition activities to resume.

Corrective Action:

- Work was stopped after the second event, pending completion of an RCA, and development of corrective actions and a recovery plan.

Status:

- CHPRC continues the process of finalizing the RCA and working with RL and regulators to develop an implementation plan to enable demolition activities to resume.
 - o Some of the activities that were performed during March were:
 - Implementation of additional radiological monitoring (i.e., continuous air monitor (CAMs), cookie sheets).
 - Continued installation of the new trailer villages to house PFP personnel.
 - Mobilization of supplies and equipment to maintain the PFP footprint in a safe configuration.
 - Application of fixatives (i.e., paints, stabilization agents) to items and areas on the PFP work control zone.
 - Maintenance, repair, and rebuild of existing equipment and systems in a safe/compliant configuration.
 - Initiation of activities to reconfigure boundaries, canister transfer areas, loadout areas, and waste storage areas to accommodate larger work control zone.
 - Reconfiguration of equipment in the PFP work control zone to support stabilization activities (water systems, foggers, etc.).

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-0011/WBS-011.OA										
Explanation of major changes to the project monthly stoplight chart: No major changes to the stoplight chart in March. However, risk elicitation have been conducted to align with the proposed path forward to re-start demolition activities.										
Realized Risks (Risks that are currently impacting project cost/schedule)										
PFP-DEMO-12: PFP/PRF Demolition Contamination Levels	Contamination levels on the canyon walls, floors, ventilation ducts, and the remaining areas of PFP will be higher than expected, thus requiring more stringent controls than expected or larger than expected waste volumes, resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$1.5 million, 22 days	●	↔	<p>Risk Event: On December 15, 2017, swing shift 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.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 80%;">Risk recovery action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>See Below</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Risk Action Assessment: A CHPRC management stop work on demolition activities was declared and a critique held to discuss the contamination spread, possible causes, and path forward. An RCA is being conducted, and recovery actions and expected completion dates will be identified after it has been completed. During March, recovery actions from the contamination spread continued. They included:</p> <ul style="list-style-type: none"> Placement of sand and soil over contaminated debris to prevent further contamination spread. Radiological surveys, decontamination, and pressure washing to release trailers/vehicles/equipment. Implementation of additional radiological monitoring (i.e., CAMs, cookie sheets). Mobilization of supplies and equipment to maintain the PFP footprint in a safe configuration. Application of fixatives (i.e., paints, stabilization agents) to items and areas on the PFP work control zone. Maintenance, repair, and rebuild of existing equipment and systems in a safe/compliant configuration. Initiation of activities to reconfigure boundaries, canister transfer areas, loadout areas, and waste storage areas to accommodate larger work control zone. <p>Reconfiguration of equipment in the PFP work control zone to support stabilization activities (water systems, foggers, etc.)</p>	Risk recovery action(s)	FC Date	%	See Below	Ongoing	N/A
Risk recovery action(s)	FC Date	%								
See Below	Ongoing	N/A								
PFP-DEMO-16: Contamination Spread Beyond Established Boundaries	Unplanned transport of contamination from posted areas due to dust suppression liquid flow, natural events, or wildlife result in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$3 million, 30 days	●	↔	<p>Risk Event: On December 18, 2017, contamination was found in the project’s administrative office area during a follow-up survey conducted after a spread of low-level contamination was found on Friday, December 15, 2017, outside of the expanded control zones. Surveys also found contamination on personal vehicles that had been driven off the Hanford site.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 80%;">Risk recovery action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>See Below</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Risk Action Assessment: 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 is being conducted, and recovery actions and expected completion dates will be identified after it has been completed. During March recovery actions from the contamination spread continued. They included:</p> <ul style="list-style-type: none"> Placement of sand and soil over contaminated debris to prevent further contamination spread. Radiological surveys, decontamination, and pressure washing to release trailers/vehicles/equipment. 	Risk recovery action(s)	FC Date	%	See Below	Ongoing	N/A
Risk recovery action(s)	FC Date	%								
See Below	Ongoing	N/A								

				<ul style="list-style-type: none"> Implementation of additional radiological monitoring (i.e., CAMs, cookie sheets). Mobilization of supplies and equipment to maintain the PFP footprint in a safe configuration. Application of fixatives (i.e., paints, stabilization agents) to items and areas on the PFP work control zone. Maintenance, repair, and rebuild of existing equipment and systems in a safe/compliant configuration. Initiation of activities to reconfigure boundaries, canister transfer areas, loadout areas, and waste storage areas to accommodate larger work control zone. Reconfiguration of equipment in the PFP work control zone to support stabilization activities (water systems, foggers, etc.). 						
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
FY2018 Risk Triggers (Risk could be realized in FY2018)										
PFP-DEMO-05: Inclement Weather	<p>Inclement weather, including moderate winds, low or high temperatures, and thunderstorms will impact the demolition of PFP.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$0K, 32 days</p> <p>*Cost increase will result in cost-per-day impacts from crews and hotel load.</p>	●	↔	<p>Risk Trigger: Extreme cold temperature, accumulating snow showers resulting in site delays/closures, and high winds.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Implement overtime (OT) shifts as necessary to mitigate further impacts associated with weather.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: During March, three days were partially impacted by high winds. The risk remains critical due to potential high-wind, winter weather delays, and cold temperatures having the ability to impact the planned demolition. The PFP project will continue to adjust the daily work scope to plan for projected weather impacts.</p>	Mitigation action(s)	FC Date	%	Implement overtime (OT) shifts as necessary to mitigate further impacts associated with weather.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Implement overtime (OT) shifts as necessary to mitigate further impacts associated with weather.	Ongoing	N/A								
PFP-DEMO-07: Removal/Extraction of Equipment Takes Longer Than Planned	<p>Controlled demolition of equipment, gloveboxes and portions of the crosscutting process support systems (i.e. ventilation) result in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Medium (26% to 74%)</p> <p>Worst Case Impacts: \$3 million, 60 days</p>	●	↔	<p>Risk Trigger: On Friday, December 15, 2017, swing shift 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.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>See Below</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: A CHPRC management stop work on demolition activities was declared and a critique held to discuss the contamination spread, possible causes, and path forward. An RCA is being conducted, and recovery actions and expected completion dates will be identified after it has been completed. During March, recovery actions from the contamination spread continued. They included:</p> <ul style="list-style-type: none"> Continuation of radiological surveys, decontamination, and pressure washing to release trailers/vehicles/equipment. Continuation of additional radiological monitoring (i.e., CAMs, cookie sheets). Application of fixatives (i.e., paints, stabilization agents) to items and areas on the PFP work control zone. Maintenance, repair, and rebuild of existing equipment and systems in a safe/compliant configuration. Continuation to reconfigure boundaries, canister transfer areas, loadout areas, and waste storage areas to accommodate larger work control zone. Reconfiguration of equipment in the PFP work control zone to support stabilization activities (water systems, foggers, etc.). 	Mitigation action(s)	FC Date	%	See Below	Ongoing	N/A
Mitigation action(s)	FC Date	%								
See Below	Ongoing	N/A								
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										

PFP-DEMO-21: Glovebox/Equipment Removal/Demolition Material	A material handling event (e.g., dropped piece of process equipment) occurs during the PFP demolition, resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$150K, 30 days	 	Risk Trigger: During pre-demolition/demolition activities in fiscal year (FY) 2018.					
			<table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A
Mitigation action(s)	FC Date	%						
None identified at this time.	N/A	N/A						

Unassigned Risks (Pending ownership of identified risks/opportunities)

No unassigned risks identified in **March**.

PROJECT BASELINE PERFORMANCE

Current Month

(\$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	0.1	0.0	7.1	(0.1)	(100.0%)	(7.1)	0.0%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Variance: (-\$0.1M/-100.0%)

The current month schedule variance is associated with recovery actions and initiating implementation of the new demolition requirements as a result of the contamination event that occurred on December 15, 2017. Stabilization recovery actions completed on March 5, 2018. This included fixative applications for stabilization, performing investigative radiological surveys, and decontaminating equipment. Implementation of the new demolition requirements kicked off on March 6, 2018, starting with removal of the existing pre-packaged waste containers.

CM Cost Variance: (-\$7.1M/0.0%)

The current month negative cost variance is due to the recovery actions and implementation of the new demolition requirements associated with a December 2017 contamination event. This includes fixative applications, performance of radiological surveys, and stabilization activities to support resumption of demolition of PFP. Assignment of Jacobs Engineering corporate resources and reassignment of CHPRC personnel to support the root cause analysis and programmatic assessments have also contributed to the variance. In addition, the resulting delay in demolition activities from the contamination event are causing an extension of unplanned project management, min-safe, and support resources.

Contract-to-Date (\$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	988.7	973.0	1,101.9	(15.7)	(1.6%)	(129.0)	(13.3%)	988.7	1,174.9	73.0	(186.2)

Numbers are rounded to the nearest \$0.1 million

Contract-to-Date (CTD) Schedule Variance (-\$15.7M/-1.6%)

The CTD schedule variance is within threshold.

CTD Cost Variance (-\$129.0M/-13.3%)

The negative CTD cost variance is primarily a result of prior year unrecoverable costs, as well as impacts to the D&D work scope and extending level of effort (LOE) support services. Unplanned costs to support implementation of schedule efficiency initiatives at PFP (i.e. foaming, Perma-Fix Northwest [PFNW] size reduction support and implementation of the PremAire Breathing system). Increased training cost of additional Health Physics Technicians (HPT) and D&D workers to PFP have also contributed to this variance. Additional resources to recover schedule for asbestos removal activities and to support the unplanned asbestos identified for removal (about 10,000 feet). Additional unplanned shipping materials (waste shipping containers TL-1800s, SLB2s, IP-1 bags, etc.) were also required to support waste loadout activities for transuranic (TRU) waste disposition efforts. Unplanned work to reconfigure the HDPE water loop to support the new radiological boundaries also contributed to this variance.

Recovery actions associated with a December 2017 contamination event, including fixative applications, performance of radiological surveys, and stabilization activities to support resumption of demolition of PFP, are ongoing. Assignment of Jacobs Engineering corporate resources and reassignment of CHPRC personnel to support the root cause analysis and programmatic assessments have also contributed to the variance.

The negative cost variance is partially offset by using fewer breathing air suits and hoses than originally planned for 242-Z entries. This is a result of fewer fieldwork team members being required to perform hands-on work in 242-Z because of the confined space and number of suits (three suits per day versus five). In addition, there were recognized efficiencies where crews were able to complete process vacuum removal in 291-Z with less effort than originally planned. Characterization results indicated lower levels of hold-up than planned, which allowed more efficient piping removal. Isolations of the 291-Z facility were performed more efficiently than planned due to the main electrical power being disconnected outside of the building rather than performing individual isolations within the facility. Hazardous material removal, stabilization, and decontamination was more efficient than originally planned. (i.e., using powerful fans to assist with vertical fixative flow up the stack).

Implementation of a baseline change request (BCR) that was processed in September 2017 to draw down on RL contingency to recover cost impacts to the RL-0011 C.2 project associated with realized RL risks. Areas that were impacted were associated with weather delays, stop works, PRF contamination events, and MSA resources retained to prevent bump and roll impacts. Recognition of efficiencies associated with demolition of 242-Z, 291-Z, and 234-5ZA are also contributing to the offset of the negative variance.

Variance at Completion (-\$186.2M/-18.8%)

The unfavorable Variance at Completion (VAC) is reflective of extended hotel load and field resource costs due to delays in demo-ready and demolition activities.

As a result of wall removals and electrical isolations, it was discovered that approximately 10,000 feet of additional asbestos was found between the walls and required removal. This is a recognized risk (PFP-092-02) and has been incorporated into the VAC. CHPRC is working with RL to use contingency for the additional 10,000 feet of asbestos identified, impacts from the criticality alarm, and relief from the 30 days of weather delays experienced from December 2016 through March 2017.

Finally, overtime was used to ready the 234-5Z facility for demolition by September 2017. Also, unplanned work on the HDPE water loop is contributing to this variance. This unfavorable variance is partially offset by recognized efficiencies due to characterization data in the 234-5Z duct level, allowing piping and ducting to be left in place for demolition and the 291-Z demolition activities. The Estimate at Completion (EAC) and VAC is reflective of the projected date to reach slab-on-grade December of 2018. EAC and VAC are subject to change based on approval of the recovery plan addressing the root cause of the unplanned releases and revised demolition approach.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	FY2018		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	80.0	79.1	0.9
Incremental Scope Pending Change Management	0.0	0.0	0.0
RL-0011 - Total	80.0	79.1	0.9

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

FY2018 expected required funding for the project breakdown structure (PBS) RL-0011 is \$79.1 million to allow for recovery actions and continuation of demolition activities to achieve slab-on-grade. Projected funding is \$80.0 million.

Critical Path Schedule

The PFP Critical Path schedule begins with the continuation of front side demo Core Stabilization Zone (CSZ) 2.5 in 234-5Z. After front side CSZ 2.5 is complete, Remote Mechanical C (RMC) process line and Remote Mechanical A (RMA) process line demo will come next, followed by completion of the basement of 234-5Z demolition. The 234-5Z demolition completes October 16, 2018. The 236-Z canyon demolition will then resume with completion scheduled for December 18, 2018, meeting the requirements for the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone – M-083-00A – PFP Facility Transition and Selection Disposition Activities. Completion of demolition is followed by site stabilization and demobilization, turnover to surveillance and maintenance, and project closeout activities completing March 14, 2019. The dates above are reflective of the known actions and

recovery efforts associated with a contamination event that occurred in December as of March month-end closing and will be updated as more information is made available from the root cause analysis and recovery plan.

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. RL Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The performance measurement baseline (PMB) annual update, implemented in September 2013, and subsequently approved BCRs, define CHPRC planning with respect to Tri-Party Agreement milestones. The following table is a two-year look-ahead of commitments and Tri-Party Agreement-enforceable milestones.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-083-00A	PPF Facility Transition and Selection Disposition Activities	09/30/17		12/18/18	On Friday, December 15, 2017, swing shift 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. An RCA is being conducted and recovery actions and expected completion dates will be identified after it has been completed. A total of 82 days were lost on schedule in March due to identified corrective actions required to resume demolition activities at PPF.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
CONTRACT			
J.12/C.2.2, C.2.3	PBS RL-0011, Plutonium Finishing Plant 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 and acts as signatory on the shipping papers, and ensures DOE Manual 460.2-1 is complied with. RL arranges for Commercial Motor Vehicle Safety Alliance (CVSA) level VI vehicle inspections and verifies that the government drivers meet the applicable 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 (TSD) requirements.	Ongoing

DOE ACTIONS / DECISIONS

None at this time.

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



PROJECT SUMMARY

The Contractor Operational Readiness Review (ORR) that was initiated on January 23, 2018, completed on March 7, 2018.

Although there were challenges that delayed completion of the contractor ORR, the project team invested the necessary time and energy to attain a level of proficiency that satisfied the ORR team. At the conclusion, the contractor ORR final report identified:

- Eleven findings.
- Seventeen opportunity for improvement items.
- Two noteworthy practices.

Letter, L.T. Blackford, CHPRC, to J.C. Connerly, RL, “Contract Number DE-AC06-08RL14788-Readiness to Proceed for Commencement of the Department of Energy Operational Readiness Review of 105 KW/Annex Engineered Container Retrieval and Transfer System (ECRTS) Activity,” was approved and transmitted to RL certifying achievement of readiness to commence the DOE ORR.

The DOE ORR is forecasted to begin on April 9, 2018.

Project breakdown structure (PBS) RL-0012 scope is 97.1 percent complete, with a cumulative schedule performance index (SPI) of 1.00 and a Cost Performance Index (CPI) of 1.04.

EMS OBJECTIVES AND TARGET STATUS

None currently identified.

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	CM Quantity	Rolling 12 Month	Comment
Dart Injuries	0	1	N/A
Recordable Injuries	0	0	N/A
First Aids	1	12	3/29/18 – Employee knelt in the back of a vehicle, causing knee to pop. (24768)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

100K Operations

- The 100K Operations group continued maintaining facilities in a safe and compliant condition. Crews continued relocation activities in 105KW Basin and performance of several monthly and quarterly routines during the period.

KW Basin Sludge Removal Capital Asset Project

- The 100K Operations team continued conducting performance demonstrations in support of successful completion of the Contractor ORR accomplished March 7, 2018.
- The 100K Operations support team performed preventive maintenance and calibrations on both Engineered Container Retrieval and Transfer System (ECRTS) components and Annex Utility System components.
- The project team prepared for commencing DOE ORR on April 9, 2018.
- The project technical staff updated the critical decision (CD)-4, project closeout submittal, to incorporate RL comments. Formal transmittal to RL is forecasted in early May.

T Plant Preparations

- The Startup Approval Letter was approved and issued by the CHPRC president on February 12, 2018. Due to delays in completing contractor ORR activities at the 105KW facility, T Plant personnel will have to re-perform an operations demonstration validating staff proficiency.

MAJOR ISSUES

Issue:

CHPRC is planning to complete the first shipment of sludge from 105KW Basin to T-Plant on June 19, 2018, which would achieve Performance Measure PM-12-2-18 (June 30, 2018). Given the minimal remaining float, CHPRC Management is monitoring both the cost and schedule associated with this work.

Corrective Action:

CHPRC completed their ORR in March. The DOE ORR is planned for April. CHPRC will work closely with RL to correct pre-start activities.

Status:

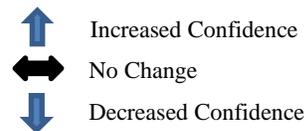
The performance measure is currently expected to be achieved.

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.



Unmitigated Risk Impacts	Assessment		Comments												
	Month	Trend													
RL-0012/WBS-012															
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)															
STP-154: ORR Results in Delays to the Project	Impacts stemming from the contractor ORR, the DOE ORR, or a combination of the two; impacts the project's operational activities and jeopardizes the project's ability to achieve PM-12-2-18, due June 30, 2018. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$216K, 24 days														
			Risk Event: Execution of the contractor ORR and execution of the DOE ORR. <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Complete necessary preventative maintenance and calibration activities prior to re-initiation of the contractor ORR and prior to initiating the DOE ORR.</td> <td>3/06/18</td> <td>100</td> </tr> <tr> <td>Continue performing operation demonstrations in presence of senior supervisor watches, with the intent on identifying and resolving emergent challenges.</td> <td>3/06/18</td> <td>100</td> </tr> </tbody> </table> Risk Action Assessment: The contractor ORR was completed on March 6, 2018. This risk will continue to monitored through completion of DOE ORR.	Risk recovery action(s)	FC Date	%	Complete necessary preventative maintenance and calibration activities prior to re-initiation of the contractor ORR and prior to initiating the DOE ORR.	3/06/18	100	Continue performing operation demonstrations in presence of senior supervisor watches, with the intent on identifying and resolving emergent challenges.	3/06/18	100			
Risk recovery action(s)	FC Date	%													
Complete necessary preventative maintenance and calibration activities prior to re-initiation of the contractor ORR and prior to initiating the DOE ORR.	3/06/18	100													
Continue performing operation demonstrations in presence of senior supervisor watches, with the intent on identifying and resolving emergent challenges.	3/06/18	100													
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)															
FY2018 Risk Triggers (Risk could be realized in FY2018)															
STP-018-O: STP Operational Upset or Spill - During first STSC	An operational upset or spill results in a work shutdown at K Basin, resulting in schedule delays. Risk Handling Strategy: Control Probability: Very Low (<10%) Worst Case Impacts: \$2 million, 48 days														
			Risk Triggers: An operational upset or spill results in work shutdown at K Basin. This risk will commence in fiscal year (FY) 2018 and continue throughout the project lifecycle until the sludge is removed from 105KW Basin. <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Conduct testing and training at Maintenance and Storage Facility (MASF) and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Installation of camera systems to allow operations and radiation protection management to monitor operation dry runs to ensure appropriate discipline and personal protective equipment (PPE) are used to complete Sludge Transport & Storage Container (STSC) connect/disconnect evolutions is in process.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in March. Training, procedure development, and RSA affidavits were completed. CHPRC plans to request authorization to commence sludge removal operations and is forecasted in May 2018.	Mitigation action(s)	FC Date	%	Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.	Complete	100	Conduct testing and training at Maintenance and Storage Facility (MASF) and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.	Complete	100	Installation of camera systems to allow operations and radiation protection management to monitor operation dry runs to ensure appropriate discipline and personal protective equipment (PPE) are used to complete Sludge Transport & Storage Container (STSC) connect/disconnect evolutions is in process.	Complete	100
Mitigation action(s)	FC Date	%													
Conduct rigorous startup testing following system installation at the 105KW Basin and Annex.	Complete	100													
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Installation of camera systems to allow operations and radiation protection management to monitor operation dry runs to ensure appropriate discipline and personal protective equipment (PPE) are used to complete Sludge Transport & Storage Container (STSC) connect/disconnect evolutions is in process.	Complete	100													

Unmitigated Risk Impacts	Assessment		Comments																								
	Month	Trend																									
RL-0012/WBS-012																											
<p>STP-073-C: Processing Efficiency - Retrieval & Shipping</p> <p>The realized processing efficiency associated with sludge retrieval and shipping operations does not match the baseline plan.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$1,000K, 90 days</p>	●	↔	<p>Risk Triggers: Actual processing efficiency associated with sludge retrieval and shipping operations does not match baseline assumptions. In addition, Management Directive (MD) PRC-MD-RP-53085, Suspension of 67% Confidence Level Surveys, was issued. The MD requires that radiological clearance surveys “shall be at the 95 percent confidence level!” and implemented with oversight provided by radiological protection management or health physicists, potentially increasing overall STSC processing times. This risk will commence in FY2018, beginning with operations campaign.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Establish a Production Control Center to facilitate maximum efficiency integrating Sludge Removal Project (SRP) operations and maintenance activities.</td> <td>3/07/18</td> <td>100</td> </tr> <tr> <td>Review operations and maintenance activities required to produce each sludge STSC and establish a “typical” schedule integrating all activities in the most efficient sequence possible.</td> <td>5/01/18</td> <td>60</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in March. Project personnel are working on a revised plan to establish the appropriate campaign schedule, taking into account ion exchange module (IXM) change outs and performance of preventive maintenance activities.</p>	Mitigation action(s)	FC Date	%	Establish a Production Control Center to facilitate maximum efficiency integrating Sludge Removal Project (SRP) operations and maintenance activities.	3/07/18	100	Review operations and maintenance activities required to produce each sludge STSC and establish a “typical” schedule integrating all activities in the most efficient sequence possible.	5/01/18	60															
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Review operations and maintenance activities required to produce each sludge STSC and establish a “typical” schedule integrating all activities in the most efficient sequence possible.	5/01/18	60																									
<p>STP-155: CD-4 Approval Takes Longer than Planned</p> <p>DOE O-413.3B, CD-4 Submittal approval takes longer than planned in the baseline.</p> <p>Risk Handling Strategy: Control</p> <p>Probability: Low (10% to 25%)</p> <p>Worst Case Impacts: \$100K, 45 days</p>	●	↔	<p>Risk Triggers: RL review/approval of the CHPRC CD-4 Project Closeout Submittal.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Meet with RL to discuss and agree upon expectations for DOE O-413.3B, CD-4 submittal content.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Obtain an example of a DOE O-413.3B, CD-4 submittal that has recently been reviewed/approved by DOE HQ.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Prepare a draft of the SRP CD-4 submittal.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Solicit and incorporate RL comments.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Submit final draft of SRP CD-4 submittal for RL review.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Complete contractor ORR and DOE ORR.</td> <td>5/1/18</td> <td>50</td> </tr> <tr> <td>Submit final SRP CD-4 submittal.</td> <td>5/7/18</td> <td>60</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in March. All actions that can be taken to positively influence risk avoidance have been taken.</p>	Mitigation action(s)	FC Date	%	Meet with RL to discuss and agree upon expectations for DOE O-413.3B, CD-4 submittal content.	Complete	100	Obtain an example of a DOE O-413.3B, CD-4 submittal that has recently been reviewed/approved by DOE HQ.	Complete	100	Prepare a draft of the SRP CD-4 submittal.	Complete	100	Solicit and incorporate RL comments.	Complete	100	Submit final draft of SRP CD-4 submittal for RL review.	Complete	100	Complete contractor ORR and DOE ORR.	5/1/18	50	Submit final SRP CD-4 submittal.	5/7/18	60
Mitigation action(s)	FC Date	%																									
Meet with RL to discuss and agree upon expectations for DOE O-413.3B, CD-4 submittal content.	Complete	100																									
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Complete contractor ORR and DOE ORR.	5/1/18	50																									
Submit final SRP CD-4 submittal.	5/7/18	60																									
Unassigned Risks (Pending ownership of identified threats/opportunities)																											
<p>CHPRC proposed five risks that are outside of CHPRC’s ability to manage and, as such, should be re-assigned to RL (STP-011D, STP-018, STP-073, STP-073-A, and STP-073-B). The proposal was not accepted by RL, stating, “the opportunities and threats appear to be under the control of CHPRC to manage.” CHPRC submitted letter CHPRC-1602146 R1 on August 30, 2016, in response to RL’s rejection letter. On March 14, 2017, CHPRC received Correspondence Number 1701045 providing direction to accelerate the capital portion of the SRP. In March 2018, CHPRC implemented acceleration opportunities and added four additional STSC transports (total of five) to the performance measurement baseline (PMB). As a result, CHPRC has reassumed ownership of these risks. CHPRC is in the process of submitting a revised change proposal reflecting the updated contract scope (five STSCs transported to T Plant by September 30, 2018).</p>																											

PROJECT BASELINE PERFORMANCE

Current Month

(\$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	3.5	3.5	4.8	0.0	1.4%	(1.2)	-34.9%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (+\$0.0M/+1.4%)

The variance is within reporting thresholds.

CM Cost Performance (-\$1.2M/-34.9%)

The current month cost variance is the result of complexities with readiness and contractor ORR, which required additional time and resources.

Contract-to-Date

(\$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	723.0	722.7	692.1	(0.3)	-0.0%	30.5	4.2%	744.5	718.2	26.1	26.3

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (-\$0.3M/-0.0%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$30.5M/+4.2%)

The variance is within reporting thresholds.

Variance at Completion (+\$26.3M/+3.5%)

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	FY2018		Variance
	Projected Funding	Spending Forecast	
Expense - Spending Forecast	41.9	38.8	3.1
Incremental Scope Pending Change Management	0.0	0.4	(0.4)
Expense – Subtotal	41.9	39.2	2.7
Line Item (LI)	18.8	17.8	1.0
Incremental Scope Pending Change Management	0.0	0.0	(0.0)
LI –Subtotal	18.8	17.8	1.0
RL-0012 – Total	60.7	57.0	3.7

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

FY2018 funding for PBS RL-0012 is \$60.7 million. Positive variance of \$2.7 million in expense funding is based on revised funding levels in the Central Plateau control point provided by RL in March 2018. CHPRC will evaluate forecast and revise as appropriate for transition of personnel from LI to expense. Positive variance in the LI is the result of efficiencies gained due to acceleration of the installation activities and risk mitigation efforts, reducing the need for contingency and management reserve.

Critical Path Schedule

The critical path runs through completion of the DOE ORR. The project schedule reflects RL providing authorization to commence retrieval operations following the review and approval of the SRP CD-4 submittal in parallel with review/approval of the CHPRC Request for Startup Approval letter. Completing retrieval operations, including the filling of STSCs with sludge and transporting them to T Plant, to complete Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestone M-016-176, Complete Sludge Removal from 105-KW Fuels Storage Basin, is required by September 2019.

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. RL Enforceable Agreement (EA) milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The performance measurement baseline (PMB) annual update, implemented in September 2013, and subsequently approved baseline change requests (BCRs) define CHPRC planning with respect to Tri-Party Agreement milestones. The following table shows the Tri-Party Agreement milestone within the CHPRC contract period (September 30, 2018).

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-175	Begin Sludge Removal from 105KW Fuel Storage Basin.	9/30/2018		5/22/2018	The forecast date does not include schedule margin from the project's risk analysis and assumes CD-4 will be approved within two weeks of issuance of the CHPRC Request for Startup Approval Letter.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Perform ORR - Team Lead	04/09/18	04/17/18
RL Issue Findings / Discrepancy List	04/18/18	04/20/18
RL Approve CD-4 Submittal Package	05/01/18	05/14/18
RL Approve Request for Startup Letter	05/01/18	05/14/18

Section C

Solid Waste Stabilization and Disposition (RL-0013)



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

March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

During the March reporting period, February 19 - March 25, 2018, Waste and Fuels Management Project (W&FMP) maintained facilities in a safe and compliant condition. Overall, the project continues to deliver ongoing efficiencies that were identified in the fiscal year (FY) 2012-2013 time frame, but continues to be impacted by emerging work and realized risks.

This month:

- Management of Cesium and Strontium Capsule (MCSC) Project (W-135): Work continues on the Cask Storage System (CSS) and the Capsule Storage Area (CSA) pad design. The CSA and the CSS Preliminary Design Review are scheduled to be initiated in early April. The project performed dimension checks for 960 of 1,936 capsules.
- At the Canister Storage Building (CSB), the project completed proficiency demonstration for the sampling of Multi Canister Overpacks (MCO) using a mockup/simulator. This demonstrates operational readiness to sample MCOs if necessary. The project used this opportunity to perform dry runs and training of newer Nuclear Chemical Operators (NCOs) for the MCO Sampling Program.

EMS Objectives and Target Status (Draft)

Objective #	Objective	Target	Due Date	Status
18-EMS-WFMP-OB1-T1	Reuse equipment from West Valley DOE site/conserves resources/minimize waste.	Reuse West Valley equipment for cesium (Cs) and strontium (Sr) capsule storage. Receive, manage, and utilize equipment as received.	9/30/18	45%
18-EMS-WFMP-OB2-T1	Chemical management compliance.	Evaluate the process for chemical management at CSB and T Plant. Perform an assessment on chemical inventory locations.	9/30/18	25%
18-EMS-WFMP-OB3-T1	Improve compliance.	Identify implementing mechanisms and gaps for low-level burial ground (LLBG) compliance matrix requirements at the project level.	9/30/18	0%
18-EMS-WFMP-OB4-T1	Reduce environmental impact of contaminants along the Columbia River and minimize accompanying risks.	Complete T Plant RA and Master Documented Safety Analysis (MDSA) Revision 12 implementation in order to prepare for sludge receipt at T Plant.	9/30/18	100%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	
Total Recordable Injuries	0	0	
First Aid Cases	1	*18	3/28/18 – While walking down stairs, employee lost balance. They tried to catch themselves with the handrail but slipped. They fell to ground at the foot of stairs, causing slight abrasions to palm of hands and bruise on left elbow and left knee. (24766) *One First Aid case; PTS in support of RL-0013.
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

13.01 Project Management

- o Performed/Completed:
 - Current Consent Agreement and Final Order (CAFO) document development status: Ecology is requiring that a Data Quality Objectives (DQO) section be added to each closure plan. The project provided an outline detailing where all of the required information was addressed in each section. A path forward was agreed upon by CHPRC, RL, and Ecology and was implemented in the affected documents. An example closure plan was provided to Ecology for informal review on March 8, 2018.

13.02 Capsule Storage & Disposition

- o Performed/Completed:
 - Waste Encapsulation and Storage Facility (WESF) Annual Safety Basis updates were approved and transmitted to RL.
 - Transfer of W-130 concrete cores from the WESF canyon to the truck port. Cores are scheduled to be loaded into roll-on/roll-off (RO/RO) container on March 28, 2018.
 - Installation of new demister pads and pre-filters on the K3N filter skid.
- o Completed Surveillances/Preventive Maintenance (PM):
 - 42 PM packages.

13.03 Canister Storage Building (CSB)

- o Performed/Completed:
 - Fabrication of the MCO sample mockup/simulator.
 - Continued procedure verifications, dry runs, and training of newer NCOs.
 - Proficiency demonstration and validation of Operational Readiness to perform MCO sampling.
- o Completed Surveillances/PMs:
 - 31 PM packages.

13.06 Transuranic (TRU) Repackaging

- o Repackaging:
 - No shipments in the current month. To date, 141.15 cubic meters has been completed for the next Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) volumetric milestone objective.

13.07 Waste Receiving and Processing (WRAP)

- o Performed/Completed:
 - Continued repairs of Motor Control Centers.
- o Completed Surveillances/PMs:
 - 207 surveillances.
 - 18 PM packages.

13.08 T Plant

- o Performed/Completed:
 - Installation of cover blocks on cell 15L.
 - Installation of 271T Fire Alarm Control Units (FACU) cover guards.
 - U Plant entry preparations for the retrieval of spare crane parts.
- o Completed Surveillances/PMs:
 - 471 surveillances.
 - 46 PM packages.
- o Shipments shipped:
 - One drum from T Plant to Environmental Restoration Disposal Facility (ERDF).

Sludge Receipt

- o Performed/Completed:
 - Relocated all five Sludge Transport and Storage Containers (STSCs) to 221-T canyon deck from 2706-T.
 - Installation of the STSC cask lid.

13.09 Central Waste Complex (CWC) and Low-level Burial Ground (LLBG)

- o Performed/Completed:
 - Electrical maintenance for MO-288/SA-1.
- o Completed Surveillances/PMs:
 - 341 surveillances.
 - 19 PM packages.
- o Shipments shipped:
 - One 1800 Top Load (TL) and one Super 7A from CWC to Perma-Fix Northwest (PFNW).
- o Shipments received:
 - Thirteen 1800TLs from the Plutonium Finishing Plant (PFP) into CWC Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) North Outside Storage Area (NOSA) in 13 shipments.
 - Ten Standard Large Box 2 (SLB2s) and four Solid Waste Boxes (SWBs) from PFP into CWC in seven shipments.
 - Three SWBs from PFWN into CWC in one shipment.
 - One 1800TL from PFP into CWC 2404WB.

13.12 Integrated Disposal Facility (IDF)

- o Performed/Completed:
 - Monthly inspections.

13.15 TRU Disposition

- o Performed/Completed:
 - Review of the first transuranic (TRU) waste stream requiring further evaluation for chemical compatibility and presence of oxidizers to meet Waste Isolation Pilot Plant (WIPP) Waste

Acceptance Criteria (WAC), Revision 8. A presentation describing actions taken will be provided to RL management in early April.

13.16 Offsite Spent Nuclear Fuel Disposition

- o Performed/Completed:
 - Maintained coordination for offsite Spent Nuclear Fuel Disposition.

13.21 Mixed Waste Disposal Trenches (MWT)

- o Completed surveillances/PMs:
 - 146 surveillances.
- o Shipments received:
 - Thirteen boxes and one drum from PFNW into MWT31 in three shipments.

13.24 Management of Cesium and Strontium Capsules Project

- o Performed/Completed:
 - CSA design: Work continues on the Preliminary Design. The Preliminary Design Review is scheduled to start in early April.
 - Site investigation (geotechnical): A surface rad survey was completed by the radiation area remedial action (RARA) group on the CSA area. The survey was completed in preparation of the geotechnical investigation and future CSA construction. No elevated readings were found.

13.25 Capsules Interim Storage Operations

- o Performed/Completed:
 - CSS design: Preliminary design is ongoing. The design agent, NAC International, will be onsite April 3 - 5, 2018, for the Preliminary Design Report presentation and to disposition comments previously provided from reviewers.
 - Engineering: Completed 960 of 1936 capsules.

Project Technical Services (PTS) Support

- o Project Delivery:
 - CSB Air Handling unit 004:
 - Mobilized design team and completed access to attic space for as-built and inspection.
 - Commenced 60 percent design activities.
 - Roofing repairs at CWC and WRAP:
 - Completed repair work on 2404-WB.
 - Commenced repairs to 2336-W.

MAJOR ISSUES

Issue:

The Washington Department of Ecology has requested that RL prepare an Environmental Assessment (EA) to address State Environmental Policy Act of 1971 (SEPA) requirements for W-135 (WESF modifications, construction of the capsule interim storage facility, and transfer of the capsules). RL believes the SEPA requirements can be addressed through a Record of Decision (ROD) amendment.

Corrective Action:

Coordinate with RL, DOE Office of River Protection (ORP), and Ecology to agree on the required document changes and schedule to provide needed SEPA coverage.

Status:

RL provided a justification to Ecology for why an EA was not needed on July 10, 2017.

A revised permitting strategy was issued by RL and Ecology, which agrees that additional SEPA coverage is not required and RL will issue a ROD amendment. The draft ROD amendment is at headquarters for approval and subsequent publication in the Federal Register.

Issue:

Ecology has indicated that they may require the 90 percent design package for the CSA prior to issuing the permit for public comment.

Corrective Action:

Work with Ecology to provide 30 percent design (as agreed in the permitting plan).

Status:

RL met with Ecology on June 22, 2017, and requested additional information regarding the need for the more detailed design. The permit application was formally submitted to Ecology on November 21, 2017, with the 30 percent design information. After meeting with Ecology to discuss their comments on the design maturity, the W-135 Project Management estimates that additional design information addressing Ecology's concerns will be required. This information should be available by mid-April; following availability of the additional design information an internal CHPRC/RL meeting will be scheduled to discuss the approach. Specific comments on the proposed permit addenda have not yet been received from Ecology.

Issue:

Ecology issued findings in inspection reports for the LLBG Trenches 31-34 and CWC regarding major risk labeling. The findings direct RL and CHPRC to label the containers with the major risks of the dangerous waste contents. CHPRC uses the U.S. Department of Transportation (DOT) hazard class labeling system (which includes the use of radiological labels) to comply with the regulatory requirement.

Corrective Action:

Work with RL to obtain agreement from Ecology that CHPRC may use the DOT hazard class labeling system, as this complies with the regulatory requirement for a "system" in use that performs the function in accordance with local, state, or federal regulations.

Status:

CHPRC and RL met with Ecology inspectors regarding this item, and the parties agreed to elevate the issue to management for resolution. Ecology is working through the rule-making process to incorporate these requirements into the regulations but continues to identify this issue in recent inspections. The project continues to await direction from RL.

Issue:

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

Corrective Action:

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

Status:

Continue 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; overpacking drums). Streamlined and consolidated container management procedures. RL authorized the additional FY2018 TRU commercial repackaging, allowing shipments to PFNW for repackaging to continue throughout the year.

Issue:

Mission Support Alliance, LLC, (MSA) Cross-Connection Control Program performed a Health Hazard Level Re-Evaluation following the guidance listed in Washington Administrative Code (WAC) 246-290-490 and internal MSA Cross-Connection Control procedures. As a result, 225-B (WESF) Health Hazard Level was changed from high to severe, requiring service connections to have cross-connections installed.

Corrective Action:

The WAC requires the corrective action to be accomplished “within 90 days of the purveyor notifying the consumer ...” or “In accordance with an alternate schedule acceptable to the purveyor.” MSA has worked with affected facilities and RL to develop corrective actions that minimize impacts to ongoing cleanup milestones.

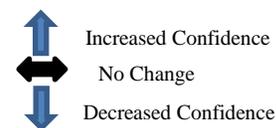
Status:

RL provided direction to MSA to remedy the majority of the issue with a modification at the source by MSA versus modifications at each facility. Description and preliminary schedule for WESF potable water facility modifications is required, unless RL approves an alternate (no action) approach that was transmitted on July 6, 2016 (CHPRC-1602928). The project continues to await RL direction for sanitary water system facility modifications. The MSA water purveyor also performed the annual cross-connection review at WESF on February 6, 2018. WESF is currently awaiting the report. Additionally, at MSA’s request, a letter was transmitted that describes to the MSA water purveyor the recently completed risk reduction activities at WESF (e.g.; W-130 Project) and the current schedule for removal of capsules to dry storage. Based on this information, MSA has indicated that reconsideration of the current classification of “severe” by the MSA water purveyor may be appropriate.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments
		Month	Trend	
RL-0013/WBS-013				
Explanation of major changes to the project monthly spotlight chart:				
WSD-125, <i>Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues</i> , was removed from the Realized Risk Section of the spotlight, and moved into the Critical Risk section, as the remaining mitigation actions are all ongoing activities.				
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)				
Lifecycle Risk Triggers (Risk could be realized at any point of the project)				

Risk Title	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
RL-0013/WBS-013																			
WSD-097: Major Equipment Failure - T-Plant	<p>T Plant suffers a major equipment failure (crane, primary power supply, etc.), resulting in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Medium (26% to 74%) Worst Case Impacts: \$3 million, 96 days</p>	●	↔	<p>Risk Trigger Metric: During planned facility operation activities, a suspected system component is discovered that requires attention, or an unexpected malfunction results in this risk being realized. This risk will continue throughout the CHPRC (September 30, 2018) contract.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify and procure spare parts for T Plant crane.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in March. The project has put into place mitigating strategies (i.e., aggressive S&M activities) to help reduce this risk. The crane is currently operational, however, an adequate spare parts inventory is needed. The project has identified spare parts for the T Plant crane with input from the manufacturer and is in the process of procuring critical spares. The project has received mechanical brake and spare parts. The long lead motor parts are scheduled to be delivered in June 2018. Engineering addressed quality assurance clause for the National Electrical Manufacturers Association (NEMA) MG1 standards to complete the mechanical motor parts order. An electrical parts order is in process. Repair of the motor drive shaft and coupling was required as a result of the 2017 annual crane preventive maintenance work performed in November. The electrical crane PMs were completed in January. The project currently has all identified electrical spare parts for the crane on order or in hand and continues to work with the vendor to acquire additional critical spares. In addition, the project is working with CPS&M to enter U Plant to determine whether spares can be salvaged from the crane that is of comparable vintage.</p>	Mitigation action(s)	FC Date	%	Identify and procure spare parts for T Plant crane.	Ongoing	N/A									
Mitigation action(s)	FC Date	%																	
Identify and procure spare parts for T Plant crane.	Ongoing	N/A																	
WSD-019: MLLW & TRU Treatment Impacts	<p>Mixed Low-Level Waste (MLLW) and TRU treatment capacity/capability does not meet Hanford needs or treatment does not occur as scheduled, resulting in cost impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Likely (75% to 90%) Worst Case Impacts: \$1.25 million, 0 days</p>	●	↔	<p>Risk Trigger Metric: Will continue throughout the contract (September 30, 2018).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Establish multiple treatment contracts, or obtain additional capability, for the processing of MLLW and TRU, with terms extending to the end of the current CHPRC contract with RL (i.e. September 30, 2018).</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Continue to work with RL to fund the processing of TRU/M waste at PFNW at a rate that keeps them viable (i.e. keeps the doors open).</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Evaluate the benefit(s) associated with an increase to the PFNW plutonium (Pu) possession limit. Their current limit is 200 grams of total Pu. Increasing the limit may allow additional quantities of transuranic mixed (TRUM) waste to be shipped to PFNW for processing. This evaluation took place in conjunction with the M-091-52 engineering study.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Negotiations with RL are ongoing to seek authorization for additional shipments of M-91 legacy TRUM to PFNW. The additional shipments would meet the objectives for the PFNW minimum optimal processing volume as identified in the optimization study provided to RL in December 2016.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in March. 1) MLLW: Two contracts are in place for offsite commercial waste treatment, which provided sufficient capability/capacity to meet current MLLW treatment needs through the end of the CHPRC contract term. However, one of the contracts was recently restricted due to the closure of the Perma-Fix East treatment facility in Tennessee (M&EC). Additional treatment capabilities will be needed to meet future anticipated MLLW treatment needs. TRU/M: Only PFNW has current capability to process TRU/M waste. This is due solely to the practical limitations imposed by the need to ship the TRU/M waste via road closure; therefore, additional commercial providers cannot be obtained. Additional authorization has been received by DOE for FY2018, which will maintain PFNW's minimum optimization processing volumes.</p>	Mitigation action(s)	FC Date	%	Establish multiple treatment contracts, or obtain additional capability, for the processing of MLLW and TRU, with terms extending to the end of the current CHPRC contract with RL (i.e. September 30, 2018).	Ongoing	N/A	Continue to work with RL to fund the processing of TRU/M waste at PFNW at a rate that keeps them viable (i.e. keeps the doors open).	Ongoing	N/A	Evaluate the benefit(s) associated with an increase to the PFNW plutonium (Pu) possession limit. Their current limit is 200 grams of total Pu. Increasing the limit may allow additional quantities of transuranic mixed (TRUM) waste to be shipped to PFNW for processing. This evaluation took place in conjunction with the M-091-52 engineering study.	Complete	100	Negotiations with RL are ongoing to seek authorization for additional shipments of M-91 legacy TRUM to PFNW. The additional shipments would meet the objectives for the PFNW minimum optimal processing volume as identified in the optimization study provided to RL in December 2016.	Complete	100
Mitigation action(s)	FC Date	%																	
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Continue to work with RL to fund the processing of TRU/M waste at PFNW at a rate that keeps them viable (i.e. keeps the doors open).	Ongoing	N/A																	
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
RL-0013/WBS-013																			
WSD-140: As-Found-Unknown Conditions - T Plant	<p>Unknowns, as-found, or emergent conditions impact the operability of the T Plant facility.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very Likely (>90%)</p> <p>Worst Case Impacts: \$990K, 0 days</p>	●	↔	<p>Risk Trigger Metric: Based on unknown conditions, the possible risk triggers are unknown.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Repairs to 221-T Dock number 2 in support of sludge receipt</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Submittal of a Baseline Change Request (BCR) to break out the planning package planned for May.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in March. Past periods included work on dock 2 removal and installation as well as asphalt repair. The project has identified additional structural issues with the facility stairs and exits for which evaluations and repairs will be carried out as necessary. In addition, the project is working to cap a leaking drain line in the canyon and to mitigate a line that has allowed water incursion into the tunnel.</p>	Mitigation action(s)	FC Date	%	Repairs to 221-T Dock number 2 in support of sludge receipt	Complete	100	Submittal of a Baseline Change Request (BCR) to break out the planning package planned for May.	Complete	100						
Mitigation action(s)	FC Date	%																	
Repairs to 221-T Dock number 2 in support of sludge receipt	Complete	100																	
Submittal of a Baseline Change Request (BCR) to break out the planning package planned for May.	Complete	100																	
WSD-125: Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues	<p>A pause in waste processing results in an unexpected container degradation within Solid Waste Operations Complex (SWOC) (excluding TRU retrieval activities) and requires additional resources to respond.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$5 million, 0 day</p>	●	↑	<p>Risk Trigger Metric: Degraded containers are discovered in CWC.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform daily/weekly waste container surveillances to identify container abnormalities.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Manage a "watch list" of waste containers that have shown signs of degradation or are associated with degraded containers.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Process waste packages at a rate funded by RL.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Procuring stainless steel 85-gallon overpacks for alternative storage of containers showing signs of degradation.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in March. The project continued to perform container surveillances in March to identify container and container cover abnormalities. Three drums have been placed in overpacks in FY2018 in addition to 24 containers in 2404WC with signs of exterior corrosion, which were placed in stainless steel overpacks on October 18, 2017. Furthermore, the overpack of storage box 75DMA16F3 was completed. RL authorized additional FY2018 TRU commercial repackaging, allowing shipments to PFNW for repackaging to continue. The remaining containers will continue to require surveillance and enhanced monitoring.</p>	Mitigation action(s)	FC Date	%	Perform daily/weekly waste container surveillances to identify container abnormalities.	Ongoing	N/A	Manage a "watch list" of waste containers that have shown signs of degradation or are associated with degraded containers.	Ongoing	N/A	Process waste packages at a rate funded by RL.	Ongoing	N/A	Procuring stainless steel 85-gallon overpacks for alternative storage of containers showing signs of degradation.	Complete	100
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Procuring stainless steel 85-gallon overpacks for alternative storage of containers showing signs of degradation.	Complete	100																	
FY2018 Risk Triggers (Risk could be realized in FY2018)																			
WSD-W135-15: Utilization of 2003 Pre-Conceptual Design	<p>A pre-conceptual design for the dry storage of the capsules was completed in July 2003. If this design cannot be utilized, it will be necessary to initiate and complete a new conceptual design, including a new analysis of alternatives.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very Likely (>90%)</p> <p>Worst Case Impacts: \$5,100K, 0 days</p>	●	↔	<p>Risk Trigger Metric: The 2003 pre-conceptual design for the dry storage of capsules cannot be utilized.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in March. The 2003 pre-conceptual design is based on design criteria that is over 13 years old. Design criteria that impacts the ability to utilize the 2003 pre-conceptual design include: location of the Dry Storage Facility, duration of the storage period, Safety Basis Requirements, and environmental permitting. Continuing to have discussions with RL can clarify impacts of the Safety Basis Requirements and environmental permitting. The risk is being captured for visibility and will remain a part of the key risks until this issue is resolved.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A									
Mitigation action(s)	FC Date	%																	
None identified at this time.	N/A	N/A																	

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0013/WBS-013										
WSD-W135-16: Content and Approval of Critical Decision Packages	The content of the critical decision (CD) packages required by DOE O 413.3B are more extensive than anticipated and require an extensive RL review. Risk Handling Strategy: Accept Probability: Very Likely (>90%) Worst Case Impacts: \$2,000K, 0 days	●	↑	<p>Risk Trigger Metric: The content and review/approval process for the CD packages is impacted by DOE O 413.3B.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Prepare joint tailoring strategy with RL on how to meet the DOE O 413.3B requirements</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in March. The pre-conceptual design of the project was based on DOE O 413.3A; the current version is DOE O 413.3B, Change Order 2. New requirements will impact the content of the CD packages or impact the duration and extent of the RL review. CHPRC continues to work closely with RL on the tailoring strategy to meet the DOE O 413.3B requirements. RL is currently evaluating the applicability of 413.3B due to new guidance from HQ. The risk is being captured for visibility and will remain as part of the key risks until this issue is resolved. No further mitigation actions are necessary at this time.</p>	Mitigation action(s)	FC Date	%	Prepare joint tailoring strategy with RL on how to meet the DOE O 413.3B requirements	Complete	100
Mitigation action(s)	FC Date	%								
Prepare joint tailoring strategy with RL on how to meet the DOE O 413.3B requirements	Complete	100								
WSD-W135-17: Modifications to WESF	The transfer of the capsules to dry storage will require modifications to WESF. Risk Handling Strategy: Accept Probability: Very Likely (>90%) Worst Case Impacts: \$7,300K, 0 days	●	↔	<p>Risk Trigger Metric: Modifications to the WESF facility are required for transfer of capsules to dry storage.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in March. The approach incorporated into the pre-conceptual design for the transfer of the capsules required minimal modifications to WESF. New or updated requirements will require more extensive modifications to WESF. The CD-1 submitted in August provides the preliminary modifications to WESF. The risk is being captured for visibility and will remain as part of the key risks until this issue is resolved.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
WSD-W135-28: RCRA Permit Requires 90% Design Information for the Capsule Storage Area (CSA)	Ecology may require the 90 percent design package for the CSA to be completed prior to issuing the permit for public comment. Risk Handling Strategy: Accept Probability: Medium (20% to 74%) Worst Case Impacts: \$1,775K, 360 days	●	↔	<p>Risk Trigger Metric: Ecology requires the 90 percent design package for the CSA to be completed prior to issuing the permit for public comment.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in March. CHPRC continues to have regular interfaces with Ecology to discuss the issue and are evaluating options should the 90 percent be required. The permit application was formally submitted to Ecology on November 21, 2017, with the 30 percent design information. The project is awaiting a determination of incompleteness and other comments on the application. The determination of incompleteness is primarily associated with the need for additional design information, which is currently being gathered. The project anticipates that a Temporary Authorization will be necessary if the permitting process is not timely.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
WSD-086: W&FM Industrial Accident or Contamination	An industrial accident or contamination event requires corrective actions, resulting in cost impacts. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$3 million, 0 days	●	↔	<p>Risk Trigger Metric: The spread of contaminated tumbleweeds at W&F laydown areas and burial grounds require additional personnel to monitor and mitigate the spread of contamination.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Additional radiation surveys, first line supervisors, and supporting staff are required to support herbicide spraying required to monitor and mitigate the spread of contamination in the burial grounds associated with biological vectors.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in March. The migration of tumbleweeds has the potential of spreading contamination to site "neighbors," therefore increased use of herbicide spraying and surveillances are required to help minimize contamination spread.</p>	Mitigation action(s)	FC Date	%	Additional radiation surveys, first line supervisors, and supporting staff are required to support herbicide spraying required to monitor and mitigate the spread of contamination in the burial grounds associated with biological vectors.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Additional radiation surveys, first line supervisors, and supporting staff are required to support herbicide spraying required to monitor and mitigate the spread of contamination in the burial grounds associated with biological vectors.	Ongoing	N/A								

Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0013/WBS-013																
WSD-133: Results of External Audits/Assessments Impact Operations	External oversight groups identify gaps in licensing/permitting, surveillance, and maintenance activities at WSD facilities. This includes but is not limited to a change in the current interpretation of required electrical PMs and additional permitting at T Plant for sludge receipt. These gaps require additional resources to address discrepancies, resulting in cost impacts. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$3,000K, 0 days	●	↔	<p>Risk Trigger Metric: WESF operations continue longer than assumed due to delays in the implementation of the Cs/Sr capsule dry storage project, which results in increased maintenance demands and the need to replace select systems required for operation due to their age and difficulty in obtaining spare parts. The WRAP facility extended dormant period requires increased maintenance work.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Replace WESF pool cell instrumentation systems, add 21 PM/S WRAP electrical system activities, and perform WRAP floor repair.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Provide RL information to substantiate the current project position.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Participate in technical mitigations to ensure compliance.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in March. The project is working on the design of the WESF pool cell instrumentation system replacement. It is expected that the WRAP floor repair will commence in the spring. Completed maintenance on the High Energy Real Time Radiography Linear Accelerator. Additional maintenance work will be performed based on facility work priority.</p>	Mitigation action(s)	FC Date	%	Replace WESF pool cell instrumentation systems, add 21 PM/S WRAP electrical system activities, and perform WRAP floor repair.	Ongoing	N/A	Provide RL information to substantiate the current project position.	Ongoing	N/A	Participate in technical mitigations to ensure compliance.	Ongoing	N/A
Mitigation action(s)	FC Date	%														
Replace WESF pool cell instrumentation systems, add 21 PM/S WRAP electrical system activities, and perform WRAP floor repair.	Ongoing	N/A														
Provide RL information to substantiate the current project position.	Ongoing	N/A														
Participate in technical mitigations to ensure compliance.	Ongoing	N/A														
WSD-136: CWC/WRAP Components Fail	CWC facilities and components may reach their end of life. These items will need to be replaced and/or repaired outside of planned funding profiles, resulting in cost impacts. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$2 million, 0 days	●	↔	<p>Risk Trigger Metric: Maintenance activities at CWC increase due to aging facilities.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Floor repairs and MDSA container stacking requirements, replacement of exhaust fans.</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Obtain spare parts for the Fire Alarm Control Units (FACU) via deactivation of old FACUs.</td> <td>7/2/2018</td> <td>0</td> </tr> <tr> <td>Conducting door frame replacements and electrical equipment repairs as necessary.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No significant changes in March. Floor repairs will be performed, weather permitting. The MDSA container stacking requirements are complete. Maintenance work at CWC will be scheduled based on facility work priorities. The WRAP facility experienced failure of the majority of the breakers earlier in the year and is currently repairing Motor Control Centers (MCC). A sink hole (about 20 feet by 20 feet) in the WRAP parking lot was identified due to a broken water line. Repair to the line and fire hydrant were completed 10/2017. The sink hole in the parking lot has continued to grow and now represents a safety concern. The project is working with MSA to repair this on an expedited schedule.</p>	Mitigation action(s)	FC Date	%	Floor repairs and MDSA container stacking requirements, replacement of exhaust fans.	Ongoing	N/A	Obtain spare parts for the Fire Alarm Control Units (FACU) via deactivation of old FACUs.	7/2/2018	0	Conducting door frame replacements and electrical equipment repairs as necessary.	Ongoing	N/A
Mitigation action(s)	FC Date	%														
Floor repairs and MDSA container stacking requirements, replacement of exhaust fans.	Ongoing	N/A														
Obtain spare parts for the Fire Alarm Control Units (FACU) via deactivation of old FACUs.	7/2/2018	0														
Conducting door frame replacements and electrical equipment repairs as necessary.	Ongoing	N/A														
Unassigned Risks (Pending ownership of identified risks/opportunities)																
No unassigned risks identified in March .																

PROJECT BASELINE PERFORMANCE

Current Month

(\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
Total	11.9	11.8	10.6	(0.1)	-1.2%	1.2	10.4%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (-\$0.1M/-1.2%)

The CM Schedule Performance is within threshold.

CM Cost Performance (+\$1.2M/+10.4%)

The CM cost performance variance is primarily associated with significant efficiencies in labor utilizations. Efficiencies include resource sharing across multiple scopes of work in areas of engineering, training, emergency preparedness, corrective action management and environmental management and with commercial repack of TRUM, which was authorized for FY2018 via Correspondence Number 1704615A. The prior authorized scope, which was not budgeted in previous performance periods, was incorporated into the performance measurement baseline (PMB) in March and performance for work executed and costed in prior periods was taken in the current period.

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	1,251.2	1,249.2	1,166.3	(2.0)	-0.2%	82.9	6.6%	1,363.4	1,276.3	110.0	87.1

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (\$-2.0M/-0.2%)

The CTD schedule variance is within threshold.

CTD Cost Performance (+\$82.9M/+6.6%)

Realizing efficiencies such as organizational flattening and streamlining; right-sizing capabilities for planned scope; optimizing resources with reorganization and consolidation of engineering capabilities across W&FM; 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 Areas (RAM) and associated surveillances/routines and records; tagging out unneeded equipment and reducing the frequency and number of preventive maintenance activities; increasing shared resources across all of SWOC; reducing dedicated resources for Corrective Action System (CAS) and utilizing project-wide support; optimizing maintenance scheduling and execution reducing Operations Field Work Supervision; increasing emphasis on managing planned

absence coverage within existing resources; simplifying and optimizing acquisition and procurement management within W&FM; and 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 (+\$87.1M/+6.4%)

Realizing efficiencies such as organizational flattening and streamlining; right-sizing capabilities for planned scope; optimizing resources with reorganization and consolidation of engineering capabilities across W&FM; 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/RAM and associated surveillances/routines and records; tagging out unneeded equipment and reducing the frequency and number of preventive maintenance activities; increasing shared resources across all of the SWOC; reducing dedicated resources for CAS and utilizing project-wide support; optimizing maintenance scheduling and execution; reducing Operations Field Work Supervision; increasing emphasis on managing planned absence coverage within existing resources; simplifying and optimizing acquisition and procurement management within W&FM; and 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)

WBS 013/RL-0013 Waste and Fuels Management Project	FY2018		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	150.8	155.9	(5.1)
Incremental Scope Pending Change Management	0.0	(30.0)	30.0
RL-0013 – Total	150.8	125.9	24.9

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2018 projected funding level for project breakdown structure (PBS) RL-0013 of \$150.8 million is based on the revised guidance provided by RL following passage of the FY2018 Omnibus. The \$24.9 million variance between projected funding and the spend forecast is primarily due to a spending forecast revision to reflect ERDF, April through September, in RL-0013, moving out of RL-0041; to incorporate deferral of forecasted RL-0013 work to offset higher priority scope within the Central Plateau Control Point in addition, and Line Item (LI) funding was allocated but not available due to continuing resolution (CR), resulting in the deferral of a portion of preliminary design activities for WESF modifications.

Critical Path Schedule

Critical Path Analysis can be provided upon request.

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. RL enforceable agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The PMB annual update, implemented in September 2013, and subsequently approved BCRs define CHPRC planning with respect to Tri-Party Agreement milestones. The following table is a one-year look ahead of commitments and Tri-Party Agreement enforceable milestones and non-enforceable target due dates.

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.	9/30/18		9/27/18	On schedule
M-091-52-T01A	Remove Five (5) Mixed Waste Containers from Outside Storage Area A and/or Outside Storage Area B	11/30/18		4/5/18	On schedule
M-091-03L	Submit Revision of TRUM Waste and MLLW PMP to Ecology.	Deleted per Change Number M-91-18-01			
M-092-00	Acquire Facilities for Cs/Sr, Na & SCW.	9/30/18		9/28/18	In Program Planning
C-026-07L	Tritium Treatment Technology Developments to Ecology and EPA.	3/31/18	3/22/18 (A)		Completed
M-026-07D	Evaluation of Tritium Treatment Technology to EPA & Ecology	3/31/19		3/31/19	On schedule
C-026-07M	Submit Tritium Treatment Technology Developments to Ecology & EPA	3/31/19		3/31/19	On schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Contract Section	Project	GFS/I	Status
CONTRACT			
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 and acts as signatory on the shipping papers, and ensures DOE Manual 460.2-1 is complied with. RL arranges for Commercial Motor Vehicle Safety Alliance (CVSA) level VI vehicle inspections and verifies that the government drivers meet the applicable 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 TSD 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 CBFO.	No WIPP shipments are planned within the contract period of performance.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
CSB – Obtain RL DSA Approval	1/31/2018 (A)	5/31/2018
CSA CD2/3 – DOE-HQ Approve Amended ROD & Publish in Federal Register	2/6/2018 (A)	5/7/2018
Provide Supplemental Permit Application Material	2/14/2018 (A)	5/24/2018
Ecology Performs Review of Supplemental information	4/27/2018	5/8/2018

Section D

Soil and Groundwater Remediation Project (RL-0030)



J. D. Rendall
Vice President and
Project Manager for
Soil and Groundwater
Remediation Project

M. A. Wright
Vice President for
Project Technical
Services

March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

PROJECT SUMMARY

Pump and Treat (P&T) Operations continued making progress on the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial process documentation for the River Corridor and Central Plateau. Groundwater treatment completed in March 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	33.7	184.1	2.2	13.6						
HX P&T	30.7	169.7	1.8	13.2						
KR-4 P&T	8.7	53.0	0.1	1.1						
KW P&T	14.5	85.0	0.8	6.8						
KX P&T	32.5	184.2	2.0	11.6						
200 West P&T	91.3	581.1	8.1	50.5	183.0	1,151.0	.24x10 ¹²	1.32x10 ¹²	13.3	81.1
Combined	211.4	1,257.2	14.9	96.3	183.0	1,151.0	.24x10¹²	1.32x10¹²	13.3	81.1
FY2018 KPG	--	2,200.0	--	160.0	--	1,800.0	--	N/A	--	120

Well Drilling by Area	FY2018 Planned	Current Month	FY2018 Cumulative
100-KR-4	3	0	0
100-HR-3	6	0	6
200-UP-1	5	2	5
200-ZP-1	4	0	2
M-24 Milestone	1	0	0
Total Wells	19	2	13
Site Wide Boreholes	29	6	29

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
<u>18-EMS-SGRP-OB1-T1</u>	Reduce adverse environmental impact to health and the environment by monitoring and confirming low-carbon tetrachloride emissions at the 200 West Pump and Treat Facility.	Evaluate treated off-gas analytical results from compliance sampling and process sampling each quarter.	7/31/18	33%
<u>18-EMS-SGRP-OB2-T1</u>	Improve compliance margin by improving expired chemical inventory management.	Better define the process of proper disposal of expired chemicals and/or chemicals with no future use.	9/30/18	50%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	1	NA
Total Recordable Injuries	0	0	NA
First Aid Cases	1	30	3/23/18 – Individual experienced ringing in the right ear after operating equipment. The employee was examined at HPMC and released back to work with no restrictions. (24767) *1 First Aid case, PTS in support of RL-0030.
Near-Misses	0	0	NA

KEY ACCOMPLISHMENTS

RL-0030 Accomplishments

Environmental Integration

- On March 1, 2018, the first of three workshops planned in fiscal year (FY) 2018 was held with participants from CHPRC, RL, Environmental Protection Agency (EPA), and Ecology to discuss development of the cumulative impact evaluation (CIE) approach document. The focus of the first workshop was to set a foundation for the CIE need and scope, discuss the relation to other cumulative evaluation activities (composite analysis, Tank Closure and Waste Management Environmental Impact Statement [EIS]), review information from the Central Plateau principles and parameters that refer or apply to the CIE, and present the schedule for the development of the approach document. The workshop went well with active participation from the parties in attendance. Future workshops will focus on details of the CIE approach including information sources, facets (e.g., waste forms and models for waste form release, vadose zone transport, and saturated zone transport), and parameters.

RL-0030.01 RL-0030 Operations

River Corridor

300-FF-5 Operable Unit (OU)

- Re-started the Stage B Uranium Sequestration project. Initiated design review and design changes including operating the injection system with temporary power, given that the municipal power lines are no longer available. Performed initial walk downs of the site to inventory equipment staged during lay-up and to support the preparation of material take offs. Initiated the procurement of subcontractor support services. Started review of work packages necessary for construction and operations.
- Provided technical and schedule information to support RL with addressing issues associated with the Yakama Nation letter dated January 4, 2018.

100-KR-4 OU

- Initiated preparation of a Technical Impracticability (TI) waiver white paper for the Sr-90 plume near the KE Reactor on March 5, 2018. The paper will support further discussions with RL and EPA senior management.
- Initiated preparation of a separate remedial investigation (RI) report based on the decision to separate the 100-KR-4 RI/feasibility study (FS) into two documents. The RI report preparation will maintain progress on the document and allow time to evaluate a TI waiver approach for the FS.
- Completed the 30 percent conceptual design review for the soil flushing/infiltration leach field on March 7, 2018.
- Provided the Revision 0, KW Soil Flushing/Infiltration Treatability Test Plan to RL on March 19, 2018. The document requires RL and EPA signatures before being released.

100-HR-3 OU

- Completed connection of two of the five planned extraction wells on March 14, 2018.
- Initiated operations acceptance testing of Well HE49 (199-H1-49) on March 20, 2018.

100-NR-2 OU

- Briefed RL on March 8, 2018, on the permeable reactive barrier performance based on the most recent (June 2017) data. The barrier performance continues to degrade. Efforts to re-inject the barrier are contingent upon completion of the Section 106 NHPA Cultural Review process. The first workshop with the Yakama Nation will be held on March 27, 2018, to develop the Memorandum of Agreement for injection of the barrier.

100-BC-5 OU

- Supported an RL meeting with EPA to review comments received from the Yakama Nation on the Draft A 100-BC-5 remedial investigation/feasibility study (RI/FS) on February 20, 2018.
- Provided the Draft, Revision 0, Proposed Plan (PP) to RL for review on March 5, 2018. The revision incorporates responses to EPA comments that were received on the Draft A PP.
- Provided the Draft, Revision 0, RI/FS Chapter 7 to RL on March 19, 2018, for submittal to EPA for informal review.

100-FR-3 OU

- Provided Revision 0, Evaluation of 100-FR-3 Groundwater Monitoring Results from Phase 1 Wells report to RL on February 21, 2018.

Central Plateau**200-UP-1 OU**

- Initiated construction of the first of two planned remedy performance monitoring wells.
- Briefed RL on the recently updated uranium plume map on March 14, 2018, and discussed impacts to the Remedial Design/Remedial Action Work Plan (RD/RAWP) schedule. A follow-up meeting will be held with RL on March 27, 2018, regarding changes to the 2017 uranium plume map, impacts to the RD/RAWP, and Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestone M-016-193, which is at risk.

200-BP-5/200-PO-1 OU

- Resolved the majority of Ecology comments on the 200-BP-5 and 200-PO-1 RI reports, except for risk assessment policy issues regarding fish consumption and the applicability of Waste Acceptance Criteria (WAC) 173-340-730. Information is being assembled on this policy issue to demonstrate that the issue has been previously resolved for other operable units. An additional comment disposition is

pending review by Ecology staff on an environmental calculation relating to exposure by ingestion and dermal contact. Incorporation of the resolved comments is proceeding.

- Received all RL, Ecology, and EPA approval signatures on the Revision 0, 200-BP-5 RAWP by March 15, 2017. The document is undergoing the release process.

200-DV-1 OU

- Hosted a working session with RL on March 20, 2018, to walk through the vadose zone modeling approach and current progress related to characterization, geology, and contaminant distribution.
- Held a briefing with RL on March 6, 2018, to discuss the salient elements of the B-Complex Field Summary Report implementing the field activities and data collection associated with the RI/FS work plan.
- Completed drilling the six remaining shallow risk boreholes on March 13, 2018. Characterization activities for the 200-DV-1 OU are now complete. The project is awaiting the analytical data.

200-ZP-1 OU

- Completed supplemental groundwater modeling runs to evaluate the performance of the 200 West P&T against remedial action objectives specified in the Record of Decision (ROD). Scheduled a meeting with RL to present the supplemental groundwater modeling runs on March 29, 2018.

200 East Closure Plans

- Resolved internal and RL informal comments on the 216-A-36B crib closure plan on March 15, 2018.
- Conducted a workshop with Ecology on March 22, 2018, to present preliminary draft of 216-A-36B crib closure plan in the “new” Option 2 template.

200-WA-1

- Completed ecological and cultural review for the characterization and remediation of 200-WA-1 sites in and around S Plant.

200-EA-1

- Continued progress on preparation of the RI/FS work plan, including:
 - Received informal RI/FS work plan Chapter 3 comments from Ecology on February 28, 2018.
 - Conducted comment resolution meeting with Ecology on Appendix E of the applicable or relevant and appropriate requirements (ARARs) on March 8, 2018.
 - Resolved RL informal comments on RI/FS work plan Chapter 4 and Appendix A of the Sampling and Analysis Plan (SAP) on March 16, 2018.
 - Delivered RI/FS work plan Chapter 4 and SAP to Ecology for informal comments on March 19, 2018.

RCRA Groundwater Monitoring

- Completed disposition of Ecology comments on March 8, 2018, for the 200 West Engineering Evaluation Reports (EERs). Final documents are in preparation.
- Issued the following 200 East draft EERs: Low-Level WMA 2 (Trench 94) on February 22, 2018, WMA A/AX on March 7, 2018, and WMA C on March 21, 2018.

Project Technical Services Accomplishments

- Training and Procedures
 - Provided first stand-up presentation for sampling by SUMMA® canisters to industrial hygiene technicians.

- o Completed procedure validation for 2WPT-PRO-OP-7246, Balance of Plant Electrical/Mechanical Lineup.
- ConOps/Work Control/Conduct of Work
 - o Supported project in identifying method to perform greasing of drill rigs with eight criteria checklist.
- Project Delivery
 - o Completed connection and construction completion document (CCD) at 100-HR-3 OU wells HE12 and HE49.
 - o Completed high-density polyethylene (HDPE) bonding and electrical greenfield work at 100-HR-3 OU wells HE14, HE47, and HE48.

Groundwater P&T Facilities

Overall, the pump and treat systems are operating above target as depicted in the Pump and Treat Performance graph below. Refer to the Major Issues section of this report for a description of challenges preventing KR-4, KX, and DX from operating at full capacity. Additionally, the 100 Area facilities are currently impacted by a low-river stage and maintenance activities.

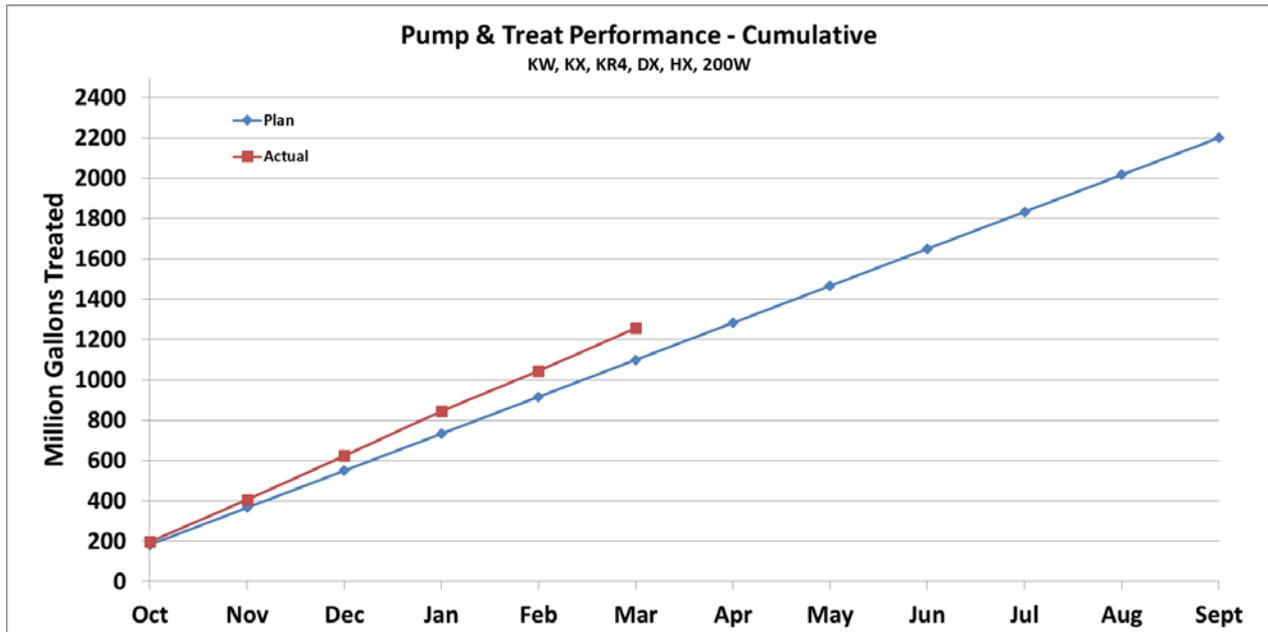
200 West P&T

- Operated the 200 West P&T at an average of 2,045 gallons per minute (gpm).

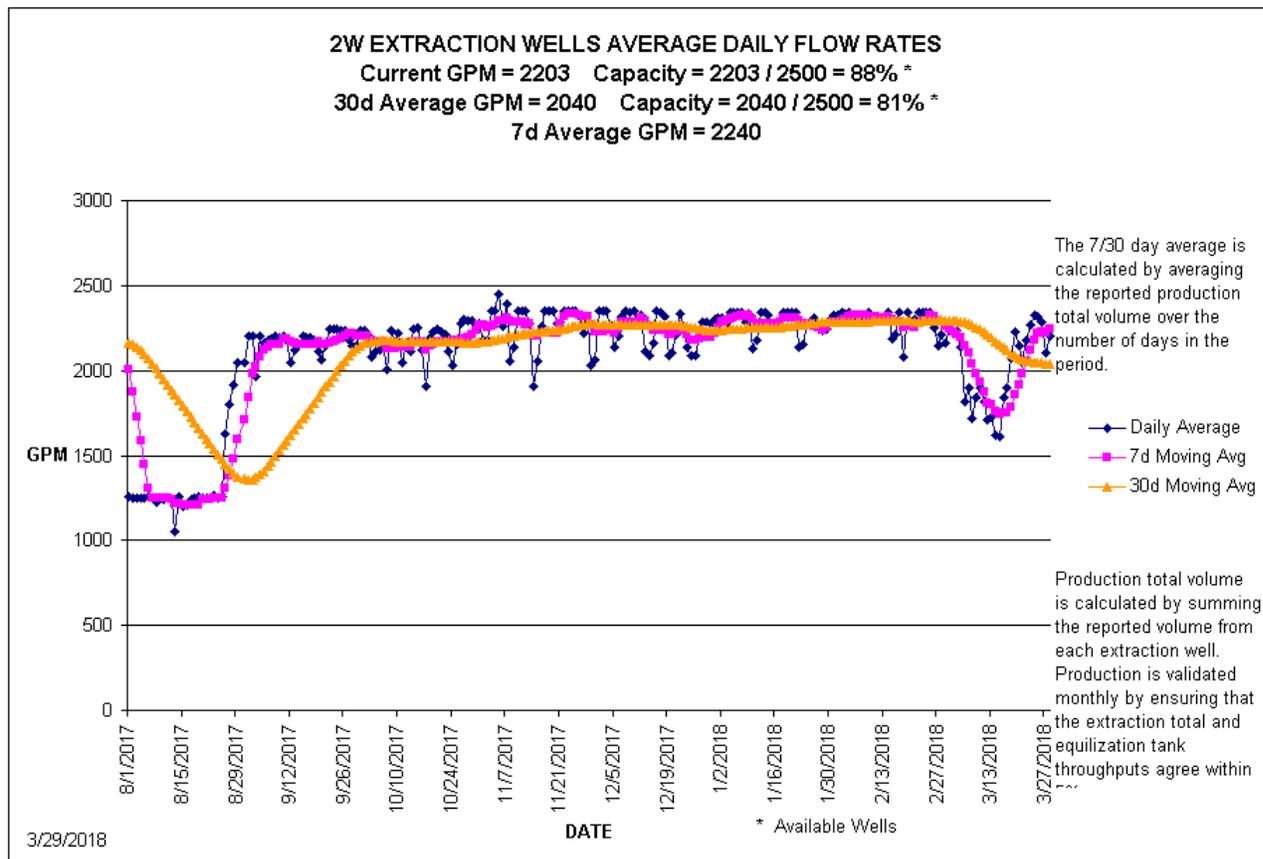
100 Area P&Ts

- Operated the DX P&T at 754 gpm, near the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 196 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 326 gpm, near the facility capacity of 330 gpm.
- Operated the KX P&T at 729 gpm, below the facility capacity of 900 gpm.
- Operated the HX P&T at 688 gpm, below the facility capacity of 900 gpm.

FY2018 P&T Operations



200 West P&T



MAJOR ISSUES

Issue:

Experiencing regulatory agency delays in the approval of the 100-DR-1, 100-DR-2, 100-HR-1, 100-HR-2, and 100-HR-3 OUs ROD.

Corrective Action:

Maintain visibility on these delays to senior management. RL/CHPRC to continue working with the regulatory agencies to facilitate completion of these documents. Submit notice of change letters to RL as contract activities are impacted.

Status:

A path forward has been identified to finalize the ROD, which includes completion of the cultural review being performed by MSA and resolution of the path forward for the 300 Area remedy implementation. As a result, finalization of the ROD is now anticipated for September 2018. Issue closed.

Issue:

KX, KR-4, and DX ion exchange vessels require diffuser repair. Nineteen of 36 vessels are in need of repair at KX and KR-4. One vessel requires repair at DX.

Corrective Action:

Repair all vessels with a damaged diffuser.

Status:

Completed replacement of train B vessel upper and lower diffusers at the KR-4 and KX facilities in March. All P&T IX vessels with known or suspected damage have been repaired. In total, eight vessels have been repaired at the KR-4 facility, 11 vessels have been repaired at the KX facility, and one vessel has been repaired at the DX facility. Issue closed.

Issue:

The evaporation rate at the modutanks is not keeping up with the purgewater being added. The project needs a reliable manner to treat the purgewater.

Corrective Action:

The project is evaluating the use of 200 West P&T and modutank operations together to mitigate two issues (200W injection well fouling and modutanks level). The pH and settling time provided by the modutanks allows the filtration of well fouling constituents. In addition, 200W has been evaluated for removing modutank water to ensure levels are maintained that support sampling and well maintenance activities. We are seeking regulatory approval to treat modutank water at 200 West P&T. Conference calls with EPA are being conducted to discuss regulatory approach.

Status:

Have prepared and cleared briefing materials. A fourth meeting with EPA occurred on March 19, 2018. EPA requested that Ecology be briefed. Briefing materials are being prepared for a meeting with EPA and Ecology on March 29, 2018.

Issue:

CHPRC plans to complete treatability tests that are required to meet Performance Measure PM-30-3-18a after the performance measure due date of September 30, 2018. The URGS treatability test injections are re-planned to begin in the fall, no earlier than October 1, 2018.

Corrective Action:

Letter CHPRC-1800623 was submitted on February 15, 2018, documenting the notification of change. CHPRC proposed to discuss contractual impacts from this decision.

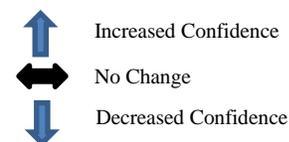
Status:

CHPRC continues discussions with RL.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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



Risk Title	Unmitigated Risk Impacts	Assessment		Comments												
		Month	Trend													
RL-0030/WBS-030																
Explanation of major changes to the project monthly stoplight chart: No major changes for March.																
Realized Risks (Risks that are currently impacting project cost/schedule)																
SGW-135: Major Equipment Failure at a Pump & Treat Facility	A major equipment failure is experienced at one of the P&T locations during operations of the facility or at the injection and extraction well network. This includes, but is not limited to, failure of: rotary drum thickeners, centrifuges, lime addition conveyor, plastic pipe joint saddles, fluidized bed reactors, membrane bio-reactors, tanks, air stripper, computer system control center, extraction/injection wells, and other related equipment supporting P&T, resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$2,000K, 86 days			<p>Risk Event: Approximately 19 of 36 KX, KR-4 vessels, and 1 of 32 DX P&T facility ion exchange vessels require diffuser repairs.</p> <table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Repair all vessels with damaged diffusers.</td> <td>3/15/17</td> <td>3/22/18</td> <td>100</td> </tr> <tr> <td>Conduct investigation of resin found in DX P&T effluent filters and repair damaged vessel (A1).</td> <td>12/06/17</td> <td>1/31/18</td> <td>100</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Completed the remaining vessel repairs (8) in March. All P&T vessels with known or suspected damage have been repaired (20 vessels). All recovery actions have been completed, therefore, this risk will be removed from the Stoplight chart in April.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Repair all vessels with damaged diffusers.	3/15/17	3/22/18	100	Conduct investigation of resin found in DX P&T effluent filters and repair damaged vessel (A1).	12/06/17	1/31/18	100
Risk recovery action(s)	Risk Date	FC Date	%													
Repair all vessels with damaged diffusers.	3/15/17	3/22/18	100													
Conduct investigation of resin found in DX P&T effluent filters and repair damaged vessel (A1).	12/06/17	1/31/18	100													
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																
Unassigned Risks (Pending ownership of identified risks/opportunities)																
No unassigned risks identified in March																

PROJECT BASELINE PERFORMANCE

Current Month

(\$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	26.9	28.9	10.0	1.9	7.1%	18.9	65.4%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (+\$1.9M/+7.1%)

The current period positive schedule variance resulted from the March 2018 implementation of BCR-030-18-017R0 – *Incorporate FY2018 Additional Scope Deductions – RL-0030*, which re-planned prior year activities associated with 200-ZP-1 monitoring well drilling from the performance measurement baseline (PMB). This BCR action resulted in a negative current period budgeted cost of work scheduled (BCWS) associated with the replanned activities and generated a corresponding positive schedule variance in the current period.

CM Cost Performance (+\$18.9M/+65.4%)

The current period positive cost variance is the result of the implementation of Baseline Change Request (BCR) BCR-030-18-013R0 – *Incorporate Additional Scope Changes – RL-0030*, in which budget was incorporated into the baseline in the current period for the following activities:

- Drilling and sampling of six 100-HR-3 well drilling campaigns.
- Drilling of four 200-ZP-1 injection wells and the construction of the well connections.
- Procurement, construction, and installation of 12 automated water level network units in the 100-HR-3 and 100-KR-4 OUs.
- Performance of FY2017 100-KR-4 and 100-HR-3 OU well realignment activities.
- Completion of KW P&T rebound study and preparation of rebound study report.
- Preparation of KR-4 soil flushing treatability test plan and initiation of associated design.
- Preparation of Decisional Draft B 100-NR-2 RI/FS report.
- Preparation of Ringold Upper Mud step/constant rate pumping test report and 100-HR-3 OU Phase 1 Tracer Study report.
- Preparation of Central Plateau tracer study work plan and initiation of tracer study.
- Preparation of 200-UP-1 and 200-ZP-1 Decisional Draft A RD/RAWP documents and updates to associated OU conceptual site model/groundwater modeling.
- Preparation of preliminary and final design of the UP-1 P&T extension as well as construction to connect the additional well to the 200W P&T facility.
- Evaluation of physical and geochemical parameters specifically related to the natural attenuation of existing or potential contaminants in the vadose zone for both the 200-UP-1 and 200-DV-1 OUs.
- Preparation of an additional draft of the 200-WA-1 RI/FS work plan.
- Performance of a data quality objectives workshop and preparation of sampling and analysis plan for characterization of shallow soils. Initiation of shallow soil characterization field activities.

Because the actual cost of the work performed was recorded in a prior period, and the performance was earned upon implementation of the subject BCR, a positive current period cost variance was generated.

Contract-to-Date (\$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	1,468.0	1,463.3	1,419.0	(4.7)	-0.3%	44.3	3.0%	1,562.9	1,503.5	84.5	59.4

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$4.7M/-0.3%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$44.3M/+3.0%)

The variance is within reporting thresholds.

Variance at Completion (+\$59.4M/+3.8%)

The variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

RL-0030 Soil and Groundwater Remediation	FY2018		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	121.9	114.4	7.4
Incremental Scope Pending Change Management	0.0	0.7	(0.7)
RL-0030 –Total	121.9	115.1	6.7

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

The FY2018 projected funding for project breakdown structure (PBS) RL-0030 increased from \$114.3 million to \$121.9 million in March following passage of the FY2018 Omnibus. The increased funding allows for potential additional work scope to be performed (this is not yet determined); therefore, there is no significant change in forecast.

Critical Path Schedule

Critical path analysis can be provided upon request.

MILESTONE STATUS

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

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
Milestones on Schedule					
M-024-58K	Initiate Discussions of Well Commitments	6/1/18		6/1/18	On schedule.
M-015-92A	Submit RFI/CMS & RI/FS Work Plan for 200-EA-1 OU to Ecology	7/31/18		7/19/18	On schedule.
M-024-69-T01	Conclude discussions of well commitments initiated under M-024-58	8/1/18		8/1/18	On schedule.
M-015-21A	Submit 200 BP-5 & 200 PO-1 OU FS Report and PP(s) to Ecology	3/31/19		1/5/19	On Schedule.
Milestones at Risk					
M-015-93C	Initiate Characterization Field Work for 200-SW-2 Operable Unit Landfills	9/30/18		TBD	At risk; project is not funded in FY2018.
M-016-193	Investigate SE Chromium Plume, Install Wells, Evaluate GW Monitoring Data & Install Monitoring Wells	9/30/18		6/30/19	At risk; three monitoring wells are impacted by their location in the PFP work control zone.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review of Decisional Draft 100-HR-3 RD/RAWP	11/23/2017 (A)	9/30/2018
Prepare and Transmit 216-A-29 Ditch Procedural Closure Letter to Ecology	2/8/2017 (A)	5/16/2018
RL Review of Draft Revision 0, 100-BC-5 Proposed Plan	3/5/2018 (A)	3/29/2018
Concurrent RL and CHRPC Review of Internal Draft 216-B-3 Pond Engineering Evaluation Report	3/29/2018	4/4/2018
Concurrent RL and CHRPC Review of Internal Draft 216-A-29 Ditch Engineering Evaluation Report	4/10/2018	4/16/2018
RL Transmit Revision 0, SST WMA U Engineering Evaluation Report to Ecology	4/12/2018	5/2/2018
RL Review Draft Annual Groundwater Report	4/12/2018	5/11/2018
Concurrent RL and CHPRC Review of Internal Draft IDF Engineering Evaluation Report	4/19/2018	5/2/2018

Description	CHPRC Delivery Date	Expected RL Due Date
216-A-36B Crib - RL Review Draft Closure Plan	4/20/2018	4/20/2018
216-A-36B Crib - Certify New Information & Submit to Ecology (Permittee)	4/23/2018	5/11/2018
RL Transmit Draft Revision 0, 100-BC-5 Proposed Plan to Regulator for Review	4/26/2018	5/2/2018
Concurrent RL and CHPRC Review of Internal Draft 216-A-37-1 Crib Engineering Evaluation Report	5/9/2018	5/15/2018
Concurrent RL and CHPRC Review of Internal Draft 216-A-36B Crib Engineering Evaluation Report	5/10/2018	5/16/2018
RL Transmit Revision 0, SST WMA T Engineering Evaluation Report to Ecology	5/10/2018	5/31/2018
RL Submit Revision 0, LLBG WMA-2 Trench 94 Engineering Evaluation Report to Ecology	5/11/2018	5/17/2018
RL Review Draft 100 Area P&T Report	5/12/2018	6/10/2018
Concurrent RL and CHPRC Review of Internal Draft SST WMA U Groundwater Monitoring Plan	5/15/2018	5/21/2018
Concurrent RL and CHPRC Review of Internal Draft 216-B-63 Trench Engineering Evaluation Report	5/25/2018	6/1/2018
RL Review Draft Central Plateau Tracer Test Sampling Analysis Plan	5/31/2018	6/29/2018
Concurrent RL and CHPRC Review of Draft LLBG WMA-2 Trench 94 Groundwater Monitoring Plan	6/4/2018	6/8/2018
RL Submit Draft IDF Engineering Evaluation Report to Ecology for Review	6/6/2018	6/6/2018
RL Transmit Revision 0, SST WMA TX-TY Engineering Evaluation Report to Ecology	6/8/2018	6/21/2018
Concurrent RL and CHPRC Review of Internal Draft SST WMA T Groundwater Monitoring Plan	6/11/2018	6/15/2018
RL Transmit Draft Revision 0, 100-BC-5 RI/FS Report to Regulators for Review	6/13/2018	6/15/2018
Concurrent RL and CHPRC Review of Internal Draft NRDWL/SWL Engineering Evaluation Report	6/14/2018	6/20/2018
Concurrent RL and CHPRC Review of Internal Draft SST WMA B-BX-BY Engineering Evaluation Report	6/19/2018	6/19/2018
RL Submit Draft SST WMA U Groundwater Monitoring Plan to Ecology for Review	6/21/2018	6/21/2018
RL Submit Draft 216-A-37-1 Crib Engineering Evaluation Report to Ecology for Review	6/22/2018	6/22/2018
RL Submit Draft 216-A-36B Crib Engineering Evaluation Report to Ecology for Review	6/25/2018	6/25/2018
RL Transmit Revision 0, SST WMA A-AX -Engineering Evaluation Report to Ecology	6/26/2018	7/10/2018

Section E

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



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation

March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The Plutonium Uranium Extraction Plant (PUREX) Tunnel 2 field investigation activities continued with collection of industrial hygiene (IH) and radiological data and the completion of chemical and mercury evaluation of tunnel inventory. Continued Ultrasonic Testing of Reduction and Oxidation (REDOX) Silo process piping in preparation for draining the risk mitigation campaign. Continued waste disposal from REDOX North Sample Gallery into Environmental Restoration Disposal Facility (ERDF) containers.

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	14	N/A
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0040 Accomplishments

Central Plateau Surveillance and Maintenance (CPS&M) Facilities and Waste Sites

- Repaired Fixed Contamination Area (FCA) around B Plant South side and U Plant.
- Nuclear Chemical Operators (NCOs) fixed postings at B Plant near ACT-001 and ACT-002.
- Supported MO414 teamsters in transporting Genie Lift from PUREX to B Plant.
- Completed B Plant Stack Sampling Call outs.
- Continued field testing new pipeline markers. These markers, also known as traffic delineators, will replace selected T-posts and are expected to reduce the severity of vehicle accidents.
- Completed Quarterly CX-70/71/72 treatment, storage and disposal (TSD) inspections.
- Completed asbestos-containing material / presumed asbestos-containing material (ACM/PACM) repair work by Tank 201 near tank farm trailers in 200E.
- Performed recovery of powered air purifying respirators (PAPRs) and Senior Supervisory Watch at REDOX.
- Continued working with biological controls for mitigation of potential biological contamination spread at various selected Waste Information Data System (WIDS) sites.
- Performed Oxygen Monitor calibrations.
- Performed Staplex Air Sampler calibrations.
- Performed Air Sample Flow meter calibrations.



- Millwright performed troubleshoot and repair of vehicle/pedestrian gates and wind sock replacement at PUREX.
- Performed annual 291-S temp, bearing, and sand filter DP gauge calibration.
- CPS&M Workers performed PUREX Annual Surveillance Tour Paths 3 and 6.

PUREX Tunnel 2 Investigation

- Removed and reinstalled 30” concrete plugs from tunnel risers 4 and 5 in support of the PUREX Tunnel investigation.
- Collected industrial hygiene (IH) and radiological data along with camera footage to assist with future planning efforts.
- Drafted Statement of Work (SOW) and site plan in preparation for site improvement contract.
- Submitted Site Evaluation Application to Mission Support Alliance, LLC (MSA).
- Continued to support environmental permit process.
- Completed draft of the Project Execution Plan (PEP) and started internal review.
- Completed chemical and mercury evaluation of tunnel inventory.
- Completed development of draft Conceptual Design Report (CDR) (document in final approval).

PUREX Stack Sampling System Replacement

- Design contractor incorporated redline changes and issued as-built drawings for CHPRC review.
- Started Design Authority review of as-built drawings.
- Started development of a Facility Modification Package (FMP) to release the as-built drawing set once Design Authority review has been completed.

B Plant Pre-filter and High Efficiency Particulate Air (HEPA) Filter Change-out

- Re-packaged previously removed pre-filters into ERDF roll-on/roll-off (RO/RO) containers to address elevated dose rates from the palletized pre-filters.
- Developing work instructions for work package SM-18-00713 “Replace B-Plant ACT Pre-Filters.” The target approval date is April 2018; awaiting post-job review of previous evolution.

REDOX Canyon Risk Mitigation

- Revised and approved Sample Analysis Forms to incorporate liquid discovered in second floor REDOX tank and additional samples for fifth, seventh, and eighth floors.
- Supported REDOX South Blower Room 3 ceiling/roof inspection.
- Continued ultrasonic testing of REDOX silo process piping in preparation for the draining risk mitigation campaign.
- Continued waste disposal from REDOX North Sample Gallery into ERDF containers.
- Continue survey, decontamination, and exterior inspection of sampling box locations in the REDOX North Sample Gallery.
- Reviewed North Sample Gallery Sample Box Access Point pictures with planning team and:
 - o Identified those boxes that can be interrogated without using intrusive techniques.
 - o Identified the access locations and tools required for intrusive access to the remaining east-end tanks.
- Reviewed North Sample Gallery Sample Box Access containment and drill equipment with craft to verify acceptability prior to procurement.
- Created doorway access through REDOX North Sample Gallery Containment Wall and made entry into the west end to verify radiological conditions.
- Commenced identification of possible portable Criticality Alarm System availability across the DOE complex in preparation for future risk mitigation of high hold-up equipment.
- Received and incorporated radiological control comments needed for reactivation of the North Sample Gallery west end egress doors.

- Received metal storage boxes intended to be deployed throughout the REDOX facility for fire hazard mitigation.
- Ordered Climate Controlled Connex Boxes for deployment at REDOX for use in potential mitigation of radiological release survey impacts, as well as replacement of planned connex availability from PFP.
- Revised many REDOX-specific work packages to include additional methods for mitigating RADON impacts exacerbated by additional radiological survey requirements.
- Ordered electrical equipment for temporary lighting and power.

MO-409 Relocation

- Completed pest spraying.
- Verified building furniture configuration with occupants and provided discrete Hanford Local Area Network (HLAN) and phone requirements.
- Scheduled HVAC equipment repairs discovered during inspections.
- Reconfigured furniture layouts in preparation for HLAN and phone installations
- Completed south exit stair inspections.

MAJOR ISSUES

No major issues to report at this time.

RISK MANAGEMENT STATUS

Unassigned Risk
Risk Passed
New Risk
Change

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

- Increased Confidence
- No Change
- Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments								
		Month	Trend									
RL-0040/WBS-040												
Explanation of major changes to the project monthly spotlight chart: Risk D4-064, <i>Aging Building Systems/Components</i> was removed from the high-risk threat value section of the spotlight report in March.												
Realized Risks (Risks that are currently impacting project cost/schedule)												
D4-042: Unexpected Site Conditions - D4	Unexpected site conditions are encountered during D4 activities resulting in recovery actions, causing unplanned, in-scope work, and schedule delays to the project. Risk Handling Strategy: Control Probability: Likely (75% to 90%) Worst Case Impacts: \$0K, 300 day			Risk Event: The B Plant ventilation system was shut down due to elevated differential pressure readings in the ACT-002 filter bank. Upon initial investigation, it was determined that the pre-filters were saturated with water and there was standing water within the ACT-001 filter bank. The result of this unexpected occurrence is that the pre-filters and HEPA filters in the ACT-002 bank, and presumably the pre-filters and the HEPA filters in the ACT-001 filter bank, need to be replaced prior to startup of the B Plant ventilation system. Unexpected radiological contamination identified within/outside the containment tent used to initiate the pre-filter change out resulted in delays to the pre-filter replacement. After initial filter change out was completed in October 2017, dose rates on the pre-filters quickly became elevated and were replaced in December 2017. Dose rates on the replaced pre-filters are rising again but at a much slower rate, but will likely require another change in the future.								
				<table border="1"> <thead> <tr> <th>Risk recovery action(s)</th> <th>Risk Date</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Work package change notice (WCNs) are being prepared to perform additional investigation of the water intrusion, remove the pre-filters and HEPA filters, and restart the B Plant ventilation system.</td> <td>August 2016</td> <td>Complete</td> <td>100%</td> </tr> </tbody> </table>	Risk recovery action(s)	Risk Date	FC Date	%	Work package change notice (WCNs) are being prepared to perform additional investigation of the water intrusion, remove the pre-filters and HEPA filters, and restart the B Plant ventilation system.	August 2016	Complete	100%
Risk recovery action(s)	Risk Date	FC Date	%									
Work package change notice (WCNs) are being prepared to perform additional investigation of the water intrusion, remove the pre-filters and HEPA filters, and restart the B Plant ventilation system.	August 2016	Complete	100%									

Risk Title	Unmitigated Risk Impacts	Assessment		Comments																												
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RL-0040/WBS-040																																
				<table border="1"> <tr> <td>Recovery actions were performed in April and May 2017 to fix contamination associated with ACT-002 in and around the containment tent.</td> <td></td> <td>Complete</td> <td>100%</td> </tr> <tr> <td>Requests to expedite the HEPA filter order have been rejected by the manufacturer due to issues with their equipment at the production facility.</td> <td></td> <td>Complete</td> <td>100%</td> </tr> <tr> <td>Execute pre-filter and HEPA filter change out.</td> <td></td> <td>Complete</td> <td>100%</td> </tr> <tr> <td>Repair tents and perform second pre-filter change out in ACT-001 and ACT-002 filter banks.</td> <td>November 2017</td> <td>Complete</td> <td>100%</td> </tr> <tr> <td>Perform dose rate monitoring of pre-filters in ACT-001 and ACT-002 filter banks.</td> <td>January 2018 – Current</td> <td>Ongoing</td> <td>N/A</td> </tr> <tr> <td>Ordered additional materials (e.g., tents, bags) to support additional pre-filter replacement, as necessary.</td> <td>February 2018</td> <td>4/5/18</td> <td>10%</td> </tr> <tr> <td>Develop revision to pre-filter change out work package to improve ALARA and general efficiency.</td> <td>February 2018</td> <td>4/25/18</td> <td>50%</td> </tr> </table> <p>Recovery Action Assessment: No major changes in March. The pre-filters and HEPA filters were replaced in both ACT filter banks, and the ventilation system was restarted. Site cleanup activities were initiated and within a day of fan operations, dose rates on the pre-filters became elevated and needed to be monitored on an hourly basis. The pre-filters were changed a second time in a single calendar year to address the elevated dose rates. The containment tents were removed in January 2018 and the site was restored to its original conditions. Daily (M-Th) dose rate surveys are being performed on the pre-filter banks to track the increasing dose rates. New pre-filters and associated materials have been ordered to support an additional pre-filter change out in one or both ACT filter banks once the dose rates exceed threshold limits and the new pre-filter removal work package has been approved. Work is currently planned to start in May 2018.</p>	Recovery actions were performed in April and May 2017 to fix contamination associated with ACT-002 in and around the containment tent.		Complete	100%	Requests to expedite the HEPA filter order have been rejected by the manufacturer due to issues with their equipment at the production facility.		Complete	100%	Execute pre-filter and HEPA filter change out.		Complete	100%	Repair tents and perform second pre-filter change out in ACT-001 and ACT-002 filter banks.	November 2017	Complete	100%	Perform dose rate monitoring of pre-filters in ACT-001 and ACT-002 filter banks.	January 2018 – Current	Ongoing	N/A	Ordered additional materials (e.g., tents, bags) to support additional pre-filter replacement, as necessary.	February 2018	4/5/18	10%	Develop revision to pre-filter change out work package to improve ALARA and general efficiency.	February 2018	4/25/18	50%
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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 risk threat value risks in March .																																
Unassigned Risks (Pending ownership of identified risks/opportunities)																																
No unassigned risks identified in March .																																

PROJECT BASELINE PERFORMANCE

Current Month

(\$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	3.5	2.3	3.9	(1.2)	-33.2%	(1.6)	-70.2%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance: (-\$1.2M/-33.2%)

The current month unfavorable schedule variance is due to impacts from other site priorities affecting the project’s ability to maintain a full contingent of resources planned for REDOX Risk Mitigation field entries; which reduced the amount of sample gallery and silo scope completed during the fiscal month of March. Additionally, the Balance of West IA Non-SQUID Specific Structures project yielded an unfavorable schedule variance due to unexpected Ecology requirements needed for the removal of the steam lines.

CM Cost Performance: (-\$1.6M/-70.2%)

The current month unfavorable cost variance is due to impacts from newly implemented radiological survey requirements, which caused a need for additional dedicated personnel to release equipment from radiological zones from REDOX. Additionally, PUREX Stack Sampling System Replacement caused an unfavorable \$156K variance due to a change order received from Apollo for unforeseen weather and work planning delays and additional costs incurred during construction.

Contract-To-Date

(\$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	473.6	470.2	445.0	(3.4)	-0.7%	25.2	5.4%	504.6	484.8	39.8	19.8

Numbers are rounded to the nearest \$0.1 million

Cost to date (CTD) Schedule Performance: (-\$3.4M/-0.7%)

The CTD schedule variance is within reporting thresholds.

CTD Cost Performance: (+\$25.2M/+5.4%)

The favorable cost variance is due to prior year activity, including:

- The majority of the CTD cost variance is from legacy work dating back to the American Recovery and Reinvestment Act (ARRA) time period.
- The remaining CTD favorable cost variance base-funded work is due to efficiencies for surveillance and maintenance and D4 activities as a result of using existing site equipment and fewer resources, and program management using fewer resources.

Variance at Completion (+\$19.8M/+3.9%)

The variance at completion is within reporting thresholds.



Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 040/RL-0040 Nuclear Facility D&D	FY2018		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	69.0	41.3	27.7
Incremental Scope Pending Change Management	0.0	18.3	(18.3)
RL-0040 – Total	69.0	59.6	9.3

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

Fiscal year (FY) 2018 projected funding for project breakdown structure (PBS) RL-0040 increased to \$69.0 million. It is anticipated the majority of the variance will be applied to the PUREX Tunnel 2 scope.

Critical Path Schedule

Critical path analysis can be provided upon request.

MILESTONE STATUS

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones represent significant events in project execution. RL Enforceable Agreement (EA) milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The performance measurement baseline (PMB) annual update, implemented in September 2013, and subsequently approved baseline change requests (BCR) define CHPRC planning with respect to Tri-Party Agreement milestones. The following table is a one-year look ahead of commitments and Tri-Party Agreement enforceable milestones and non-enforceable target due dates.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-250C	Submit to Ecology a 3-Year Rolling Prioritized Schedule to Implement Waste Site Removal Actions	3/31/2018		3/29/2018	On schedule
M-016-255	Complete Removal of All Waste Sites for FY18 as Updated/Modified in M-16-17-01	9/30/2018		9/30/2019	In negotiation with RL to adjust schedule to FY2019

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
202A (PUREX) Draft B EE/CA to Ecology for review	12/11/17 (A)	3/26/18
221B (B Plant) EE/CA to RL for Review	1/11/18 (A)	4/3/18



Section F

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



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation

March 2018
CHPRC-2018-06, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

The 100K Closure Project continued remediation of Waste Site 116-KE-2; completed backfill of four Waste Sites; completed confirmatory testing of the sand filter media removal system conceptual design; and received garnet filter media removal system (GFMRS) process components on site. The 300-296 Remote Soil Excavation Project continued to make progress with equipment procurements and fabrication, equipment installation at the mockup, and interference removal activities within the 324 Building. Backfill of the 618-10 Burial Ground completed on March 6, 2018.

EMS Objectives and Target Status (Draft)

Objective #	Objective	Target	Due Date	Status
18-ERDF-OB1-T1	Conserve resources/waste minimization	Procure and use metal liner substitutes for the macro-encapsulation treatment of waste instead of using functional roll-on/roll-off (RO/RO) waste containers as sacrificial containers.	9/30/18	40%
18-ERDF-OB2-T1	Improve compliance/pollution prevention	Monitor and evaluate universal waste (UW) and recycling accumulation areas for compliance with CHPRC procedures.	9/30/18	40%
18-EMS-KBOPR-OB1-T1	Improve compliance/pollution and spill prevention	Monitor and evaluate UW and recycling accumulation areas for compliance with CHPRC procedures. Survey spill prevention measures.	9/30/18	46%
18-EMS-324BDP-OB1-T1	Increase EMS awareness	Promote and increase 324 Building Disposition Project (324 BDP) personnel EMS awareness via various means throughout fiscal year (FY) 2018.	9/30/18	40%
18-EMS-324BDP-OB2-T1	Improve compliance	Review and update as needed Resource Conservation and Recovery Act of 1976 (RCRA) inspection implementing procedures, inspection forms, checklists, and work packages (WP) to capture operating record information and assign appropriate metadata.	9/30/18	85%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Months	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	3	27	<p>3/1/18 – Employee fell while descending stairs and sprained right ankle. The individual was transported to an offsite medical facility for evaluation and released with no restrictions. (24753)</p> <p>3/7/18 – While assembling scaffolding, an employee slipped and fell on a wet surface due to a water spill and strained their right shoulder. The employee was taken to HPMC for evaluation and returned to work with restrictions. (24754)</p> <p>3/20/18 – While at a standard HPMC appointment, employee disclosed elbow pain. It was determined that the elbow pain was likely the result of cumulative years of work. Employee was examined at the 200W HPMC clinic and released to work without restriction. (24760)</p>
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0041 Accomplishments

- 100K Closure Project:
 - o 100K Soil Remediation:
 - Completed backfill of Waste Sites 100-K-103, 100-K-79:9, 1607-K1, and 1607-K5 in March 2018. This completes all backfill activities planned in FY2018.
 - Continued excavation of radioactive waste crib, Waste Site 116-KE-2 (approximately 45 percent complete). Average production rate was 28 Environmental Restoration Disposal Facility (ERDF) cans per day.
 - Continued Radcon work planning for the deep excavation currently planned to commence in early May.
 - Continued preparation of Waste Sites 100-K-107 and 108 regulatory closure document (approximately 80 percent complete).
 - Progressing closure of Waste Site 100-K-42 with the U.S. Environmental Protection Agency (EPA).
 - Developed a plan for additional excavation of Waste Site 100-K-99 to remove radioactively contaminated soil discovered during in-process sampling.
 - o K West Basin Deactivation:
 - GFMRS:

- Testing personnel at Maintenance and Storage Facility (MASF) continued setting up process system hardware for upcoming integrated testing. The goal is to complete setup by the end of April. The test engineer has begun development of an integrated test procedure.
- American Boiler Works (ABW) continues with fabrication of Sludge Transport & Storage Container (STSC) Units 425, 426, 427, and 428 (approximately 80 percent complete). ABW should complete fabrication and start the process of Helium leak testing, hydrostatic testing, and free iron testing the first week in April.
- Procurement of long lead STSC instrumentation is underway at Hi Line Engineering. Contract award is expected in early April.
- Garnet Filter Number 3 Sluice Outlet Valve V-305 Risk Mitigation:
 - o On-hold until the first STSC has been shipped to T Plant.
- Sand Filter Media Removal System (SFMRs):
 - All testing is complete. The lead engineer will begin preparing a test report in May.
- K West Basin Below-water Debris Characterization:
 - Presented a breakdown of various long range planning (scenarios to the RL Federal Project Director. Through discussion in this forum, the FY2019 work scope for K West Basin characterization and deactivation will be oriented to pose as little impact as possible to the sludge removal mission, enable basin dewatering on a date earlier than currently planned, and provide confidence in early completion of Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) M-016-181, *Complete Deactivation, Demolition & Removal of 105-KW FSB*.
 - In support of the above objectives, high dose debris may be segregated and accumulated in the North Loadout Pit (NLOP); and stabilized with grout. Characterization and disposition of the grouted material will be managed separate from the rest of the basin and pits, in concert with demolition of the remaining K West Basin structure.
- o K East Reactor Interim Safe Storage (ISS):
 - Began developing a whitepaper on areas of known asbestos within 105 KE Reactor, which proposes that some asbestos should remain in the building during the ISS period based on regulatory requirements, past ISS practices, safety considerations, and removal constraints.
 - Performed a walk down inside the building to collect additional information and photographs of known asbestos locations to support development of the asbestos whitepaper.
 - Identified fall hazard concerns associated with the 52-foot elevation inside the 105KE reactor building due to previously damaged wall panels. Started planning corrective actions to address the issue.
 - Continued preparation of draft revision to DOE-RL-2005/26, *RAWP for 100K Reactor and Ancillary Facilities* document.
 - Used topographical survey data to quantify the amount of soil placed on the north and west sides of the 105 KE Reactor building since the 2012 geotechnical report was prepared (approximately 30,000 m³). The information will benefit the geotechnical report update and the project cost estimate and schedule for earthwork associated with the Safe Storage Enclosure (SSE) construction.
 - Held a kickoff meeting and site walk down for preparation of the updated geotechnical report for soils surrounding the KE Reactor Building. Geotechnical contractor completed a draft letter report documenting the initial findings. The findings will form the basis for the updates made to the 105KE Reactor geotechnical engineering study.
 - Started preparing a revision to DD-49286, 105 KE ISS Project Functional Design Criteria to reflect limited changes to the SSE design, quality assurance requirements, and current soil conditions.

- Continued evaluation of the codes and standards included in the 2012 version of DD-49286, *105 KE ISS Project Functional Design Criteria* against current codes, standards, and CHRPC procedures.
 - Met with CHRPC Estimating & Program Support and reviewed objectives for developing a detailed estimate for construction of the 105KE Safe Storage Enclosure (SSE).
- o Ancillary Facility Deactivation & Demolition (D&D):
 - Continued asbestos abatement in 165K East Power Control Building.
 - Finalized the engineering evaluation of 166KE Fuel Storage Basin (FSB) for use in D&D planning and Waste Site 130-KE-2 soil remediation.
 - Continued FSB 166KE D&D and Waste Site 130-KE-2 soil remediation planning.
 - Placed order with vendor to obtain switches and charging cords for roof crawler to load test 166KE roof.
- o Remaining Closure Operations:
 - Continued collecting shrub seeds from various locations around the Hanford Site to support FY2019 re-vegetation efforts (includes 618-10).
- 618-10 Burial Ground:
 - o Completed backfill of the 618-10 Burial Ground on March 6, 2018.
 - o Continued to work on environmental closeout documentation.
 - o Continued infrastructure demobilization activities.
 - o Project Technical Support (PTS):
 - Continued demolition of trailers at the 618-10 Burial Ground site.
 - Performed Lockout/Tagout (LOTO) work site assessment.
- 324 Building Minimum Safe:
 - o Issued new 300 Area Waste Container Operations procedure (300A-PRO-OP-54222) to cover movement of materials between 324 and an approved Waste Storage Area.
 - o Finalized the transition of 32 procedures from bluesheeted Washington Closure Hanford, LLC, (WCH) procedures to the CHRPC formatting.
 - o Removed and replaced two pressure transmitters in preparation for rebuilding the older transmitters.
 - o Initiated troubleshoot of failed stack flow transmitter. Able to receive data points allowing for annual stack flow calculation reporting.
 - o Performed 11 monthly, quarterly, or annual preventative maintenance packages.
- 300-296 Soil Remediation Project:
 - o The Annual Safety Basis Update RL review comments were received and resolutions provided.
 - o Completed the direct shipment of a waste container to ERDF.
 - o Received the balance of non-rad hardened auxiliary cameras to support hot cell cleanout within the 324 Building.
 - o The Request for Proposal (RFP) for the 324 Waste Bins, Weldment, Lifting Bail and Below the Hook Lifting Device (BTHLD) was issued.
 - o The Floor Saw System, HVAC Exhaust Dams and Snorkel System, Concrete Dump Tools, and Cementitious Grout Analysis contracts were awarded and design/fabrication has begun.
 - o Design of the Rad Assay and Crane Mounted Radiation Detectors contract continues with fabrication to start early April.
 - o Continued design and fabrication of the 324 A, C, D-Cell Dams.
 - o Continued fabrication of the Remote Excavator Arm (REA) system, Mockup Water Delivery System.
 - o The REA through supports and dummy posts were delivered to the mockup for installation.
 - o Completed fabrication of the Mockup Transfer Mechanism and Mockup Grout Delivery System and the systems were delivered to the Mockup.

- o Completed fabrication of the Mockup Cameras & Lighting System and delivery is anticipated the first week of April to the Mockup.
- o Progressed on work package development for equipment installation at the Mockup.
- o Continued Brokk limits of use evaluation (the Brokk is a previously procured piece of equipment that is being evaluated for use as an alternative remotely operated excavation tool).
- o Continued cell sealing of A-Cell and interference removal activities inside of 324 Building.
- o Contractor demonstration of core drilling activities progressed at the subcontractor's shop.
- o Geotechnical drillers completed all borehole activities and testing of soil samples were initiated.
- o PTS Support:
 - Emergency Preparedness (EP)
 - Conducted 324-EPDF-022818 Evaluated Limited Scope Incident Command Post (ICP) Drill.
 - Conducted 324 monthly EP/Facility Operations meeting.
 - Conducted 324-EPDE-032818 Full Up Evaluated Drill.
- Environmental Restoration Disposal Facility (ERDF):
 - o Received 17,874 tons in the fiscal month of March.
 - o Received 83,190 tons fiscal year-to-date (FYTD).
 - o Began preparing to receive waste from PFP.
 - o PTS performed LOTO work site assessment.

MAJOR ISSUES

Issue

In February 2018, a higher than expected ratio of alpha to beta/gamma contamination was detected in a localized area in the Radiochemical Engineering Cell (REC) airlock after removing waste from C-Cell. Discovery of an elevated latent contamination level upon removal of the waste was unexpected and beyond the reasonable control of CHPRC. This condition is realization of risk RCC-300-296-01, Latent Conditions Impact Facility Modification.

Corrective Action

Determine cause for high alpha reading and update appropriate procedures as necessary. Perform a follow-on review to identify previously unknown legacy activities conducted in the Radiochemical Engineering Cell (REC) cells to determine contributing factors to elevated alpha levels.

Status

Timely Orders have been issued and a Notification of Differing Site Conditions Letter is planned for transmittal to DOE in April.

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 spotlight chart: <i>Added Realized Risk, RCC-300-296-01 – Latent Conditions Impact Facility Modification.</i>													
Realized Risks (Risks that are currently impacting project cost/schedule)													
RCC-300-296-01: Latent Conditions Impact Facility Modification	A higher than expected ratio of alpha to beta/ gamma contamination was detected in a localized area in the REC airlock after removing waste from C Cell. Risk Handling Strategy: Control Probability: Likely (75% to 90%) Worst Case Impacts: 72 days	●		<p>Risk Event: A higher than expected ratio of alpha to beta/gamma contamination was detected in a localized area in the REC airlock after removing waste from C Cell. Discovery of an elevated latent contamination level upon removal of the waste was unexpected and beyond the reasonable control of CHPRC.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Recovery action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Recovery actions are in development</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> </tbody> </table> <p>Recovery Assessment: A follow-on review is being performed to identify previously unknown legacy activities conducted within the REC cells. This information will provide results that contribute to the elevated alpha levels detected. The impacts of the event are being determined, along with corresponding actions necessary to progress with cell cleanout efforts.</p>	Recovery action(s)	FC Date	%	Recovery actions are in development	-	-			
Recovery action(s)	FC Date	%											
Recovery actions are in development	-	-											
RCC-300-296-13: 300-296 Design review issues arise for the structural modification to the 324 Building.	Demolition of existing structures and installation of structural modifications to the 324 Building are necessary to provide structural support to B-Cell during excavation of the radiological contaminated soil. There is limited access and work space in the 324 Building, which could lead to design review issues impacting the installation of the structural modifications. The impacts may result in in-scope unplanned work causing cost and schedule impacts to the project. Risk Handling Strategy: Control Probability: Very Likely (>90%) Worst Case Impacts: \$640K, 160 days	●		<p>Risk Event: Upon review of the 30 percent design submittal, it was determined that the cell wall loading/limitations were inadequate and required additional clarification.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Recovery action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Contractor Prepare and Submit Structure Modification Design - 30%-60% (VE2810)</td> <td style="text-align: center;">4/25/2018</td> <td style="text-align: center;">95</td> </tr> <tr> <td style="text-align: center;">Contractor Prepare and Submit Structure Modification Design – Final (VE2810A)</td> <td style="text-align: center;">8/22/2018</td> <td style="text-align: center;">-</td> </tr> </tbody> </table> <p>Recovery Assessment: No major changes in March. To reduce the potential impacts associated with conflicting drawing information and performing structural modifications, applicable design efforts were updated to encompass further analysis of cell footings, load limitations, and field demonstrations. These efforts will ensure modifications are successfully performed and completed. The additional efforts have been incorporated into the FES, along with the estimate to complete (ETC), to reflect impacts of risk being realized.</p>	Recovery action(s)	FC Date	%	Contractor Prepare and Submit Structure Modification Design - 30%-60% (VE2810)	4/25/2018	95	Contractor Prepare and Submit Structure Modification Design – Final (VE2810A)	8/22/2018	-
Recovery action(s)	FC Date	%											
Contractor Prepare and Submit Structure Modification Design - 30%-60% (VE2810)	4/25/2018	95											
Contractor Prepare and Submit Structure Modification Design – Final (VE2810A)	8/22/2018	-											
RCC-300-296-03: Mockup Testing and Qualification of Remote Equipment / Process Identifies Major Modification Requirements.	Issues such as equipment interferences, differing as-found conditions than planned, equipment reliability, etc., arise prior to/during mockup testing, leading to re-design of equipment and resulting in cost and schedule delays. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$773K, 80 Days	●		<p>Risk Event: During recent vendor tests and/or Factory Acceptance Testing (FAT), issues and conditions were identified with mockup equipment, resulting in additional redesign, materials, and/or fabrication efforts greater than planned. Remote equipment procurements that have resulted in cost and/or schedule impacts include the REA system components (through support and dummy post assemblies), and transfer mechanism (electrical components).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Recovery action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Perform Construction Acceptance Test (CAT) for Mockup Equipment Install - Cameras and Lighting; REA system with HPU; Transfer Mechanism (VE0640)</td> <td style="text-align: center;">6/5/2018</td> <td style="text-align: center;">-</td> </tr> </tbody> </table> <p>Recovery Assessment: No major changes in March. Equipment procurements are continuously monitored and tracked to account for additional redesign efforts, materials, and fabrication efforts resulting in cost and/or schedule impacts. This risk will be realized through satisfactory completion of CAT. Impacts have been incorporated into the project schedule, along with the ETC, to reflect impacts of risk being realized.</p>	Recovery action(s)	FC Date	%	Perform Construction Acceptance Test (CAT) for Mockup Equipment Install - Cameras and Lighting; REA system with HPU; Transfer Mechanism (VE0640)	6/5/2018	-			
Recovery action(s)	FC Date	%											
Perform Construction Acceptance Test (CAT) for Mockup Equipment Install - Cameras and Lighting; REA system with HPU; Transfer Mechanism (VE0640)	6/5/2018	-											

Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
RCC-300-296-02: 300-296 Loss of ventilation in the 324 hot cells or Zone II	Zone I or II ventilation system failure causes loss of ventilation and shutdown of soil remediation activities, resulting in in-scope unplanned work, and subsequently resulting in schedule impacts. Risk Handling Strategy: Control Probability: Medium (26% to 74 %) Worst Case Impacts: \$0K, 48 days			Risk Trigger Metric: Ventilation fan or other system component failure may prevent airlock entry, which is needed for cleanout of REC cells, penetration sealing, and installation of equipment.						
				<table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>324 Min. Safe Spare Parts and Routine Preventive Maintenances (PMs) (R03095)</td> <td>9/30/2018</td> <td>47.4</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	324 Min. Safe Spare Parts and Routine Preventive Maintenances (PMs) (R03095)	9/30/2018	47.4
Mitigation action(s)	FC Date	%								
324 Min. Safe Spare Parts and Routine Preventive Maintenances (PMs) (R03095)	9/30/2018	47.4								
RCC-300-296-07: 300-296 Failure of a REC Cranes (B-Cell, A-Cell, A-D & Airlock, 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: \$832.7K, 144 days			Risk Trigger Metric: REC crane failure occurs during operations. Mitigation Assessment: No major changes in March . The project experienced loss of the CHA crane in November 2017. Final repairs and load testing for the 30-ton CHA crane were completed and the crane was returned to service in January 2018. The previously completed white paper will assist in identifying and ultimately lead to procurement of additional spare/replacement parts, along with deferred maintenance to be performed. In addition, the project is initiating an evaluation for recommendations with manufacturers to assist with determining Preventive Maintenance and available spare parts in the event of necessary repairs. These recovery efforts are expected to reduce the potential for impacts.						
RCC-300-296-08: 300-296 Failure of a cell shield door	Failure of shield door(s) or crane shield door(s) shuts down cleanout of REC cells/airlock, penetration sealing in airlock, and equipment installation efforts. It may not be possible to repair a shield door due to radiation dose rate and location. The door failure results in in-scope unplanned work and subsequently causes cost and schedule impacts to the project. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$460K, 48 days			Risk Trigger Metric: During operation of cleanout activities, a shield door becomes inoperable and will not open or close. Due to dose rates, it may not be possible to repair a shield door. <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Perform assessment (PRC-SRP-00043) on shield doors</td> <td>-</td> <td>100</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Perform assessment (PRC-SRP-00043) on shield doors	-	100
Mitigation action(s)	FC Date	%								
Perform assessment (PRC-SRP-00043) on shield doors	-	100								
RCC-300-296-21: 300-296 Unable to Remove the Floor Plug Between D-Cell and C-Cell	Personnel are unable to lift the D Cell floor plug with the seal breaker/lifting device and remote operated impact device. The impact of this risk will result in an increased number of soil bins needed to be loaded into waste boxes for disposal at ERDF. Risk Handling Strategy: Control Probability: Low (10% to 25%) Worst Case Impacts: \$462K, 56 days			Risk Trigger Metric: Personnel are unable to lift the D Cell floor plug with the seal breaker/lifting device and remote operated impact device. <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Fab/Install/Concept Test ROID SB/LD at MASF (VE1010)</td> <td>-</td> <td>100</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Fab/Install/Concept Test ROID SB/LD at MASF (VE1010)	-	100
Mitigation action(s)	FC Date	%								
Fab/Install/Concept Test ROID SB/LD at MASF (VE1010)	-	100								
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
Lifecycle Risk Triggers (Risk could be realized at any point of the project)										
Unassigned Risks (Pending ownership of identified risks/opportunities)										
RCC-300-296-04DOE: 300-296 Seismic Event (Force Majeure)	A Force Majeure incident, such as seismic event, results in the loss of structural integrity; causing cost and schedule impacts to the project delivery. CHPRC Comment: CHPRC cannot manage the geological seismic movement that may impact the structural integrity of a building. Therefore, this risk is proposed to be transferred to DOE. DOE has “informally” accepted this risk as a transfer risk. A formal letter of acceptance (CHPRC-1705651) was sent to RL on December 12, 2017. Once this risk has been formally accepted, via acknowledgement from the RL contracting officer, it will be removed from the stoplight chart.									
RCC-300-296-23DOE: 300-296 Large Brush Fire (Force Majeure)	A brush fire ignited on the Hanford Site near the proximity of the 300-296 Waste Site, resulting in cost and schedule delays. CHPRC Comment: This risk was identified as “Force Majeure” and is beyond the capabilities of CHPRC to manage. Therefore, this risk was proposed to be transferred to DOE. DOE has “informally” accepted this risk as a transfer risk. A formal letter of acceptance (CHPRC-1705651) was sent to RL on December 12, 2017. Once this risk has been formally accepted, via acknowledgement from the RL contracting officer, it will be removed from the stoplight chart.									
RCC-300-296-27: 300-296 Requirement	Due to complex-wide or facility specific changes in requirements outside of CHPRC’s ability to manage (e.g. technical documents, procedures, training), project delivery will be impacted in terms of cost and schedule.									

Changes Result in Additional Work/Entry Prerequisite Training	CHPRC Comment: Changes to DOE orders, federal or state regulations, waste acceptance criteria established by another site contractor, or another DOE site could impact the baseline scope/schedule/cost. Although a contract change is required to incorporate changes to DOE orders, no contract change is required for federal or state regulations or for waste acceptance criteria changes. The potential criteria changes are outside of CHPRC's ability to manage. Therefore, this risk was proposed to be transferred to DOE. DOE has "informally" accepted this risk as a transfer risk. A formal letter of acceptance (CHPRC-1705651) was sent to RL on December 12, 2017. Once this risk has been formally accepted, via acknowledgement from the RL contracting officer, it will be removed from the stoplight chart.
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PROJECT BASELINE PERFORMANCE

Current Month

(\$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	18.6	11.9	14.5	(6.7)	-36.0%	(2.6)	-21.8%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (-\$6.7M/-36.0%)

The current month unfavorable schedule variance is partially caused by the 300-296 project, which experienced delays in procurement/fabrication of the 324 equipment resulting from design changes and fabrication difficulties, and delays in 324 interference removal, penetration sealing, and hot cell cleanout activities due to a high alpha reading stop work in the airlock.

CM Cost Performance (-\$2.6M/-21.8%)

The current month unfavorable cost variance is partially caused by the 300-296 project experiencing higher than planned costs associated with procurement/fabrication of mockup and 324 equipment resulting from design changes and fabrication difficulties; design changes associated with the facility and structural modifications contractor; and inefficiencies associated with the inability to perform work in the airlock due to the high alpha reading stop work. The negative cost variance is partially offset by the use of existing crews to perform backfill at the 618-10 Burial Ground rather than hire a separate subcontractor as well as resource sharing and staff attrition at the 618-10 Burial Ground. The negative cost variance is also offset by lower staffing levels than planned at ERDF and a credit received for transporting and disposing other Hanford contractor (OHC) waste.

Contract-to-Date (\$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	554.3	548.4	490.5	(5.9)	-1.1%	58.0	10.6%	686.2	599.0	108.5	87.2

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (-\$5.9M/-1.1%)

The schedule variance is within reporting thresholds.

CTD Cost Performance (+\$58.0M/+10.6%)

The favorable cost variance is primarily due to completing Confirmatory Sampling - No Action (CSNA) waste sites early and under cost. In addition, less demolition was required for the K East Sedimentation Basin and fewer resources are supporting the level of effort (LOE) program management scope. Some resources have been diverted to other priority work scope and some resource sharing has occurred. The favorable cost variance was partially offset by the cost overruns in prior years for the utilities project. The 618-10 Burial Ground Complex also realized favorable cost variances with shared resources, lower drum processing costs, and excavation and backfill efficiencies at the 316-4 Waste Site and the 618-10 Burial Ground. These favorable variances are slightly offset by a negative CTD variance in the 300-296 project primarily due to difficulties in execution of airlock cleanout, higher-than-planned engineering costs resulting from design changes associated with the mockup and 324 structural design, and with the design and fabrication of essential procurements. In addition, inefficiencies associated with the inability to perform work in the airlock due to the high alpha reading stop work contributed to the variance.

Variance at Completion (+\$87.2M/+12.7%)

The 100K Closure positive VAC is primarily due to labor; fewer resources have been supporting the LOE program management scope. Some resources have been diverted to other priority work scope, and some resource sharing has occurred. The remaining VAC is primarily due to the implementation of efficiencies as well as staffing ramp downs at the 618-10 Burial Ground. Offsetting the positive variance, the 300-296 project experienced increased costs associated with airlock cleanout, engineering and design activities, continued staff ramp up, and equipment procurement activities.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	FY2018		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	143.6	140.9	2.8
Incremental Scope Pending Change Management	0.0	2.7	(2.7)
RL-0041 - Total	143.6	143.5	0.1

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis:

FY2018 projected funding for project breakdown structure (PBS) RL-0041 is \$143.6 million. The delta between the spending forecast and projected funding levels for FY2018 is partially due to incorporating moving Maintenance and Storage Facility (MASF) from PBS RL-0012 to PBS RL-0041. Additionally, the 300-296 project spend forecast increased by \$1.8 million due to increased costs associated with changes to the 324 Structural Modification Design and manipulator and crane repairs. The fiscal year spend forecast (FYSF) funds delta is unfavorably offset because CHPRC was directed by the FY2018 annual performance measure baseline (PMB) update to plan ERDF operations in the PMB under PBS RL-0013. Subsequently, CHPRC was directed that ERDF operations could not be transferred from RL-0041 to RL-0013 until after the FY2018 appropriations were approved by Congress. As FY2018 appropriations have been finalized, ERDF is now forecasted, costed, and funded under PBS RL-0013. However, ERDF actuals for the first half of FY2018 remain in RL-0041 until a cost transfer can be processed.

Critical Path Schedule:

Critical Path Analysis can be provided upon request.

MILESTONE STATUS

Tri-Party Agreement milestones represent significant events in project execution. RL Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The PMB annual update, implemented in September 2013, and subsequently approved BCR, define CHPRC planning with respect to Tri-Party Agreement milestones. The following table is a one-year look ahead of commitments and Tri-Party Agreement enforceable milestones and non-enforceable target due dates.

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
M-016-00B	Complete all 300 Area remedial actions in accordance with ROD requirements.	9/30/2018		6/20/2018	Revegetation of the 618-10 Complex was removed from the Tri-Party Agreement milestone per change number M-16-17-02. Forecast completion date is now aligned with completion of demobilization.
M-094-00	Complete disposition of all 300 Area surplus facilities, excluding 324 Building.	9/30/2018	7/10/2017 (A)		On October 19, 2017, issued letter-notifying RL of the completion on July 10, 2017.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review, Comment & Concur DSA/TSR revision	03/21/18 (A)	04/10/18
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #10	3/15/18 (A)	3/16/18 (A)
RL and Regulator Review of CVP and Waste Site Reclassification Form for 618-10 Burial Ground	3/26/18	5/9/18
Ecology receive the certified CHPRC and RL Information (1301, 1325)	03/29/18	04/24/18
RL Certify and Submit Permit Modification Package to Ecology (1324)	04/02/18	04/11/18
RL Prepare, Review, Approve & Issue DSA/TSR SER Revision	04/04/18	05/07/18
RL Certify Information – RL Manager Letter to Ecology (1301, 1325)	04/09/18	04/11/18
Class 1 Prime modification RL Certification send Class 1 Prime to Ecology for Action to close 1301-N and 1325-N	04/25/18	06/27/18
Deliver attachment(s) and certification(s) to RL (1301, 1325)	05/15/18	05/17/18
RL Approval of SNR	05/15/18	06/12/18
324 Add A Part A – Review Addendum & Conduct Workshop	05/29/18	06/11/18
RL Independent Structural Modification Review	07/07/18	08/15/18

Section G

Fast Flux Test Facility Closure (RL-0042)



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation

March 2018
CHPRC-2018-03, 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 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

RL-0042 Accomplishments

- Completed Annual G-3 Tank Inspection at FFTF.
- Incorporated engineering comments and initiated workability review of a new work package to perform electrical drawing verifications in the 400 Area; completion of other 400 Area work packages with Lockout/Tagout (LOTO) is suspended until this work is performed.
- Placed order for additional parts and wiring to support replacement of the 481 Building C-670 fire pump control panel with a new panel that meets current National Fire Protection Association (NFPA) standards.
- Millwright performed troubleshoot and repair of vehicle/pedestrian gates and wind sock replacement at FFTF.
- Received additional documentation from P16 Variable Frequency Drive manufacturer and completed the Acquisitions Verification System (AVS) receipt inspection of the P16 pump motor starter.
- Obtained clarification from CHPRC Fire Protection that NFPA 265, 2017 requirements for inspecting tanks is required every five years when they have corrosion protection, versus three years for unprotected tanks. Therefore, it was determined that the internal dive inspections for T-58 and T-87 tanks will not be required.
- Engineering started investigating the feasibility of applying a new spray-on interior tank liner to T-58, T-87, and/or another unused tank prior to the end of the five-year tank inspection period, rather than complete tank replacement as previously planned.

MAJOR ISSUES

Issue:

Identified and investigated a LOTO incident associated with previous electrical work (2017) on the P-16 pump motor starter.

Corrective Action: As a result, identified the need to develop a new work package to physically verify 400 Area electrical circuits for water utilities equipment. This verification must be completed before further work is performed on the 400 Area water utilities equipment. This also affects the completion of a number of work packages that are currently in development/review.

Status: Work package continues to be developed to physically verify 400 Area electrical circuits due to inaccuracies discovered in the electrical drawings for the water utilities equipment. Incorporated engineering comments and initiated workability review of the new work package to perform electrical drawing verifications in the 400 Area

RISK MANAGEMENT STATUS

No key risks currently identified.

PROJECT BASELINE PERFORMANCE

Current Month

(\$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)	-5.9%	0.0	7.8%

Numbers are rounded to the nearest \$0.1M

CM Schedule Performance: (\$-0.0M/-5.9%)

The schedule variance is within reporting thresholds.

CM Cost Performance: (+\$0.0M/+7.8%)

The cost variance is within reporting thresholds.

Contract-to-Date (\$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	25.3	25.3	21.0	0.0	0.0%	4.3	17.2%	26.5	22.7	1.7	3.8

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (+\$0.0M/+0.0%)

The schedule variance is within reporting thresholds.

CTD Cost Performance (+\$4.3M/+17.2%)

The cost variance reflects efficient use of resources to support deactivation activities.

Variance at Completion (+\$3.8M/+14.4%)

The Variance at Completion is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS VS. SPEND FORECAST (\$M)

RL-0042 FFTF Closure	FY2018		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	4.0	2.5	1.5
Incremental Scope Pending Change Management	0.0	0.0	0.0
RL-0042 – Total	4.0	2.5	1.5

Numbers are rounded to the nearest \$0.1 million

Funds Analysis

Fiscal year (FY) 2018 projected funding for project breakdown structure (PBS) RL-0042 is \$4.0 million. The spending forecast of \$2.5 million includes inspections of the fire suppression system tanks and minor repairs.

Critical Path Schedule

Critical path analysis is not applicable to this project. The remaining 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



March 2018
CHPRC-2018-03, 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) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO X YES (YYYYMMDD) 2009 / 09 / 18			

5. CONTRACT DATA								
a. QUANTITY 1	b. NEGOTIATED COST 5,588,957	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 337,992	d. TARGET PROFIT/FEE 241,605	e. TARGET PRICE 5,830,563	f. ESTIMATED PRICE 6,077,637	g. CONTRACT CEILING 5,830,563	h. ESTIMATED CONTRACT CEILING 6,077,637	i. DATE OF OTB/OTS (YYYYMMDD)

6. ESTIMATED COST AT COMPLETION				7. AUTHORIZED CONTRACTOR REPRESENTATIVE					
MANAGEMENT ESTIMATE AT COMPLETION (1)		CONTRACT BUDGET BASE (2)		VARIANCE (3)		a. NAME (Last, First, Middle Initial) Dickerson, Kala K		b. TITLE Prime Contract Compliance Manager	
a. BEST CASE 5,779,354						c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)	
b. WORST CASE 5,901,116									
c. MOST LIKELY 5,836,031		5,926,949		90,918					

8. PERFORMANCE DATA																			
CAPN.PBS ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION					
	BUDGETED COST		ACTUAL		VARIANCE		BUDGETED COST		ACTUAL		VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)									
RL-0011 Nuclear Mat Stab & Disp PFP	113	0	7,115	-113	-7,115	988,662	972,958	1,101,924	-15,704	-128,966	0	0	0	988,662	1,174,875	-186,213			
RL-0012 SNF Stabilization & Disp	3,478	3,526	4,757	48	-1,231	722,953	722,652	692,131	-300	30,521	0	0	0	744,401	718,057	26,343			
RL-0013 Solid Waste Stab & Disp	11,923	11,784	10,555	-138	1,229	1,251,218	1,249,187	1,166,279	-2,031	82,908	0	0	0	1,361,501	1,274,374	87,127			
RL-0030 Soil & Water Rem-Grndwtr/Vadose	26,940	28,850	9,990	1,910	18,860	1,467,980	1,463,304	1,419,002	-4,676	44,302	0	0	0	1,532,260	1,484,961	47,299			
RL-0040 Nuc Fac D&D - Remainder Hanfrd	3,477	2,321	3,950	-1,156	-1,629	473,570	470,155	444,976	-3,415	25,178	0	0	0	484,999	465,180	19,819			
RL-0041 Nuc Fac D&D - RC Closure Proj	18,629	11,915	14,515	-6,714	-2,600	554,302	548,418	490,454	-5,883	57,965	0	0	0	659,865	572,681	87,184			
RL-0042 Nuc Fac D&D - FFTF Proj	221	208	192	-13	16	25,305	25,314	20,965	8	4,348	0	0	0	26,487	22,661	3,826			
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															78,639	66,564	12,075		
e. SUBTOTAL	64,781	58,605	51,074	-6,177	7,531	5,483,989	5,451,987	5,335,731	-32,002	116,256	0	0	0	5,876,814	5,779,354	97,461			
f. MANAGEMENT RESERVE															56,678				
g. TOTAL	64,781	58,605	51,074	-6,177	7,531	5,483,989	5,451,987	5,335,731	-32,002	116,256	0	0	0	5,933,492					
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																			
a. VARIANCE ADJUSTMENT																			
b. TOTAL CONTRACT VARIANCE															-32,002	116,256	5,933,492	5,779,354	154,139

* Per email direction received December 6, 2017 from the RL Contracting Officer, CHPRC is authorized to incorporate the value of proposed changes into the baseline, as well as remove work that is not authorized from our execution plan. When a contract alignment settlement is reached, baseline change requests (BCRs) will be processed to align the PMB with the settlement values.

*CPR Format 1 displays fully burdened dollars which includes indirect G&A that is distributed to each Project.
*An incorrectly implemented UB BCR (BCR-PRC-18-017R0) has caused discrepancies with the EAC, Best Case, Worst Case, and Most Likely

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) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE						REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)		
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)								
34 - Env Program & Strategic Png	1,167	1,120	626	-47	494	80,141	79,596	73,312	-545	6,284	0	0	0	85,652	79,591	6,061		
35 - Business Services	0	0	0	0	0	477,296	477,296	453,519	0	23,777	0	0	0	477,296	453,519	23,777		
36 - Prime Contract & Proj Integr	190	190	89	0	101	7,790	7,790	4,665	0	3,125	0	0	0	8,807	5,467	3,340		
3B - PFP Closure Project	113	0	7,115	-113	-7,115	899,880	884,176	1,020,867	-15,704	-136,691	0	0	0	899,880	1,093,818	-193,938		
3C - Waste & Fuels Management Project	11,864	11,726	10,488	-138	1,238	1,136,312	1,134,281	1,053,765	-2,031	80,517	0	0	0	1,246,285	1,161,554	84,731		
3D - Soil & Groundwater Remediation	25,716	27,673	9,332	1,957	18,342	1,286,560	1,282,428	1,238,345	-4,132	44,083	0	0	0	1,345,023	1,297,805	47,218		
3G - K Basin Oper & Plateau Remediation Project	11,353	8,556	11,779	-2,797	-3,223	1,409,216	1,407,608	1,330,910	-1,609	76,698	0	0	0	1,476,389	1,393,538	82,851		
3H - River Risk Management Project	14,377	9,340	11,645	-5,038	-2,306	186,794	178,811	160,348	-7,982	18,463	0	0	0	258,844	227,499	31,345		
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														78,639	66,564	12,075		
e. SUBTOTAL (Performance Measurement Baseline)	64,781	58,605	51,074	-6,177	7,531	5,483,989	5,451,987	5,335,731	-32,002	116,256	0	0	0	5,876,814	5,779,354	97,461		
f. MANAGEMENT RESERVE														56,678				
g. TOTAL	64,781	58,605	51,074	-6,177	7,531	5,483,989	5,451,987	5,335,731	-32,002	116,256	0	0	0	5,933,492				

* Per email direction received December 6, 2017 from the RL Contracting Officer, CHPRC is authorized to incorporate the value of proposed changes into the baseline, as well as remove work that is not authorized from our execution plan. When a contract alignment settlement is reached, baseline change requests (BCRs) will be processed to align the PMB with the settlement values.

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE														DOLLARS IN THOUSANDS			Form Approved OMB No. 0704-0188	
1. CONTRACTOR CH2M HILL Plateau Remediation Company				2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:				3. PROGRAM a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009				4. REPORT PERIOD a. FROM: 2018/02/19 b. TO: 2018/03/25						
5. CONTRACT DATA																		
a. ORIGINAL NEGOTIATED COST 4,312,366				b. NEGOTIATED CONTRACT CHANGE \$1,276,591		c. CURRENT NEGOTIATED COST (A + B) \$5,588,957		d. ESTIMATED COST AUTH UNPRICED WORK \$337,992		e. CONTRACT BUDGET BASE (C + D) \$5,926,949		f. TOTAL ALLOCATED BUDGET \$5,933,492		g. DIFFERENCE (E - F) (\$6,543)				
h. CONTRACT START DATE 6/19/2008				i. DEFINITIZATION DATE 6/19/2008			j. PLANNED COMPL DATE 9/30/2018			k. CONT COMPLETION DATE 9/30/2018			l. EST COMPLETION DATE 9/30/2018					
6. PERFORMANCE DATA																		
BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)																		
ITEM (1)		BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)	UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)	
				+1 Apr-18 (4)	+2 May-18 (5)	+3 Jun-18 (6)	+4 Jul-18 (7)	+5 Aug-18 (8)	+6 Sep-18 (9)									
a. PM BASELINE (BEGIN OF PERIOD)		5,419,208	49,544	41,818	50,541	36,775	36,670	43,151	191,826	3,391,477	391,653	471,323	504,826	485,027	527,975	97,251	5,869,531	
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																		
BCR-012-18-004R0 EVM Health Adjustments														0		0		
BCR-012C-18-005R0 Reduce Schedule Margin														0		0		
BCR-013-18-016R0 - Incorporate RL-0013 Scope Changes - M-091-53														1,643		1,643		
BCR-013-18-017R0 - RL-0013 Deferral of NDA Campaign														0		0		
BCR-030-18-013R0 - Incorporate Additional Scope Changes - RL-0030														20,072		20,072		
BCR-030-18-014R0 - RL-0030 FY2018 Scope Deferrals														(0)		(0)		
BCR-030-18-015R0 - MR Draw for 100-KR-4 Operable Unit TI Versus MNA Evaluation														158		158		
BCR-030-18-016R0 - Incorporate CO #318, Re-Plan 200-WA-1 & 200-BC-1														(499)		(499)		
BCR-030-18-017R0 - Incorporate FY2018 Additional Scope Deductions - RL-0030														(2,722)		(2,722)		
BCR-041-18-014R0 - Incorporate Remaining FY2018 Scope (MASF Ops) for CO 319, Ga														1,005		1,005		
BCR-041-18-015R0 - Incorporate Remaining FY2018 Scope for CO 320, Sand Filter M														241		241		
BCR-PRC-18-016R0 - Incorporate Remaining FY2018 Work Scope for CO 327 Accelerat														5,998		5,998		
BCRA-PRC-18-0180, HPIC Updates March 2018														0		0		
BCR-PRC-18-017R0, Undistributed Budget Adjustments March 2018															(18,612)	(18,612)		
c. PM BASELINE (END OF PERIOD)		5,483,989	64,781	42,425	51,605	38,823	38,720	45,823	175,430	3,391,477	391,653	471,323	504,826	485,027	553,870	78,639	5,876,814	
7. MANAGEMENT RESERVE																		
																56,678		
8. TOTAL																		
																5,933,492		

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) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group	ACTUAL CURRENT PERIOD	ACTUAL END OF CURRENT PERIOD (Cumulative)	FORECAST (Non-Cumulative)											AT COMPLETION		
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS							
			+1 APR 2018	+2 MAY 2018	+3 JUN 2018	+4 JUL 2018	+5 AUG 2018	+6 SEP 2018	FY19	1st QTR FY19	2nd QTR FY19	FY19-LC	ATCOMPLETE			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)		
300 - Office of the President	8	768	6	6	6	6	6	6	6	6	0	0	0	0	0	807
303 - Internal Audit	4	501	4	5	5	5	5	5	5	5	0	0	0	0	0	531
304 - General Counsel	4	468	5	5	5	5	5	5	5	5	0	0	0	0	0	498
31 - Communications	9	1070	9	9	9	9	9	9	9	9	0	0	0	0	0	1125
32 - Safety Health Security & Quality	52	7441	56	57	57	59	60	61	61	61	0	0	0	0	0	7791
34 - Env Program & Strategic Ping	37	5045	48	48	48	48	49	47	47	47	0	0	0	0	0	5335
35 - Business Services	56	8051	67	67	67	67	67	67	67	67	0	0	0	0	0	8450
36 - Prime Contract & Proj Integr	63	5413	66	66	66	66	66	66	66	66	0	0	0	0	0	5809
38 - Project Technical Services	34	5770	39	42	42	42	42	42	39	39	0	0	0	0	0	6016
3B - PFP Closure Project	177	50235	169	186	196	199	195	195	195	192	192	378	336	0	0	52282
3C - Waste & Fuels Management Project	346	51700	376	377	376	369	364	342	342	6	6	13	19	0	0	53948
3D - Soil & Groundwater Remediation	283	37898	300	282	293	284	277	259	259	48	23	41	17	0	0	39723
3G - K Basin Oper & Plateau Remediation Project	365	49489	395	378	372	390	351	322	322	16	20	15	0	0	0	51748
3H - River Risk Management Project	237	4912	172	167	164	151	156	157	157	13	20	9	1	0	0	5922
g. TOTAL DIRECT	1674	228761	1712	1696	1706	1701	1654	1581	276	447	415	36	0	0	0	239984

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) 2018/02/19			
b. LOCATION (Address and ZIP Code) Richland, WA 99354		b. NUMBER DE-AC06-08RL14788		b. PHASE Base		b. TO (YYYY/MM/DD) 2018/03/25			
		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:	64,781	58,605	51,074	(6,177)	-9.5%	7,531	12.9%	0.90	1.15
Cumulative:	5,483,989	5,451,987	5,335,731	(32,002)	-0.6%	116,256	2.1%	0.99	1.02
	BAC	EAC	VAC in \$	VAC in %	TCPI				
At Complete:	5,876,815	5,779,354	97,461	1.7%	0.96				
Explanation of Variance/Description of Problem:									
<p>Current Period Schedule Variance: The current month (CM) negative schedule variance is primarily due to PBS RL-0041 delays at the 300-296 project, in procurement/fabrication of the 324 equipment resulting from design changes and fabrication difficulties, and delays in 324 interference removal, penetration sealing, and hot cell cleanout activities due to a high alpha reading stop work in the airlock.</p> <p>Also contributing to the negative schedule variance is PBS RL-0040 due to impacts from other site priorities affecting the project's ability to maintain a full contingent of resources planned for REDOX Risk Mitigation field entries; which reduced the amount of sample gallery and silo scope completed during the fiscal month of March. Additionally, the Balance of West IA Non-Subsequent Units for Individual Determination (SQUID) Specific Structures project yielded an unfavorable schedule variance due to unexpected ecology requirements needed for the removal of the steam lines.</p> <p>The negative schedule variance is offset by PBS RL-0030 March 2018 implementation of Baseline Change Request (BCR) BCR-030-18-017R0 – <i>Incorporate FY2018 Additional Scope Deductions – RL-0030</i>, which re-planned prior year activities associated with 200-ZP-1 monitoring well drilling from the performance measurement baseline (PMB). This BCR action resulted in a negative current period budgeted cost of work scheduled (BCWS) associated with the replanned activities and generated a corresponding positive schedule variance in the current period.</p> <p>Current Period Cost Variance: The CM positive cost variance is primarily due to PBS RL-0030 implementation of BCR-030-18-013R0 – <i>Incorporate Additional Scope Changes – RL-0030</i>, in which budget was incorporated into the baseline in the current period. Because the actual cost of the work performed (ACWP) was recorded in a prior period, and the performance was earned upon implementation of the subject BCR, a positive current period cost variance was generated.</p> <p>The positive cost variance is offset by PBS RL-0011 recovery actions and implementation of the new demolition requirements associated with a December 2017 contamination event. This includes fixative applications, performance of radiological surveys, and stabilization activities to support resumption of demolition of PFP. Assignment of Jacobs Engineering corporate resources and reassignment of CHPRC personnel to support the root cause analysis (RCA) and programmatic assessments have also contributed to the variance. In addition, the resulting delay in demolition activities from the contamination event are causing an extension of unplanned project management, min-safe, and support resources.</p> <p>Cumulative Schedule Variance: The variance is within reporting thresholds.</p> <p>Cumulative Cost Variance: The variance is within reporting thresholds.</p>									
Impact:									
<p>Current Period Schedule: The current month schedule variance is not expected to impact the overall contract schedule.</p> <p>Current Period Cost: CHPRC is actively formulating a PFP Recovery Plan to allow the resumption of PFP Demolition activities.</p> <p>Cumulative Schedule: N/A</p> <p>Cumulative Cost: N/A</p>									
Corrective Action:									
<p>Current Period Schedule: No corrective actions have been identified.</p> <p>Current Period Cost: Cost impacts are being estimated and will be incorporated in the project estimate to complete (ETC).</p> <p>Cumulative Schedule: N/A</p> <p>Cumulative Cost: N/A</p>									

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

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

The \$97.5 million Variance at Completion (VAC) increased \$23.2 million from February to March reporting. The change is primarily due to \$13.9 million associated with the move of the Environmental Restoration Disposal Facilities (ERDF) from project breakdown structure (PBS) RL-0041 to PBS RL-0013, in which only the removal of the estimate to complete was removed from RL-0041, while the offset was not added to RL-0013. Additionally, a system entry of \$12 million was not processed to offset the Undistributed Budget. Both issues will be corrected in April. A corrective action has been initiated to ensure system entries are not missed at month-end closing.

CHPRC continues to track completion of the contract scope within budget and is currently projecting a corrected VAC of \$71.6 million, with \$56.7 million of management reserve (MR), for a total positive variance of \$128.3 million. For March, the project was 9.5 percent behind schedule and 12.9 percent under planned cost. Contract to date (CTD), the project was 0.6 percent behind schedule and 2.1 percent under planned cost.

There were nine of the 14 BCRs in the period that impacted the PMB:

- BCR-013-18-016R0, Incorporate RL-0013 Scope Changes – M-091-53
- BCR-030-18-013R0, Incorporate Additional Scope Changes – RL-0030
- BCR-030-18-015R0, MR Draw for 100-KR-4 Operable Unit TI Versus MNA Evaluation
- BCR-030-18-016R0, Incorporate CO 318, Re-Plan 200-WA-1 & 200-BC-1 Characterization
- BCR-030-18-017R0, Incorporate FY2018 Additional Scope Deductions – RL-0030
- BCR-041-18-014R0, Incorporate Remaining FY2018 Scope (MASF Ops) for CO #319, Garnet Filter Media Removal
- BCR-041-18-015R0, Incorporate Remaining FY2018 Scope for CO #320, Sand Filter Media Removal
- BCR-PRC-18-016R0, Incorporate Remaining FY2018 Work Scope for CO #327 Accelerating the Shipment of Sludge
- BCR-PRC-18-017R0, Undistributed Budget Adjustments March 2018

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

Variance in Performance BAC and EAC: The variance at complete (VAC) between the BAC and EAC this month is a + \$97.5 million (\$71.6 million corrected), +1.7% and is within reporting thresholds.

Format 1 and 3 Contract Data:

Contract Price Adjustments

CPS - In Process		
	Total Authorized Unpriced Work	\$337,992
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
	Grand Total Adjustments	\$337,992

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

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

Undistributed Budget Activity

BCR Number	Title	PBS	Fiscal Year	UB
BCR-PRC-18-017R0	<i>Undistributed Budget Adjustments March 2018</i>	RL-0030	2018	\$-18,612K

The Undistributed Budget decreased by \$18,612K.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
BCR-030-18-013R0	<i>Incorporate Additional Scope Changes – RL-0030</i>	RL-0030	2018	\$170K
BCR-030-18-015R0	<i>MR Draw for 100-KR-4 Operable Unit TI Versus MNA Evaluation</i>	RL-0030	2018	\$-158K
BCR-030-18-017R0	<i>Incorporate FY2018 Additional Scope Deductions – RL-0030</i>	RL-0030	2018	\$-52K

Overall, there was a decrease in Management Reserve (MR) of \$39K during March.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2018	N/A

Overall, there was no change to the Fee during 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 ECWR or BCWR if greater plus the to-go (available) management reserve, which assumes all efficiencies gained contract-to-date will be eroded at completion and all available management reserve is used (e.g., all identified risks realized), plus the scope identified in the Trend Log that is not in the EAC. The Best/Worst and Most Likely EAC values are documented in the Format 1 Report.

Prepared by: Project Control Staff	Date: 04/17/2018	Approved by:	Date:
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** Per email direction received December 6, 2017 from the RL Contracting Officer, CHPRC is authorized to incorporate the value of proposed changes into the baseline, as well as remove work that is not authorized from our execution plan. When a contract alignment settlement is reached, baseline change requests (BCRs) will be processed to align the PMB with the settlement values.*

Appendix B

Project Services and Support (WBS 000)



T. L. Vaughn
Vice President for
Safety, Health, Security
and Quality

M. A. Wright
Vice President for
Project Technical
Services

March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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

S. E. Johnson
Director of
Communications

R. M. Millikin
Vice President for
Prime Contract and
Project Integration

T. A. Heidelberg
Vice President for
Business Services
Chief Financial Officer

PROGRAM SUMMARY

Project Services and Support functional activities continue to provide support and technical services to all CHPRC projects, as well as central management of cross-cutting services. This section is reported on a quarterly basis.

EMS Objectives and Target Status (Draft)

Objective #	Objective	Target	Due Date	Status
18-EMS-ADMIN-OB1-T1	Reduce energy intensity.	Increase facility occupancy rates to greater than 83 percent by compressing occupancy and vacating underutilized facilities. Occupancy compression to be maintained through disposition of buildings or square footage reduction.	9/30/18	30%
18-EMS-PTS-OB1-T1	Spill prevention/waste minimization/pollution prevention.	Monitor and evaluate spill prevention program and existing techniques to reduce and/or eliminate spills to the environment by surveillances and on-going training. Also survey universal waste and recycling areas.	9/30/18	48%
18-EMS-PTS-OB2-T1	Monthly chemical management inspection.	Ensure chemical products are accurately tracked, maintained, and excessed/disposed. Perform quarterly assessment on chemical inventory locations.	9/30/18	52%

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	1	9	1/30/18 – Worker experienced bug bite to right wrist. Employee was seen at HPMC and received over-the-counter medication. (24727)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

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

- There was one First Aid injury reported during this quarter in the functional groups.
 - o Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
 - Finalized the CHPRC Safety Improvement Plan (SIP) for 2018.
 - Correspondence transmitted to Department Of Energy Richland Operations Office (RL):
 - Letter, CHPRC-1800348, “Notification Of Change Regarding Issuance of 10 Code of Federal Regulations 851, Worker Safety and Health Program, Technical Amendment,” dated January 24, 2018.
 - Letter, CHPRC-1800086 R1, “Vehicle and Equipment Safety Surveillances of CHPRC Facilities and Projects,” dated February 20, 2018.
 - Letter, CHPRC-1800585, “Annual Report of CHPRC Voluntary Protection Program,” dated February 12, 2018.
 - Completed quarterly assessment, SHS&Q-2018-WSA-19320, of the Computerized Accident/ Incident Report System (CAIRs) to ensure data/information quality and accuracy.
 - Completed assessment, SHSQ-2018-WSA-20316, *Review of CHPRC Ergonomics Program*.
 - Completed Chronic Beryllium Disease Prevention Program (CBDPP) Assessment, SHS&Q-2018-WSA-19732.
 - Issued PRC-POL-SH-54212, *CHPRC Vehicle Safety Policy*.
 - Updated PRC-PRO-SH-40499, *Safety and Health Inspections*.
 - Revised and issued PRC-PRO-SH-17916, *Industrial Hygiene Exposure Assessments*.
 - Revised and issued PRC-PRO-SH-40410, *Hazard Communication Program*.
 - Updated PRC-PRO-SH-121, *Heat Stress Control*.
 - Developed and issued 300A-PRO-SH-54224, *Issue and Control of Respiratory Protection Equipment*.
 - Finalized and posted OSHA 300A Summary of Work-Related Injuries and Illnesses.
 - Performed document reviews in support of the Uranium Reactive Gas Sequestration (URGS) project.
 - Supported development of an Industrial Hygiene Technician Fundamentals training program to be provided by HAMMER.
 - Developed computer-based Silica Awareness Training and Competent Person Training.
 - Supported Plutonium Finishing Plant Closure Project (PFP) recovery and stabilization efforts, including direct participation on the Hazard Review Board (HRB).
 - Initiated Employee Zero Accident Council (EZAC) 90-day Cross Project Safety Inspection Campaign.
 - Supported Integration Safety Management System (ISMS) Corrective Action Working Group.
 - o Radiological Control accomplishments:
 - Supported PFP recovery activities.
 - Completed Work Site Assessment (WSA) on Clearance of Radiological Materials.
 - Completed WSA on Radioactive Material Areas.
 - Completed WSA on Radiological Work Planning.
 - Completed WSA on Radiological Survey Reports.
 - Completed WSA on Radiological Training Requirements.
 - Supported Sentinel implementation planning (new site-wide access control system).
 - Supported T Plant and Engineered Container Retrieval and Transfer System (ECRTS) readiness activities.
 - Initiated Radiological Protection Improvement Plan.
 - Implemented Senior Supervisory Watch for clearance survey process.
 - Implemented secondary clearance survey process.
 - Hired contracted Health Physicists to support ongoing PFP Closure Project corrective actions.

- Supported Jacobs Corporate and Department of Energy Headquarters (DOE-HQ) independent assessments of the PFP Closure Project and the Radiological Protection Program.
- Implemented soft skill daily reminders for Radiological Protection organization.
- Annual dosimetry exchange was completed.
- Supported 324 Building Disposition Project in responding to DOE-HQ (EA-30 and EM-3) trip reports.
- Completed evaluation of PFP Closure Project contamination control and air monitoring protocols.
- Completed trend analysis of calendar year (CY) 2017 contamination control events.
- Completed review and approved Technical Evaluations (TE) for:
 - Real-time air monitoring in 324 Building, Radiochemical Engineering Cells Airlock and/or C-Cell.
 - Radiological Characterization for Demolition of the 276-BA Facility.
 - Use of the RSI RS-700 Vehicle Borne Detector System in Areas Contaminated with PFP Radionuclides of Concern.
 - Basis for Individual Personal (Lapel) Air Sampling Practices in Radiological Buffer Areas and Contamination Areas at the PFP.
 - Sludge Treatment Project (STP) and 100-K Closure Project Radiological Characterization Supporting Radiological Controls, Clearance, Work Place Air Monitoring and Dosimetry.
- o Nuclear Operations Support & Compliance accomplishments:
 - Correspondence transmitted to the Department of Energy Richland Operations Office (RL):
 - Letter, CHPRC-1800060, dated January 9, 2018, *Transmittal of the 2018 Annual Update to the CH2M HILL Plateau Remediation Company Safety Management Programs, HNF-11724, Revision 14, for RL Review and Approval.*
 - Letter, CHPRC-1800189, dated January 15, 2018, *Submittal of the Annual Update of the 224-B Facility Safety Basis and the Unreviewed Safety Question Determinations Summary.*
 - Letter, CHPRC-1703616A R1, dated January 23, 2018, *Transmittal of RL Directed Actions from Safety Evaluation Report 17-NSD-0041_RL.*
 - Letter, CHPRC-1800428, dated January 30, 2018, *Transmittal of the Documented Safety Analysis for the Canister Storage Building, HNF-25059, Revision 0; the Technical Safety Requirements for the Canister Storage Building, HNF-52060, Revision 0; and the Fire Hazards Analysis for the Canister Storage Building, HNF-52062, Revision 0.*
 - Letter, CHPRC-1704539.1, dated February 12, 2018, *2017 Annual Update to the B Plant Documented Safety Analysis, HNF-14804, Revision 8, Comment Incorporation.*
 - Letter, CHPRC-1705160.1, dated February 13, 2018, *2017 Annual Update to the Documented Safety Analysis for the 216-Z-9 Waste Storage Crib Facility, HNF-58818, Revision 1 and the Technical Safety Requirements for the 216-Z-9 Waste Storage Crib Facility, HNF-59125, Revision 1, Comment Incorporation.*
 - Letter, CHPRC-1800700, dated February 20, 2018, *Submittal of the Annual Update of the Fast Flux Test Facility Safety Basis and the Unreviewed Safety Question Determinations Summary.*
 - Letter, CHPRC-1800657, dated February 26, 2018, *Transmittal of Updates to the Waste Encapsulation and Storage Facility Documented Safety Analysis, HNF-8758, Revision 12; the Waste Encapsulation and Storage Facility Technical Safety Requirements, HNF-8759, Revision 12; and the Fire Hazards Analysis for Building 225-B Waste Encapsulation and Storage Facility, HNF-SD-WM-FHA-019, Revision 8.*
 - Letter, CHPRC-1800833, dated March 1, 2018, *Transmittal of the Canister Storage Building Evaluation of Safety of the Situation for the Uranium Oxide Calculation Error, CHPRC-03539, Revision 0.*

- Letter, CHPRC-1800060.1, dated March 1, 2018, *Transmittal of the 2018 Annual Update to the CH2M HILL Plateau Remediation Company Safety Management Program, HNF-11724, Revision 14, Comment Incorporation.*
- Letter, CHPRC-1800888, dated March 22, 2018, *Submittal of the Annual Update of the Plutonium Finishing Plant Safety Basis and the Unreviewed Safety Question Determinations Summary.*
- Letter, CHPRC-1801146, dated March 26, 2018, *Transmittal of the 2018 Annual Update to the Plutonium-Uranium Extraction Facility Documented Safety Analysis, CP-14977, Revision 11, the Unreviewed Safety Question Determinations Summary for the Plutonium-Uranium Extraction Facility, and the Fire Hazards Analysis for the Plutonium-Uranium Extraction Facility, CP-41822, Revision 4.*
- Correspondence received from RL:
 - Letter, 18-NSD-0009_RL, dated January 16, 2018, *Resubmittal of the Conceptual Safety Design Report (CSDR) for the Capsule Storage Area, CHPRC-03293, Revision 0, to the U.S. Department of Energy Richland Operations Office (RL) for Approval.*
 - Letter, 18-NSD-0013_RL, dated March 22, 2018, *Approval of the 2018 Annual Update to the “CH2M HILL Plateau Remediation Company Safety Management Programs,” HNF-11724, Revision 14.*
 - Letter, 18-NSD-0011_RL, dated March 23, 2018, *Approval of HNF-58818, Revision 1, Documented Safety Analysis (DSA) for the 216-Z-9 Waste Storage Crib Facility, and HNF-59125, Revision 1, Waste Storage Crib Facility Technical Safety Requirements.*
- Other:
 - CHPRC-TS-18-001, *Authorization to Ship Memo for One-Time Request for Shipment for Sludge Transport from K West Basin to T Plant.*
 - CHPRC-03532, *One-Time Request for Shipment for Sludge Transport from K West Basin to T Plant Compliance Matrix for K West Basin.*
 - CHPRC-01186, Rev. 3, *Standard Waste Box Generic Tiedown to Transporter.*
 - CHPRC-01383, Rev. 2, *1800-TL Tiedown for Transport on Trailers 8.5 ft to 10 ft Wide.*
- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
 - 861 Condition Reports (CRs) were screened:
 - Four significant issues identified.
 - Eight adverse issues identified.
 - 413 Track Until Fixed issues identified.
 - 169 Trend Only items identified.
 - 250 Opportunity for Improvement (OFI) items identified.
 - 17 Screened Out.
 - 720 CRs administratively closed.
 - 1,058 CR actions administratively closed.
 - Provided Course 600082, *CHPRC Responsible Manager Training - Issues Management*, to CHPRC employees.
 - Provided full time support to PFP Issues Management and Occurrence Reporting activities.
 - Provided Root Cause Team Lead support for EM-RL--CPRC-PFP-2017-0018, *Discovery of Contamination Spread.*
 - Provided Occurrence Reporting support to the River Risk Management Project
 - Completed Apparent Cause Evaluation for and transmitted final Occurrence Reporting and Processing System (ORPS) reports EM-RL--CPRC-PFP-2017-0017, *Reportable Contamination Discovered in Radioactive Material Area (RMA)*, and EM-RL--CPRC-ERDF-2017-0006, *Potential Exposure to an Uncontrolled Hazardous Energy Source.*
 - Transmitted Notification ORPS report EM-RL--CPRC-ERDF-2018-0001, *Electrical Arc Observed During Troubleshooting On Lighting Control Panel 5.*

- Transmitted Notification ORPS report EM-RL--CPRC-PFP-2018-0003 *Contamination Detected Outside Posted Radiological Area.*
- Transmitted Notification ORPS report EM-RL--CPRC-PFP-2018-0004 *Technical Safety Requirement (TSR) Specific Administrative Control Noncompliance.*
- Transmitted Notification ORPS report EM-RL--CPRC-324FAC-2018-0001, *“Pop” and Spark Observed While in the Process of Cutting Electrical Wires in Junction Box (Near Miss).*
- Provided support for the Monthly Defense Nuclear Facility Safety Board (DNFSB) Resident Inspector Meeting.
- Provided DNFSB conference call regarding 324 Building White Paper (RF/ARF) discussion.
- Forty-four documents were provided in response to DNFSB requests for information (RFI).
- Provided support and coordination to the DNFSB Hanford Site Resident Inspectors requests.
- Two external Lessons Learned were submitted in OPEXShare
 - 2018-RL-HNF-0001 - *Condition Known as ‘Rock Drill’ Causes Truck Tire to Rupture.*
 - 2017-W&FMP-0009 *Secondary Events to Natural Phenomenon Hazards not Fully Analyzed.*
- Six internal Lessons Learned was submitted in OPEXShare
 - 2018-KBO&PR-0001 *Prohibited Articles on the Hanford Site.*
 - 2018-RRMP-0001 *Connex Container with Radiological Material Sent to Location Not Posted for Radioactive Material Area.*
 - 2018-W&FMP-0001 *Recommendations for Successful Declaration of Readiness for T Plant Receipt of Sludge.*
 - 2018-PFP-0001 *Review Packaging Instructions Before Shipping Material Packaged Prior to Completing Characterization.*
 - 2018-ERDF-0001 *Multiple Fuse Failures Were Not Recognized as Symptoms Leading to an Electrical Event.*
 - 2018-KBO&PR-0002 *Verify Primary and Alternate Power Sources Are Not Energized Using Transfer Switch During Safe Condition Check.*
- One Just-In-Time was submitted in OPEXShare for Hanford contractors.
 - 2018-RL-HNF-0002 *Improper PPE Identified on Electrical Hazard Evaluation.*
- o Performance Oversight, Assessment, and Quality Assurance accomplishments:
 - 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 general assessment mentoring to K-Basin Operations and Plateau Remediation (KBOPR) and SHS&Q organizations.
 - Completed and implemented software upgrades to the Integrated Evaluation Plan (IEP).
 - Completed Mid-Point Effectiveness Review *EM-RL-CPRC-SOLIDWASTE-2016-000.2*
 - Provided coaching on BS-2018-WSA-20093, *Staffing Cycle Time Improvements.* Assisted in drafting and provided interim review of the WSA.
 - Provided coaching on PC&PI-2018-WSA-19489, *Assessment of the CHPRC CAM Notebooks.* Assisted in drafting and provided interim review of the WSA.
 - Coordinated CHPRC personnel with RL for assessment shadowing and review.
 - Met with Mission Support Alliance (MSA) Worker Protection (Radiological) staff to initiate joint-planning for the 10 CFR 835 Occupational Radiation Protection, Subpart J, *Radiation Safety Training*, Assessment scheduled for January through March 2018.
 - Provided support, as a core team member, for *PFP Contamination Spread Root Cause Evaluation* efforts.
 - As part of CHPRC 10 CFR 835 Triennial Assessment activities, observed MSA Worker Protection (Radiological) perform *10 CFR 835 Occupational Radiation Protection, Subpart J, Radiation Safety Training* assessments of classroom training at HAMMER.

- Completed SHS&Q-2018-SURV-16457, QA-599 Section 5.0 Work Processes “Process Monitoring or Data Collection Instruments.”
- Provided mentoring to the ISMS Assessment Team for PO-2018-MA-20495, *Implementation of ISMS*.
- Initiated EP&SP-2018-IA-16629, *HASQARD Administrative Requirements* Sections 6.0 and 11.0.
- As part of CHPRC 10 CFR 835 Triennial Assessment activities, observed MSA Worker Protection (Radiological) perform *10 CFR 835 Occupational Radiation Protection, Subpart J, Radiation Safety Training*, assessments of classroom training at HAMMER.
- As part of CHPRC 10 CFR 835 Triennial Assessment, *Subpart J Radiation Safety Training*, performed in-field activities at CHPRC project/facilities.
- o Fire Protection (FP) accomplishments:
 - Resolved Condition Report involving Waste Encapsulation and Storage Facility (WESF) sprinkler system deficiencies.
 - Developed a plan for implementing change to 420.1C and briefed the Facility Managers Forum regarding cost and benefits of this change.
 - Supported 100K Contractor Operational Readiness Review (ORR).
 - Provided input to Hanford Fire Marshall Permit (HFMP) System update.
 - Completed 324 Building Fire Hazards Analysis (FHA).
 - Completed 105 KW Facility Fire Protection Assessment (FFPA).
 - Completed 15 TSR Fire Protection Assessments.
 - Finalized Revision 9 of the Solid Waste Operations Complex (SWOC) FHA.
 - Completed 224-T FFPA.
 - Continued Fire Protection procedure roll-out, which includes coordination with the projects via a weekly meeting to ensure adequate review for potential impacts.
 - Interim Storage Area (ISA) and 402 Building FHAs are in comment resolution stage.
- SHS&Q Focus Areas:
 - o **Issue:** Beryllium program assessment findings from DOE-HQ, Office of Safety, Health and Security Independent Oversight Inspection report.
 - o **Status:** Revision 4 continues to be developed by the Hanford Beryllium Committee. Revision 3 has been pulled back by RL due to DOE-HQ legal review. Revision 2 remains in effect.
 - o **Action:** Beryllium facility assessments have been completed. Remaining is characterization sampling of 46 facilities, structures, and conex boxes, the majority of which currently have administrative or similar holds preventing access.
 - o **Issue:** Accident & Injury Reduction.
 - o **Status:** Continue investigating recordable, days away, restricted, or transferred (DART), and First Aid injuries to determine cause, prevention, and reduction to prevent recurrence. Project safety campaigns are being effective.
 - o **Action:** Injury trends continue to improve across the PRC. OSHA 300 log was timely posted as required by law.
 - o **Issue:** PFP December contamination event.
 - o **Status:** Supporting PFP and other projects with dedicated OS&IH personnel and Radiological Control personnel from the SHS&Q Central group for Senior Supervisory Watch of high-risk work activities and other project work activities.
 - o **Action:** Providing additional RadCon resources from the Central group and through outside subcontractors. Responding to oversight issues and action items from Jacobs Corporate assessment, EM-3, and EA observations.

Environmental Program and Strategic Planning (EP&SP)

• Environmental Protection

- o Supported Environmental Data Integration in gathering and interpreting radiological data from the PFP contamination events.
- o Responded to a significant records and information request resulting from a Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Article XXXII letter from Environmental Protection Agency (EPA) and Ecology regarding the PFP contamination events.
- o Supported the completion of stack monitoring upgrades at Plutonium Uranium Extraction Plant (PUREX) and a Washington State Department of Health (DOH) inspection to close out the associated 2016 Ecology/DOH General Notice of Potential Violation (GNOPV).
- o Completed information/certification submittal to MSA for:
 - Annual Dangerous Waste Report.
 - Hanford AOP Semi-Annual Report.
 - Annual Radionuclide Air Emissions Report.
 - Criteria and Toxics Annual Certification.
 - Significant Discharges.
 - Greenhouse Gas Report.
 - Resource Conservation and Recovery Act (RCRA) Non-Compliance Report.
 - Emergency Planning and Community Right-to-Know Act (EPCRA) 313 Toxics Release Inventory (TRI) Report.
 - Notification of Newly Identified Waste Management Units for CY2017 (letter to Ecology).
- o Provided presentation to Central Plateau Surveillance and Maintenance (CPS&M) and Waste and Fuels Management Project (W&FMP) design authorities on Radioactive Air Emission and related Environmentally Significant Systems (ESS) requirements for abatement and extractive monitoring systems.
- o Provided a dedicated team member to the completion of a Management Assessment (MA) of the CHPRC ISMS.
- o Provided a dedicated team member to participate on the HRB for PFP recovery.
- o Responded to significant records and information requests resulting from DOH Letter of Concern regarding PFP contamination events.
- o Supported mediation and pre-hearing preparation activities for PUREX “white powder” AO.
- o Compliance Status:
 - Provided information and records for regulatory inspections at Tank Farms (ST4511), WESF, 400 Area Waste Management Unit (WMU), B Plant (NRR), AK packages for retrievably stored waste (RSW) containers, low-level burial ground (LLBG) Trenches 31/34, and stacks at canister storage building (CSB), WESF, B Plant, PUREX, and Waste Receiving and Processing (WRAP). Also provided DOH with vehicle surveys associated with the PFP contamination events.
 - Facilitated regulatory visits to SWOC facilities and 100-K Basin Annex.

• Environmental Compliance and Quality Assurance

- o Assessment Status
 - Surveillance, *RCRA TSD BEP Corrective Action Effectiveness Review*, was completed on February 14, 2018, and resulted in two findings and one opportunity for improvement.
 - Surveillance, *Dangerous Waste Management Inspections*, was completed on February 21, 2018, and resulted in five findings and two opportunities for improvement.

• Demonstrate active leadership and progress toward obtaining new Resource Conservation and Recovery Act (RCRA) Permit for the Hanford Site

- o Facilitated and participated in the following meetings:
 - Weekly permit Project Management Team meetings.
 - Weekly permit meeting for Hanford contractors.

- Weekly schedule strategy discussions with Ecology.
- Biweekly schedule status meetings with RL, ORP, Ecology, and contractors.
- Monthly Tier 2 Meeting with RL, ORP, and Ecology Senior Management.
- o Maintained the permit schedule.
 - Provided a detailed monthly schedule report and analysis for progress on the permit to Ecology, RL, ORP, and the contractors.
- o Provided tracking and status of open issues that are preventing progression of the permit.
- o Provided fulltime regulatory expertise and project management support.
- **Quality and timeliness of key documents submitted**
 - o From January through March 2018, 82 environmental documents supporting various CHPRC projects were completed through EP&SP Publication Services. Publication Services was established to provide a systematic process for performing technical editing and formatting of environmental documents. High quality and readability are outcomes from documents that are processed through Publication Services.

Business Services

- **Supply Chain:**
 - o Worked with Soil and Groundwater Project representatives to establish the acquisition plan and procurement strategy for acquiring technical support services to perform Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Fate and Transport Models and other environmental services. This will be a competitive procurement that replaces the current existing agreement.
 - o Researched potential sources that provide metal and/or tensile fabric structures that could be used over large waste site areas.
 - o Participated in the initial project briefing associated with PUREX Tunnel 2 Remediation. Supply Chain issued an Expression of Interest/Sources Sought document for the purposes of seeking industry feedback on concepts for PUREX Tunnel 2 stabilization and methods for partially closing the empty/unused space in the tunnel. Responses were received the first week in February and released to the project for evaluation. Follow-on procurement actions include Site Infrastructure Upgrades, Tunnel 2 Conveyance System Installation, and Tunnel 2 Grout Placement.
 - o Researched potential sources for cameras that can be used in a high-hazard/radiological environment.
 - o Developed a statement of work (SOW) for disassembly of 637 Building at the Project 618-10 work site. The building is no longer needed at the project site, and was disassembled and staged for the purposes of moving to another site or excessing.
 - o Issued four SOWs to perform an independent assessment of the PFP radiological control program.
 - o Received potential contractor responses to Expression of Interest/Sources Sought announcements on the PUREX Tunnel 2 Remediation Project and released them to the project for evaluation.
 - o Made initial contact with the DOE's Supply Chain Management Center regarding potential opportunities for developing a strategic sourcing agreement to supply chemicals for the Hanford Site.
 - o Met with representatives of the 300-296 Remote Soil Excavation Project to develop an appropriate procurement strategy on establishing fixed-price contracts for performing routine equipment maintenance services.
 - o Developed a SOW for the purposes of receiving PFP crisis communication support. Made contact with potential firms to determine availability and interest.
 - o Completed the development of a SOW for independent boiler and pressure vessel inspections in support of Project Technical Services (PTS).

- o Developed a SOW for a subject matter expert (SME) on radiological exposure matters in support of the PFP recovery efforts.
 - o Worked with River Risk Management Project on the development of a SOW for reviewing installation and maintenance of remotely-operated equipment and crane operations in the 324 Building and mockup.
 - o Worked with Integration Management and the River Risk Management Project to address a failure in the sewer system located outside of the 324 Building.
 - o Performed a small business presentation on “Doing Business at Hanford” for the Idaho Small Business Symposium.
 - o Discussed with the Soil & Groundwater Project (S&GP) the field schedule for completing nine HR-3 wells.
- **Facilities & Property Management (F&PM):**
 - o Continued second phase of the MSA-led value engineering study recommendation to reconcile Real Property records in Sunflower with the information in the Facilities Information Management System (FIMS).
 - o Trailer MO6117 has been rerouted to 19th and Bridgeport to support PFP’s Command Center operations.
 - o Facilitated/coordinated set-up of new PFP Command Center trailer complex (10 mobile offices), located south of 289T. Anticipated site-to-completion is April 2018.
 - o Started 2018 Property Inventory Campaign, conducted first fiscal year (FY) 2018 Property Coordinators Meeting on March 22, 2018. Currently, 42 percent complete with inventory campaign, including a “pinging” approach for computers.
 - o MO-6301 relocated from 618-10 to 300-296.
 - o Nearing completion of beneficial occupancy of MO2525 shower trailer for Central Plateau Projects. Expect completion mid-April 2018.
- **Finance:**
 - o 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-FY2015.
 - o January through March month-end completed with no cost suspensions.
 - o Continuing to gather support and create responses for the FY2016 Invoice Assessment. The costs associated with the educational reimbursement and the extended temporary duty issues are being worked through the partnering sessions with RL.
 - o Submitted the final FY2017 Incurred Cost Report to RL.
 - o Submitted FY2018 first quarter International Transactions report to RL finance.
 - o Submitted the CY2017 Property Valuation Report.
 - o Submitted the FY2018 first Quarter reconciliation of RL’s Accounts Payable – Accrued Liabilities account (#2110).
 - o Provided support for the Disclosure Statement #9 revision audit to Cohn Reznick.
 - o Mailed 1099 forms to applicable vendors.
 - o Provided support for an RL Inventory Assessment.
 - o Provided support for an RL Property Recognition and Reporting (CR 4202) Assessment.
- **Human Resources (HR):**
 - o Compensation updated the CHPRC Exempt, Salaried Nonexempt, and Drafter/Designer Salary Structures. The Salary Structures were adjusted upward by 2.1 percent with an effective date of January 1, 2018. CHPRC provided notification of this adjustment to RL via our Position to Market submission in December 2017.
 - o Compensation assisted CH2M HILL Corporate in auditing activities as part of the annual issuance of employee 1095-C forms (Affordable Care Act).

- o Compensation worked with CHPRC Project Controls to provide MSA Benefits with CY2018 Headcount Forecasting for HEWT Budgeting.
- o Conducted brown bag sessions discussing professional development with the EP&SP management team.
- o Implemented the new Washington State Paid Sick Leave law. This included publishing a Management Directive, sending communications to all employees, and establishing the necessary tracking requirements.
- o Engaged with other Hanford contractors to discuss implementation of impending Paid Family Leave state law.
- o Completed the 2018 Affirmative Action Plan.
- o Supported the sitewide policy/approach to establishing the Hanford Workforce Engagement Center.
- **Labor Relations (LR):**
 - o Continue to provide support to PFP Recovery efforts by coordinating resource needs within the CHPRC projects and Other Hanford Contractors (OHCs), as well as hiring temporary employees for certain classifications.
 - o The following is the current status of grievances in the arbitration process:
 - PRC-015-011 – union claiming misassignment of work in regard to respirator maintenance. Status: Arbitration was scheduled for October 11, 2016, but was postponed by mutual agreement as parties work to reach a settlement in the matter. CHPRC continues to await a response from the union on the company’s settlement proposal.
 - PRC-016-044, 049, and 050 – termination. Status: Arbitration scheduled for April 25-26, 2018.
 - PRC-017-010 – union claiming employee should have been paid between time when ready to return to work and when started with MSA. Status: Arbitration postponed by mutual agreement, tentatively scheduled for August 1-2, 2018.
 - PRC-017-017 – union claiming only Nuclear Chemical Operator (NCOs) can issue respiratory equipment. Company recognizes D&D workers as well. Status: Arbitration scheduled May 23, 2018.
 - PRC-017-018 – union claiming company not calculating hours worked correctly when coupled with “R” time. Status: Arbitration scheduled June 6, 2018.
 - PRC-017-039 – union claiming filling out of Electronic Bill of Material [EBOM]). Status: Arbitration scheduled December 12-13, 2018.
 - PRC-017-040 – union claiming exempt performed Excessing of Material. Status: Arbitration scheduled February 21, 2019.
 - PRC-017-042 – union grieving company’s closure of the Plastic Shop at PFP. Status: Arbitration scheduled January 22, 2019.
 - o The following grievances have been requested by Hanford Atomic Metal Trades Council (HAMTC) to move to arbitration and are pending arbitration dates:
 - PRC-017-022 (Shower trailer installation).
 - PRC-017-035 & PRC-017-050 (Jurisdictional – building of supports).
 - PRC-017-045 (Waterline assigned to Building Trades).
 - PRC-017-052 (Termination).
 - PRC-018-001 (Demobilization of equipment on Davis Bacon work site).

- **Procurement:**

- o In the second quarter of FY2018, awarded/amended 432 contracts with a total value of \$22.15 million. Additionally, awarded 605 new material purchase orders (PO) valued at \$1.99 million to support ongoing project objectives.
- o At the end of 114 months of the CHPRC project, procurement volume has been significant: \$2.69 billion in contract activity has been recorded with approximately 56.3 percent, or \$1.51 billion, in awards to small businesses. These awards include 8,085 contract releases, 25,381 POs, and 296,553 PCard transactions.
- o Major contract awards:

Contract/ Release	Award Date	Awarded To	Title	Contract Type	Value
53687-16	1/9/2018	GRAM Northwest	GEO Support for Drilling 5 UP1 Wells, FY18	T&M	\$166,893.16
65197	1/9/2018	Federal Engineers and Constructors Inc.	100 K Waste Sites Remediation & Backfill	FFU	\$3,587,457.30
55747-13	1/10/2018	Apollo Sheet Metal Inc. dba Apollo Mechanical Contractors	Upgrade CSB AH-004	FFP	\$267,440.07
65223-1	1/11/2018	American Electric Inc.	300-296 Project – Electrician Support	LHC	\$617,520.43
55705-6	1/24/2018	Intermech Inc.	PUREX Tunnel 2 Investigation and Design Support	T&M	\$200,277.20
54177-79	2/1/2018	INTERA Incorporated	Development of Baseline Risk Assessment for 200-DV- 1 RI	T&M	\$604,771.00
65340	2/13/2018	Mid Columbia Engineering Inc.	Project W-135 Technical Support Services	T&M	\$469,993.06
65551	2/15/2018	James Fisher Technologies LLC	HVAC Exhaust Dams and Snorkel System	T&M	\$338,377.52

Contract/Release	Award Date	Awarded To	Title	Contract Type	Value
64033-1	2/15/2018	Yellow Jacket Drilling Services LLC	Install 2 Injection Wells in the 200-ZP-1 OU, FY18	FFU	\$734,944.00
65547	2/20/2018	Mid Columbia Engineering Inc.	Floor Saw System	T&M	\$404,840.94
65723-1	2/22/2018	OJEDA	PFP Water Loop - Alternate Source	T&M	\$91,795.60
48768-11	2/28/2018	Carpenter Drilling LLC	The Installation Of Three Dual-Purpose Wells, Plus One Optional D	FFP	\$409,350.00
44438-63	3/13/2018	DGR Grant Construction Inc.	PFP Recovery Material Storage Fencing And Gates	FFP	\$84,500.00
36883-75	3/16/2018	OJEDA	Cementitious Grout Analysis	FFP	\$95,500.00

Prime Contract and Project Integration (PC&PI)

- **Project Management/Compliance Assessments**

- o Preparation and the disposition of eight Baseline Change Requests (BCRs) by the Change Control Board (CCB) was facilitated in January, thirteen BCRs in February, and fourteen BCRs in March by Project Management/Compliance Assessments as part of their responsibility as CHPRC CCB coordinator.
- o During January through March, Project Management/Compliance Assessments supported efforts by the 618-10 and Sludge Retrieval Projects to work with RL to prepare for the submittal of Critical Decision (CD)-4, *Approve Start of Operations or Project Completion*, documentation as required by DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*. CD-4 is the achievement of the project completion criteria defined in the Project Execution Plan (PEP), the approval of transition to operations, and it marks the completion of the execution phase.
- o During January, the Project Management/Compliance Assessments organization supported a request from the DOE General Accounting Office (GAO) passed through the RL Assistant Manager for River and Plateau (AMFP) for information on CHPRC's Earned Value Management System (EVMS).
- o During March, in their role as the CHPRC Technical Authority for DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, Project Management/Compliance Assessments reviewed and commented on the draft PEP for the PUREX Tunnel 2 Stabilization Project.

- **Prime Contract Compliance (PCC):**
 - During January through March, PCC received and processed nine contract modifications (645-653) from RL.
 - The Correspondence Review Team received and determined the distribution for 155 incoming letters/documents. The PCC manager reviewed 110 outgoing correspondence packages.
 - Submitted CHPRC-1800571R1 – “Notification of Change Regarding National Environmental Policy Act of 1996 Determinations.”
 - Submitted CHPRC-1800204R1 – “Notification of Change Regarding Replacement of the Radiological Access Control/Entry System Program in Fiscal Year 2018.”
 - Submitted CHPRC-1800348 – “Notification of Change Regarding Issuance of 10 Code of Federal Regulations 851, Worker Safety and Health Program, Technical Amendment.”
 - Submitted CHPRC-1800491 – “Notification of Change in CHPRC Responsible Corporate Official.”
 - Submitted CHPRC-1800623 – “Notification of Constructive Change Regarding the Uranium Reactive Gas Sequestration Treatability Test Postponement.”
- **Information Management:**
 - Processed 123,315 electronic records into the Integrated Document Management System (IDMS).
 - Continued desktop computing equipment upgrade project in support of HLAN Windows 10 implementation to be completed in FY2018. To date 290 computers have been refreshed.
 - Completed Primavera P6 upgrade to version 17.7.
- **Project Integration**
 - Project Support, Systems Integration & Schedule Integration
 - Developed, implemented, and trained Project Controls staff on using the automated tool for validations and quality checks on BCRs.
 - Developed and implemented a monthly performance automated e-CAM notebook report.
 - Completed the upgrade and data quality checks of the scheduling tool (Primavera P6 v17.7) and the schedule analysis tool (Acumen 8.1).
 - Completed testing for upgrade of Cobra 8.1 Planning database. This kicks off the upgrade of six Cobra databases and the Project Management Reporting System (PMRS), to be completed throughout the month of April.
 - Developed a Project Controls (Analyst) monthly processing SharePoint training site.
 - Developed an EVMS system/tool training program and presented during the three-day Earned Value Professional Certification (EVPC) course given to CHPRC personnel. In addition, prepared and presented overviews of Work Authorization, Variance Analysis Reporting (VAR) Tool, and Cobra/PMRS.
 - Teamed with Washington River Protection Solutions LLC (WRPS) to put together a presentation for the Energy Facility Contractor’s Group (EFCOG) on the state of the Integrated Master Schedule (IMS) complex-wide and what is being done to improve and implement scheduling best practices.
 - Completed and issued the second quarter RL Key Deliverables report.
 - Submitted final package for WSA PC&PI-2018-WSA-19490, conducted Assessment of the FY2018 Work Authorization Documents. The assessment was to evaluate the proper flow down of the WADs, and assure the processing of records into IDMS. One opportunity for improvement was identified for better training of project personnel.
 - Completed corrective actions CR-2017-1574, initiated by WSA PC&PI-2017-WSA-18633, Effectiveness of the CHPRC Work Authorization Process related to scope associated with Notices of Change (NOC). Actions included updates to the Work Authorization procedure PRC-PRO-PC-40081 and the Work Authorization Implementation Guide PRC-GD-PC-40082.

- o Estimating & Program Support
 - Completed development of one change proposal (CP)/request for equitable adjustment (REA):
 - REA 013 PRC 1682 - Support Approval of Solid Waste Operations Complex (SWOC) Permit Part B, Work After Public Comment.
 - Completed cost evaluations for CPs/REAs to support the anticipated global settlement:
 - CP 041 306 1596 - 618-10 Burial Ground.
 - CP 041 306 1597 - RCCC Remaining Closure Operations.
 - CP 041 306 1600 - 316-4 Waste Site.
 - CP 041 306 1610 - 300-63 Waste Site.
 - CP 041 306 1615 - Surveillance & Maintenance Sites RCCC Transition Add-Ons.
 - CP 030 318 1618 - 200-WA-1 and 200-BC-1 Operable Units Characterization – Completed.
 - Continued cost evaluations for CPs/REAs to support the anticipated global settlement: CP 012 327 1646 - Sludge Retrieval Project (SRP) Acceleration of 105KW and T Plant
 - CP 013 311 1625 - Emergency Response for Facility/Waste Site ESH&Q or Remediation (roof, misc.)
 - CP 040 324 1641 - Miscellaneous PBS RL-040 Work Scope.
 - CP 041 305 1616 - 300-296 Waste Site Design Change, Initiate Procurements, Initiate Testing, and Initiate Removal of Debris.
 - CP 041 306 1613 - Minor Capital Funded Projects RCCC Transition Add-Ons.
 - CP 041 328 1656 - 300-296 Waste Site Additional Scope
 - CP 041 330 1662 - 100K FY2018 Waste Site Remediation Activities
 - Miscellaneous estimating support:
 - CP 040 PRC 1688 - PUREX Tunnel 2 Stabilization
 - CP 011 PRC 1691 - PFP Stabilization and Disposition.
 - CP 011 PRC 1692 - PFP Recovery Phased Approach.
 - CP 040 PRC 1693 - REDOX Stack Upgrade.
- o 000 Project EVM Support & Reporting:
 - Issued three months of CHPRC Monthly Performance Reports to RL.
 - Submitted the January, February, and March Gold Metrics to RL.
 - Submitted the FY2018 FIMS Required Maintenance Report to MSA.
 - Completed Safety Hour reporting each month.
 - Compiled Integrated Project Team (IPT) and Monthly Project Review packages for January, February, and March.
 - Prepared monthly Indirect Project Review packages.
 - Performed and drafted PS&PI-2018-WSA-19242, *MSA Contract Coding Assessment*. Reviewed all MSA contract releases for proper resource category coding.
 - Performed and drafted PS&PI-2018-WSA-19244, *Effectiveness of Maintenance & Operating Cost Corrective Actions Assessment*. Reviewed use of Code of Accounts (COA) in relation to maintenance control account and Work Charging Authorization.
- **Program Integration**
 - o Interface Management:
 - Initiated internal review of the J.13/J.14 contract table updates. Primary areas of update include reassignment of River Corridor Closure Contract waste sites and removal of demolished facilities.
 - Completed reviews and concurrence on MSA Service Delivery Documents.
 - Facilitated temporary agreements involving shared responsibilities with MSA service providers in response to new work control and radiological boundaries at PFP. Specifically,

- this included work to address Near Field Monitoring sampling and the removal of bulk tumbleweeds from facility collection areas.
- Provided initial input of CHPRC data to MSA for the annual Infrastructure Services and Alignment Plan.
 - Facilitated mobile office trailer swap with WRPS. Trailers involved include MO409, MO354, and MO386.
 - Completed evaluation and obtained WRPS approval for continued storage of archive samples at 222-S. Letter transmitted to WHL as requested.
 - Issued PRC-AIA-MSA-03299, Revision 0, Administrative Interface Agreement between CHPRC and MSA for Waste Site Interfaces related to Sewer Upgrade Project L-853/854 and HNF-46148, Revision 4, ICD between MSA and CHPRC for Water System Services.
- o Risk Management:
- Completed first quarter risk register reviews, and initiated second quarter FY2018 risk register updates.
 - Supported Truthful Cost or Pricing Data (TCOPD) updates as identified above under Project Integration.
 - Conducted monthly assessments of the status of key project risks, and risk impacts associated with BCRs.
 - Conducted CHPRC Min-Safe analysis to identify potential opportunities for cost efficiencies.
 - Initiated Post Contract Baseline Planning to support assumed scope identified in the post contract period IPL.
- o Strategic Management:
- In February and March 2018, Strategic Management began detailed scope planning for FY2019, to determine priorities and align to the approved RL IPL. As part of this effort, a FY2019 Budgetary Needs presentation was produced and provided to RL to support funding requests. Proposed funding targets for FY2019, FY2020, and FY2021 were created, and initial targets were provided to the projects.
 - Strategic Management is supporting the Post Contract Baseline Planning effort, including a variety of staffing reports, IPL funding requirements, and work analysis.
 - Strategic Management continued their support of long range planning for the Central Plateau and River Corridor projects. From January to March, support included lifecycle planning at the 100K closure area, and planning risk mitigation work at the Central Plateau for project breakdown structure (PBS) RL-0040. Strategic Management continues to provide support to the projects to enhance their successful cleanup strategy.
 - Strategic Management continues partnering with the Environment Program & Strategic Planning group on long-term cleanup initiatives. Focus during January through March 2018 was providing RL with detailed long-range planning (LRP) assumptions for each project, producing a variety of graphics to support cleanup strategy, and participating in internal planning meetings and workshops to support the AMRP cleanup strategy.
 - In the quarter, Strategic Management compiled and provided updates to the internal IPL based on actuals from January, with a new FY2018 estimate at completion (EAC) calculated based on the January forecasts. An analysis and corrective actions for identified deltas for the new EAC to the planned increment was prepared and responded to by the projects as part of overall performance analysis. Change forms for the IPL were submitted to RL, and an approved Execution Year Priority List was approved by RL in March 2018, which included the Integrated Disposal Facility (IDF) to move to the funded priorities. Updates to the IPL will again be submitted to RL following the March forecasts.
 - Strategic Management continued to implement tracking to the LRP scope to document LRP changes and ensure accurate planning as FY2018 progresses.

- A revision to the Productivity Tracking Log (PTL) standard was issued in March 2018, which uses current project process to provide key data and decision-making information. This update will streamline the reporting, allowing additional projects to report, and use existing metrics.

PTS

- Training and Procedures
 - o Supported field activities by developing new training plans and scheduling all training for new HOLT drillers.
 - o Partnered with technical authorities to analyze procedure actions that have not proceeded in the process in the last 90 days. Assisted the TAs in determining if there is a valid reason for the inactivity, if work should resume on the procedure update, or if the procedure action should be discontinued.
 - o Removed course #020445, *DOE-0346 Hanford Site Fall Protection Program Revision 2 Gap Training*, from CHPRC training templates. This course material has now been incorporated into the initial training, which is based on the site-wide standard.
 - o Worked with HAMMER staff to open additional course sessions for high priority, safety-related training. First was forklift training to support urgent needs at PFP. Second was a broader request to open additional sessions of RadWorker II, 40-HR HAZWOPER, Respiratory Refresher, and Authorized Worker/Lockout/Tagout (LOTO). These were needed to allow some flexibility to reschedule employees, if necessary, over the course of the next two months.
 - o Worked with senior management and subject matter experts (SMEs) to issue a high-priority management directive on increased CHPRC oversight of the Hazardous Energy Control process. This urgent request was turned around in less than eight hours.
 - o Prepared training plans and scheduled classes for continuing PFP staff augmentation efforts (Radiological Control Technicians [RCTs] and D&D workers.)
 - o Coordinated with HAMMER to schedule a block of training for out-of-state subcontractor Yellow Jacket Drillers for upcoming groundwater project support.
 - o Conducted new training course (#600620) Fluid Systems Isolation, with PTS Field Work Supervisors (FWS). This was the first in a series of courses being developed to improve fundamental systems knowledge of FWS.
 - o Procured two training material development software programs (Adobe Creative Cloud and Adobe Captivate) to enhance the presentation of computer-based training (CBT), including tutorials and closed-captioning for the hearing impaired (508 compliance).
- Operations Program
 - o ConOps/Work Control/Conduct of Work
 - Updated the Conduct of Operations Applicability Matrix. The matrix is currently in the review and comment resolution phase.
 - Conducted an initial analysis of recent LOTO reportable events for the presentation to the Facility Managers Forum.
 - Began development of the FWS System Isolation fundamentals training module.
 - Partnered with KBOPR, W&FM, and 300-296 to conduct Start-up/Readiness Team Collaboration Meetings.
 - Submitted and approved a minor revision to PRC-PRO-OP-055, Startup Readiness, to support corrective action from PFP readiness lessons learned.
 - Participated in the DOE-0336 LOTO site committee meetings.
 - Supported the CHPRC Hazardous Energy Control Technical Review Board (HECTRB) meetings.
 - Supporting hazardous energy common cause evaluation.

- Consolidating status for open frame breaker maintenance.
- Completed triennial assessment of the Nuclear Maintenance Management Program (NMMP).
- Supported Common Cause Analysis for Hazardous Energy Control Events.
- Collecting data for breaker maintenance assessment.
- Assigned acting Work Management Technical Authority.
- Attended critique for Drain Tap installation on PFP fire system loop.
- Breaker Maintenance WSA.
- Provided completed annual LOTO assessment to all projects.
- o Emergency Preparedness (EP)
 - Scheduled a facility managers working team session on Facility Emergency Response Organization (FERO) staffing efficiency improvements.
 - Partnered with the Environmental group, CHPRC Facility Management, and MSA on the transition of the Building Emergency Plans and Facility Response Plans to the new format.
 - Attended EP quarterly manager Forum with Hanford Site EP managers, MSA, and RL.
 - Attended EP Hanford Site Drill Coordinator workshop on security threat support.
 - Participated in independent Waste and Fuels Management Project EP Program assessment.
 - Conducted CHPRC EP Program status and integration meeting with MSA emergency management.
 - Conducted FERO status and staffing working group with the Facility Manager’s Forum.
 - Attended workgroup with Industrial Hygiene to review chemical screening process and responsibilities.
 - Conducted EP Program Drill Report training and expectation review.
 - Held Emergency Preparedness workgroup on Universal FERO Support Plan and Drill Package Template Final Draft Review.
 - Developed Draft of the FERO Staffing Improvement Recommendations/Plan for presentation to Facility Managers Task Team on March 29, 2018.

Communications:

Communications supported RL in proactive and reactive media stories:

- Tri-City Herald
 - o (February 8, 2018), Radioactively contaminated Richland building coming down.
 - o (February 20, 2018), Radioactive contamination found in ‘clean’ cars, says Hanford watchdog.
 - o (March 19, 2018), New manager named for troubled Hanford demolition project.
 - o (March 22, 2018), 42 Hanford workers contaminated with radiation. Test results released.
- EM Newsletter
 - o (January 30, 2018), Hanford Workers Enter Reactor to Prepare for Cocooning.
 - o (February 13, 2018), Procurements Benefit Communities.
 - o (March 20, 2018), Inventive Employees Build Replica, Tools to Improve Groundwater Cleanup.
- Communications supported RL in the development of social media posts featuring:
 - o PFP progress updates.
 - o Sludge Removal Project.
 - o 324 Building Mockup Facility.
 - o Backfilling 17 waste sites in 100 Area.
 - o 618-10 Burial Ground completed.
 - o Groundwater Treatment Program.
 - o Engineer’s Week.
 - o Project Management Institute’s Project of the Year.

- Communications supported RL in the development of presentations and documents:
 - o Hanford Advisory Board (HAB) River and Plateau (RAP) Committee Meeting in Richland on January 8, 2018. Presentations and discussions included the latest about improving worker safety and health at Hanford, the PFP, and PUREX tunnels.
 - o HAB RAP meeting on February 6, 2018, worked on 100 B/C presentation with RL and EPA, 324 Building Disposition Project, and WESF presentations and PFP support.
 - o HAB meeting in Richland on March 7, 2018. Presentations included an agency update on the 324 Building Disposition Project, 618-10 Project, K Basin Sludge, Groundwater, PFP, and PUREX Tunnels.
 - o PUREX Tunnels Public Meeting presentation developed for RL. The meeting was held March 14, 2018, at the Richland Public Library. The presentation supported RL's discussion on the path forward for stabilizing PUREX Tunnel 2 and answered questions from the public.
 - o Oregon Department of Energy Cleanup Board Meeting, was held on Tuesday, March 20, 2018. The presentation was on K Basin Sludge Removal and PFP.
 - o RL Public Tour Script for tour guides and updated photos and graphics for public tour.

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	0.2	0.0	0.0%	(0.0)	-14.5%
Internal Audit	0.2	0.2	0.1	0.0	0.0%	0.1	56.9%
General Counsel	0.2	0.2	0.1	0.0	0.0%	0.1	35.8%
Communications	0.1	0.1	0.1	0.0	0.0%	0.0	0.4%
Safety, Health, Security, and Quality	1.3	1.3	1.2	(0.0)	-0.1%	0.1	8.0%
Environmental Program and Strategic Planning	0.5	0.5	0.4	0.0	0.0%	0.1	17.0%
Business Services	2.4	2.4	2.1	0.0	0.0%	0.3	12.5%
Prime Contract and Project Integration	2.3	2.3	2.0	0.0	0.0%	0.3	13.8%
Project Technical Services	0.8	0.8	0.8	(0.0)	-0.2%	0.1	6.8%
Indirect WBS 000 Total	8.1	8.1	7.1	(0.0)	-0.0%	1.0	12.5%

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: (+\$1.0M/+12.5%)

The positive cost variance is attributable to lower subcontractor cost realized than planned in Internal Audit due to time phasing of subcontractors performing incurred cost audits on a milestone invoicing schedule. Additionally, lower subcontractor cost is due to desktop computing equipment purchases made in the prior year that were originally planned for this year, as well as less user based services support required than planned. Also, organizations have been operating at leaner staffing levels due to open vacancies, workforce restructuring impacts, and unplanned absences due to personal injury.

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	0.9	0.9	1.0	0.0	0.0%	(0.0)	-1.6%	2.0
Internal Audit	0.9	0.9	0.3	0.0	0.0%	0.5	61.2%	1.9
General Counsel	0.8	0.8	0.5	0.0	0.0%	0.3	32.3%	1.6
Communications	0.6	0.6	0.6	0.0	0.0%	0.0	0.7%	1.3
Safety, Health, Security and Quality	6.5	6.5	6.3	0.0	0.0%	0.1	2.3%	13.6
Environmental Program and Strategic Planning	2.6	2.6	2.1	0.0	0.0%	0.4	17.3%	5.5
Business Services	11.4	11.4	11.1	0.0	0.0%	0.4	3.2%	24.1
Prime Contract and Project Integration	11.3	11.3	10.6	0.0	0.0%	0.7	6.0%	23.9
Project Technical Services	4.0	4.0	3.8	(0.0)	-0.2%	0.1	3.1%	8.4
Indirect WBS 000 Total	39.0	39.0	36.4	(0.0)	-0.0%	2.5	6.5%	82.3

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: (+\$2.5M/+6.5%)

The positive cost variance is attributable to less labor cost than budgeted due to workforce restructuring impacts, open vacancies, project needs, as well as unplanned absences higher than planned. Also contributing to the positive variance is lower subcontractor cost realized than planned in Internal Audit due to time phasing of subcontractors performing incurred cost audits on a milestone invoicing schedule. Additionally, lower subcontractor cost is due to desktop computing equipment purchases made in the prior year that were originally planned for this fiscal year. Furthermore, CHPRC received an unplanned PCard rebate of \$178K. The positive cost variance is partially offset by unplanned box van rentals to store furniture, higher than planned Abadan copier costs, unplanned cut/cap of trailer MO885, higher than planned city of Richland utility bill, higher than planned facility lease costs, and higher than planned MSA maintenance/janitorial support. Also offsetting the positive variance is increased dosimetry due to bioassay costs associated with the December contamination issue at PFP.

Appendix C Capital Asset Projects



March 2018
CHPRC-2018-03, 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)



K. A. Wooley
(Acting) Vice President for
Plutonium Finishing Plant
Closure Project

March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress has been temporarily put on hold on work associated with critical decision (CD) 4 closure to remove the final glovebox from the 234-5Z facility during demolition. Remaining glovebox (HA-46) has been staged until the area of the 234-5Z facility is demolished. The total number of gloveboxes removed to date is 173 and is 99 percent complete.

The following are key metrics associated with this Capital Asset Project (CAP).

<i>Key Metrics</i>	<i>Current Month Plan</i>	<i>Current Month Actuals</i>	<i>Cumulative Plan</i>	<i>Cumulative Actuals</i>
Glovebox/Hood Removed	-	0	174	173
COMPLETE KPP Rooms/Areas Ready for Demo	-	0	72	72 rooms/areas

KEY ACCOMPLISHMENTS

RL-0011_C1 Accomplishments

- Accomplishments to achieve stabilization following the December 2017 contamination event include:
 - o Application of fixative to trailers, remaining structures, and debris piles within the Plutonium Finishing Plant (PFP) Complex.
 - o Continued maintenance applications of fixative.
 - o Routine radiological surveys.
 - o Expanded the Radiological Buffer Area (RBA).
 - o Continued hauling of pit run and staging it on the east and west ends of the High Contamination Area (HCA)/Airborne Radioactivity Area (ARA).
 - o Extra radiological surveys when sustained winds were 20 miles per hour or greater.
 - o Installed a new decontamination tent to support radiological surveys.
 - o Approximately 70 percent complete with installation of new trailer village outside the PFP RBA boundary.
 - o Completed Conduct of Operations Self-Assessments.
 - o All bio-assay results were received and communicated to individuals potentially affected by the contamination event.
 - o Electrical and water isolations were completed in the trailer village to support the revised work boundary.

MAJOR ISSUES

On December 15, 2017, contamination was found outside of the established PFP radiological boundaries. On December 18, 2017, follow-up radiological surveys found additional contamination present in the administrative office area. Work was stopped after the second event, pending completion of a root cause analysis (RCA) and development of a recovery plan. CHPRC is continuing to work on finalizing the RCA and working with RL and regulators to develop a recovery plan to enable demolition activities to resume. This will allow for the removal of the final glovebox remaining in 234-5Z.

CORRECTIVE ACTION LOG

Reference Appendix C.1 Format 5 for specific corrective actions for this CAP.

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 spotlight chart:						
No major changes to the spotlight chart in March. However, risk elicitation have been conducted to align with the proposed path forward to re-start demolition activities.						
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)						
PFP-DEMO-21: Glovebox/Equipment Removal/Demolition Material	A material handling event (e.g., dropped piece of process equipment) occurs during the PFP demolition, resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$150K, 30 days	●	↑	Risk Trigger: During pre-demolition/demolition activities in fiscal year (FY) 2018.		
				Mitigation action(s)	FC Date	%
				None identified at this time.	N/A	N/A
Mitigation Assessment: No major changes in March. The mitigation strategies have been put in place; as a result, the risk strategy is to accept with no further mitigation actions identified at this time. PFP will continue to adhere to the CHPRC Integrated Safety Management System (ISMS) program/hoisting and rigging program to include detailed analyses of potential hazards and identification of preventive measures to implement prior to starting the work. At this time, no alternative course of actions are needed. One glovebox remains in the 234-5Z facility (HA-46) and will be removed once demolition resumes. Additional special handled waste packages remain in the 234-5Z duct level and basement.						
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 SCHEDULE

The PFP CAP 1 Critical Path schedule begins with the continuation of front side demo Core Stabilization Zone (CSZ) 2.5 in 234-5Z. After front side CSZ 2.5 is complete, Remote Mechanical C (RMC) process line and Remote Mechanical A (RMA) process line demo will come next, followed by surgical removal of HA-46 from 234-5Z. This leads to CD-4 declaration and confirmation of completion worksheet. The CD-4 closeout complete is December 6, 2018. The dates above are reflective of the known actions and recovery efforts associated with a contamination event that occurred in December as of March month-end closing and will be updated as more information is made available from the RCA and recovery plan.

SCHEDULE MARGIN/MANAGEMENT RESERVE

Reference Appendix C.1 Formats 1, 2, 3, and 5 for specific schedule margin/management reserve (MR) 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	11/30/17	12/06/18	<p>Progress has been temporarily put on hold on work associated with CD-4 closure to remove the final glovebox from the 234-5Z facility during demolition. On December 15, 2017, swing shift 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 was held to discuss the contamination spread, possible causes, and a path forward. A RCA is being conducted, and recovery actions and expected completion dates will be identified after it has been completed. There was a 77-day loss since February as a result of corrective actions that were known at March month-end that have been incorporated into the current recovery schedule to resume demolition activities.</p> <p>The total gloveboxes removed to date remains at 99 percent complete. Completion of CD-4 closure by November 30, 2017, was not achieved.</p>

*Due date reflects CD-4 due date with DOE contingency.

**Forecasted Date reflects CD-4 due date without DOE contingency.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

Nothing to report at this time.

DOE ACTIONS / DECISIONS

Working with RL on CD-4 closure actions. CD-4 closure date of November 30, 2017, was not met.

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



March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

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) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE				REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST	SCHEDULE	BUDGET	BUDGETED	ESTIMATED	VARIANCE
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)	VARIANCE (12a)	VARIANCE (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	254,706	279,989	-19	-25,284	0	0	0	254,725	280,004	-25,279
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	315,133	332,570	-19	-17,437	0	0	0	315,152	332,584	-17,432
f. MANAGEMENT RESERVE														2,393		
g. TOTAL	0	0	0	0	0	315,152	315,133	332,570	-19	-17,437	0	0	0	317,545		

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 RL_0011_C1 - PFP D&D (ARRA/Base)		a. FROM (YYYYMMDD) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES (YYYYMMDD) 2009 / 09 / 18			

5. PERFORMANCE DATA															
WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)												AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 APR 2018 (4)	+2 MAY 2018 (5)	+3 JUN 2018 (6)	+4 JUL 2018 (7)	+5 AUG 2018 (8)	+6 SEP 2018 (9)	FY19 (10)	1st QTR FY19 (11)	2nd QTR FY19 (12)	FY19-LC (13)	ATCOMPLETE (14)		
35 - Business Services	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
3B - PFP Closure Project	0	15442	0	0	0	0	0	0	0	1	0	0	0	0	15443
g. TOTAL DIRECT	0	15459	0	0	0	0	0	0	0	1	0	0	0	0	15460

Appendix C.2

Capital Asset Project

RL-0011.C2 - Demolition of PFP Facilities



K. A. Wooley
(Acting) Vice President for
Plutonium Finishing Plant
Closure Project

March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress on demolition at the Plutonium Finishing Plant (PFP) is on hold while recovery actions are implemented. Due to the December contamination event, additional recovery actions, radiological monitoring, and radiological controls are being utilized. Once all mitigating actions are complete, the stop work will be lifted and demolition will continue.

The following are key metrics associated with this Capital Asset Project (CAP).

<i>Key Metrics</i>	<i>Current Month Plan</i>	<i>Current Month Actuals</i>	<i>Cumulative Plan</i>	<i>Cumulative Actuals</i>
COMPLETE Cold and Dark/Demo Ready activities for 234-5Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 236-Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 242-Z	-	-	1	1
COMPLETE Cold and Dark/Demo Ready activities for 291-Z	-	-	1	1
Complete Cold and Dark/Demo Ready activities for PFP Ancillary Facilities	-	-	15	14
Complete Demolition of 234-5Z	-	-	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	14
Turnover Facility to Long Term Surveillance & Maintenance	-	-	-	-

KEY ACCOMPLISHMENTS

RL-0011_C2 Accomplishments

- Accomplishments to achieve stabilization following the December 2017 contamination event include:
 - o Application of fixative to trailers, remaining structures, and debris piles within the PFP Complex.
 - o Continued maintenance applications of fixative.
 - o Routine radiological surveys.
 - o Expanded the Radiological Buffer Area (RBA).
 - o Continued hauling of pit run and staging it on the east and west ends of the High Contamination Area (HCA)/Airborne Radioactivity Area (ARA).
 - o Extra radiological surveys when sustained winds were 20 miles per hour or greater.
 - o Installed new decontamination tent to support radiological surveys.
 - o Approximately 70 percent complete with installation of new trailer village outside the PFP RBA boundary.
 - o Completed Conduct of Operations Self-Assessments.
 - o All bio-assay results were received and communicated to individuals potentially affected by the contamination event.
 - o Electrical and water isolations were completed in the trailer village to support the revised work boundary.

MAJOR ISSUES

On December 15, 2017, contamination was found outside of the established PFP radiological boundaries. On December 18, 2017, follow-up radiological surveys found additional contamination present in the administrative office area. Work was stopped after the second event, pending completion of a root cause analysis (RCA) and development of a recovery plan. CHPRC is continuing to work on finalizing the RCA and working with RL and regulators to develop a recovery plan to enable demolition activities to resume.

CORRECTIVE ACTION LOG

Reference Appendix C.2 Format 5 for specific corrective actions for this CAP.

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.C3 (CAP.2)										
Explanation of major changes to the project monthly stoplight chart: No major changes to the stoplight chart in March. However, risk elicitation have been conducted to align with the proposed path forward to re-start demolition activities.										
Realized Risks (Risks that are currently impacting project cost/schedule)										
PFP-DEMO-12: PFP/PRF Demolition Contamination Levels	Contamination levels on the canyon walls, floors, ventilation ducts, and the remaining areas of PFP will be higher than expected, thus requiring more stringent controls than expected or larger than expected waste volumes, resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$1.5 million, 22 days	●	↔	<p>Risk Event: On December 15, 2017, swing shift 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.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 80%;">Risk recovery action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>See Below</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Risk Action Assessment: 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 RCA is being conducted, and recovery actions and expected completion dates will be identified after it has been completed. During March, recovery actions from the contamination spread continued. They included:</p> <ul style="list-style-type: none"> Placement of sand and soil over contaminated debris to prevent further contamination spread. Radiological surveys, decontamination, and pressure washing to release trailers/vehicles/equipment. Implementation of additional radiological monitoring (i.e., CAMS, cookie sheets). Mobilization of supplies and equipment to maintain the PFP footprint in a safe configuration. Application of fixatives (i.e., paints, stabilization agents) to items and areas on the PFP work control zone. Maintenance, repair, and rebuild of existing equipment and systems in a safe/compliant configuration. Initiation of activities to reconfigure boundaries, canister transfer areas, loadout areas, and waste storage areas to accommodate larger work control zone. Reconfiguration of equipment in the PFP work control zone to support stabilization activities (water systems, foggers, etc.). 	Risk recovery action(s)	FC Date	%	See Below	Ongoing	N/A
Risk recovery action(s)	FC Date	%								
See Below	Ongoing	N/A								

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0011/WBS-011.05.C3 (CAP.2)										
PFP-DEMO-16: Contamination Spread Beyond Established Boundaries	<p>Unplanned transport of contamination from posted areas due to dust suppression liquid flow, natural events, or wildlife result in cost impacts and schedule delays.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Medium (26% to 74%) Worst Case Impacts: \$3 million, 30 days</p>	●	↔	<p>Risk Event: On December 18, 2017, contamination was found in the project’s administrative office area during a follow-up survey conducted after a spread of low-level contamination was found on December 15, 2017, outside of the expanded control zones. Surveys also found contamination on personal vehicles that had been driven off the Hanford site.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Risk recovery action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>See Below</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p>Risk Action Assessment: A CHPRC management stop work on demolition activities was declared and a critique held to discuss the contamination spread, possible causes, and path forward. An RCA is being conducted, and recovery actions and expected completion dates will be identified after it has been completed. During March recovery actions from the contamination spread continued. They included:</p> <ul style="list-style-type: none"> Placement of sand and soil over contaminated debris to prevent further contamination spread. Radiological surveys, decontamination, and pressure washing to release trailers/vehicles/equipment. Implementation of additional radiological monitoring (i.e., CAMs, cookie sheets). Mobilization of supplies and equipment to maintain the PFP footprint in a safe configuration. Application of fixatives (i.e., paints, stabilization agents) to items and areas on the PFP work control zone. Maintenance, repair, and rebuild of existing equipment and systems in a safe/compliant configuration. Initiation of activities to reconfigure boundaries, canister transfer areas, loadout areas, and waste storage areas to accommodate larger work control zone. Reconfiguration of equipment in the PFP work control zone to support stabilization activities (water systems, foggers, etc.). 	Risk recovery action(s)	FC Date	%	See Below	Ongoing	N/A
Risk recovery action(s)	FC Date	%								
See Below	Ongoing	N/A								
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
FY2018 Risk Triggers (Risk could be realized in FY2018)										
PFP-DEMO-05: Inclement Weather	<p>Inclement weather, including moderate winds, low or high temperatures, and thunderstorms will impact the demolition of PFP.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Medium (26% to 74%) Worst Case Impacts: \$0K, 32 days</p> <p>*Cost increase will result in cost-per-day impacts from crews and hotel load.</p>	●	↔	<p>Risk Trigger: Extreme cold temperature, accumulating snow showers resulting in site delays/closures, and high winds.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Mitigation action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Implement overtime (OT) shifts as necessary to mitigate further impacts associated with weather.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: During March, three days were partially impacted by high winds. The risk remains critical due to potential high-wind, winter weather delays, and cold temperatures having the ability to impact the planned demolition. The PFP project will continue to adjust the daily work scope to plan for projected weather impacts.</p>	Mitigation action(s)	FC Date	%	Implement overtime (OT) shifts as necessary to mitigate further impacts associated with weather.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Implement overtime (OT) shifts as necessary to mitigate further impacts associated with weather.	Ongoing	N/A								

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0011/WBS-011.05.C3 (CAP.2)										
PFP-DEMO-07: Removal/Extraction of Equipment Takes Longer Than Planned	Controlled demolition of equipment, gloveboxes and portions of the crosscutting process support systems (i.e. ventilation) result in cost impacts and schedule delays. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$3 million, 60 days			<p>Risk Trigger: On December 15, 2017, swing shift 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.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>See Below</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: 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 RCA is being conducted, and recovery actions and expected completion dates will be identified after it has been completed. During March, recovery actions from the contamination spread continued. They included:</p> <ul style="list-style-type: none"> • Continuation of radiological surveys, decontamination, and pressure washing to release trailers/vehicles/equipment. • Continuation of additional radiological monitoring (i.e., CAMs, cookie sheets). Application of fixatives (i.e., paints, stabilization agents) to items and areas on the PFP work control zone. • Maintenance, repair, and rebuild of existing equipment and systems in a safe/compliant configuration. • Continuation to reconfigure boundaries, canister transfer areas, loadout areas, and waste storage areas to accommodate larger work control zone. • Reconfiguration of equipment in the PFP work control zone to support stabilization activities (water systems, foggers, etc.). 	Mitigation action(s)	FC Date	%	See Below	Ongoing	N/A
Mitigation action(s)	FC Date	%								
See Below	Ongoing	N/A								
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
PFP-DEMO-21: Glovebox/Equipment Removal/Demolition Material	A material handling event (e.g., dropped piece of process equipment) occurs during the PFP demolition, resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$150K, 30 days			<p>Risk Trigger: During pre-demolition/demolition activities in fiscal year (FY) 2018.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in March. The mitigation strategies have been put in place; as a result, the risk strategy is to accept with no further mitigation actions identified at this time. PFP will continue to adhere to the CHPRC Integrated Safety Management System (ISMS) program/hoisting and rigging program to include detailed analyses of potential hazards and identification of preventive measures to implement prior to starting the work. At this time, no alternative course of actions are needed. One glovebox remains in the 234-5Z facility (HA-46) and will be removed once demolition resumes. Additional special handled waste packages remain in the 234-5Z duct level and basement.</p>	Mitigation action(s)	FC Date	%	None identified at this time.	N/A	N/A
Mitigation action(s)	FC Date	%								
None identified at this time.	N/A	N/A								
Unassigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in March .										

CRITICAL PATH SCHEDULE

The PFP Critical Path schedule begins with the continuation of front side demo Core Stabilization Zone (CSZ) 2.5 in 234-5Z. After front side CSZ 2.5 is complete, Remote Mechanical C (RMC) process line and Remote Mechanical A (RMA) process line demo will come next, followed by completion of the basement of 234-5Z demolition. The 234-5Z demolition completes October 16, 2018. The 236-Z canyon demolition will then resume with completion scheduled for a December 18, 2018. Completion of demolition is followed by C2 CD-4 closeout paperwork activities leading to completing CD-4 on March 14, 2019. The dates above are reflective of the known actions and recovery efforts associated with a



contamination event that occurred in December as of March month-end closing and will be updated as more information is made available from the RCA and recovery plan.

SCHEDULE MARGIN/MANAGEMENT RESERVE

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

CRITICAL DECISION MILESTONE STATUS

Number	Title	* Due Date	**Forecast Date	Status/ Comment
RL-011.C2	Completion of Demolition of all PFP Facilities.	8/31/18	03/14/19	Progress has been temporarily put on hold on PFP demolition activities. There was a 91-day loss of schedule for March. This was a result of incorporation of corrective actions from the contamination event that occurred on December 15, 2017, during swing shift wherein 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 a path forward. An RCA is being conducted and upon completion recovery actions with expected completion dates will be identified.

*Due date reflects CD-4 due date with DOE contingency.

**Forecasted Date reflects CD-4 due date without DOE contingency.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None to report at this time.

DOE ACTIONS / DECISIONS

Working with RL on CD-4 closure actions.

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



March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC07-08RL14788
Deliverable C.3.1.3.1 - 1

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

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

FORM APPROVED

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME RL_0011_C2 PFP Demolition Capital Asset Project		a. FROM (YYYYMMDD) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

WBS.Resp Org Group	CURRENT PERIOD						CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	SCHEDULE (10)	COST (11)									
ITEM (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12a)	(12b)	(13)	(14)	(15)	(16)	
3B - PFP Closure Project	0	0	6,169	0	-6,169	55,307	41,793	63,124	-13,513	-21,330	0	0	0	55,307	124,490	-69,184	
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	6,169	0	-6,169	55,307	41,793	63,124	-13,513	-21,330	0	0	0	55,307	124,490	-69,184	
f. MANAGEMENT RESERVE														3,434			
g. TOTAL	0	0	6,169	0	-6,169	55,307	41,793	63,124	-13,513	-21,330	0	0	0	58,741			

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 RL_0011_C2 PFP Demolition Capital Asset Project		a. FROM (YYYYMMDD) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

5. PERFORMANCE DATA															
WBS.Resp Org Group ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)												AT COMPLETION (15)
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 APR 2018 (4)	+2 MAY 2018 (5)	+3 JUN 2018 (6)	+4 JUL 2018 (7)	+5 AUG 2018 (8)	+6 SEP 2018 (9)	FY19 (10)	1st QTR FY19 (11)	2nd QTR FY19 (12)	FY19-LC (13)	ATCOMPLETE (14)		
3B - PFP Closure Project	146	1385	132	149	159	162	158	158	154	303	276	0	0	3034	
g. TOTAL DIRECT	146	1385	132	149	159	162	158	158	154	303	276	0	0	3034	

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) 2018/02/19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018/03/25	
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	6,169.2	0.0	-	-6,169.2	-	-	0.00
Cumulative:	55,306.9	41,793.4	63,123.6	-13,513.5	-24.4%	-21,330.2	-51.0%	0.76	0.66
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	55,306.9	124,490.4	-69,183.6	-125.1%	-	0.22			

Explanation of Variance/Description of Problem:
 Current Month:
 Schedule Variance: The schedule variance for the current month is within threshold.

Cost Variance: The current month unfavorable variance are associated with impacts and recovery efforts from the contamination event that occurred on December 15, 2017. A root cause analysis has been finalized and corrective actions will be implemented prior to resumption of demolition activities.

Cumulative to Date:
 Schedule Variance: The cumulative unfavorable schedule variance is due to delay of demolition of ancillary buildings and 236-Z caused by resources being redirected to support higher priority critical path work associated with decommissioning of 234-5Z, 242-Z, and 236-Z, as well as ready for demo activities associated with impacts from 236-Z Canyon Crane failure, contamination impacts from an unplanned criticality alarm failure, contamination recovery in the duct level of 234-5Z (two week delay in July 2016), increased characterization efforts, weather delays (snow and wind), recovery from demolition contamination events, and greater efforts to complete 242-Z demolition than originally planned. In addition, the PUREX Tunnel collapse caused a four day delay due to closure of the Hanford site restricting access to PFP and a contamination event associated with removal of PRF gallery gloveboxes causing a 20 day delay of demolition activities on the 236-Z facility. Further, impacts associated with the Stop Work that was initiated by the Hanford Atomic Metals Trade Council (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 a result of delays in the ready for demolition activities, the C2 CD-4 has been delayed and is in jeopardy of being met. However, the TPA milestone M-083-00A was re-negotiated to a due date of 9/30/2017 and will not be met. In addition, a BCR was processed in the month of September to draw down on DOE contingency to recover the direct cost impacts to the RL-0011 C.2 Project associated with realization of the DOE-RL risks. Areas that were impacted were associated with Weather Delays, Stop Works, PRF Contamination Events, and MSA Resources retained to prevent Bump and Roll impacts. A contamination event occurred on Friday, December 15, 2017 swing shift when 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 has been conducted and recovery actions and expected completion dates are identified. This is partially offset 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.

Cost Variance: The cumulative negative cost variance is associated with MSA subcontracted resources arriving to support PFP demolition that were planned as P/Q shift support with a baseline start date of February 2016. 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 Hanford Atomic Metals Trade Council (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 G&A Rate for FY2017 resulted in a reduction to the 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 has been conducted and recovery actions and expected completion dates are 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: Progress continued to work toward CD-4 closure as teams continued to ready the PFP facilities for demolition. The PRF facility initiated demolition on November 8, 2016, and completion of demolition activities will occur in December, 2018. Demolition on the 291-Z facility commenced on June 30, 2017, and the 291-Z stack was demolished on July 15, 2017. The 234-5ZA facility was demolished in the month of August 2017 with loadout of waste completed in the month of September. Demolition of 234-5Z was initiated on September 13, 2017, and is now 53 percent complete. Completion of all demolition activities are scheduled to occur in December 2018. The December date is reflective of the known actions and recovery efforts associated with a contamination event that occurred in December, 2017 and will be updated as more information is made available from the Root Cause Analysis and recovery plan. There was an 82-day loss of schedule for March. This was a result of incorporation of corrective actions from the contamination event that occurred on Friday, December 15, 2017 as identified above. The baseline completion date is not considered recoverable. The TPA Milestone TPA-083-00A, complete PFP facility transition and selected disposition activities of November 30, 2017 was not met.

Cost Impact: Stop Works, Safety Pauses, weather impacts (i.e., unusual winter, heat, wind, etc.) multiple contamination events, the PRF Crane failure, and associated recovery actions have negatively impacted demolition of the PFP facilities. In addition, readiness activities took longer than originally assumed as a result of increased requirements required by the Readiness Assessment team to demonstrate readiness for demolition of the PRF facility and efforts to mobilize took longer than originally assumed as a result of implemented recommendations from the readiness assessment team. An unplanned Management Assessment for the 234-5Z and 291-Z facilities to incorporate lessons learned from the demolition of the 236-Z and 242-Z facilities are also contributing to the cost impacts. Finally, in the early stages of this project subcontracted MSA resources specializing in facility demolition charged the project until the ready for demo status was achieved. Unexpected contamination events that occurred during demolition of the PRF facility in January, June, and December, 2017, and delays with the 242-Z demolition has contributed to the cost impacts on this project. A Baseline Change Request (BCR) was processed in the month of September to draw down on DOE contingency to recover the direct cost impacts to the RL-0011.C.2 Project associated with realization of the DOE-RL risks. Areas that were impacted were associated with Weather Delays, Stop Works, PRF Contamination Events, and MSA Resources retained to prevent Bump and Roll impacts. This is partially offset by recognized efficiencies during the 291-Z demolition and 291-Z stack implosion as well as the 234-5ZA, 252-Z1, 2503-Z, and 2735Z, 2734ZA, ZB, ZC, ZD, and ZL facilities.

A negative VAC is reflective of impacts associated with recovery efforts from a contamination event that occurred on December 15, 2017. Partially offset by working one shift during demolition of 236-Z, 242-Z and 291-Z building and stack rather than two as planned in the PMB. Durations for the remainder of the 234-5Z and PRF demolitions activities have been adjusted to incorporate increased durations as a result of expected recovery actions from the contamination event that occurred in December. Upon completion of the recovery efforts associated with the December, 2017 contamination event, it is expected that DOE-RL will authorize CHPRC to re-start demolition activities to safely get the project to slab on grade.

Corrective Action:

NOTE: Corrective actions associated with stop works/safety pauses, contamination events, and 236-Z Canyon Crane failure, and additional asbestos removal activities that are impacting the ability to initiate demolition activities in the RL-0111.C2 capital asset project were previously addressed in the Operations project corrective action plan.

Corrective actions associated with recovery actions from the contamination event that occurred on December 15, 2017 as described above are continuing to be developed and will be documented in future reporting periods.

Activities performed in the month of January were:

- Placement of sand and soil, and over contaminated debris and equipment to prevent further contamination spread
- Radiological surveys, decontamination and pressure washing to release trailers/vehicles/equipment
- Implementation of additional radiological monitoring (i.e., CAMs, cookie sheets)
- Mobilization of supplies and equipment to maintain the PFP footprint in a safe configuration
- Application of fixatives (i.e., paints, stabilization agents) to items and areas on the PFP work control zone
- Maintenance, repair and rebuild of existing equipment and systems in safe/compliant configuration
- Initiation of activities to reconfigure boundaries, canister transfer areas, load out areas, waste storage areas, to accommodate larger work control zone
- Reconfiguration of equipment in the PFP work control zone to support stabilization activities (water systems, foggers, etc.)

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

The following items are addressed, as applicable, per the EVMSIH:

1. Schedule Margin Analysis: In the EAC there is currently no remaining schedule margin in this capital asset account. Schedule margin was lost in February 2016 as a result of impacts from stop works associated with PremAire breathing air issues related to size reduction of the HA-9A glovebox and impacts from a safety pause associated with a PremAire Breathing Air radiological event resulting in increased survey requirements for PPE and a requirement for removing additional asbestos in the 234-5Z facility prior to demolition activities commencing.
2. IMS 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 ACWP: No change in the month of March
6. EAC Analysis: Best Case = \$124,490; Most Likely = \$127,925; Worst Case = \$128,781
7. Negative CV > VAC: No change in the month of March
8. MR 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. EVT Changes: No change in the month of March

Prepared by: Cory McCoy

Date: 04/15/18

Approved by:

Date:

Appendix C.3
Capital Asset Project
RL-0012_C1_1 - Sludge Retrieval Project
15-D-401



R. M. Geimer
Vice President for
K Basin Operations and
Plateau Remediation

March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

The Contractor Operational Readiness Review (ORR) that was initiated January 23, 2018, completed March 7, 2018.

Although there were challenges that delayed completion of the contractor ORR, the project team invested the necessary time and energy to attain a level of proficiency that satisfied the ORR team. At the conclusion, the contractor ORR final report identified:

- Eleven findings.
- Seventeen opportunity for improvement items.
- Two noteworthy practices.

Letter, L.T. Blackford, CHPRC, to J.C. Connerly, RL “Contract Number DE-AC06-08RL14788-Readiness to Proceed for Commencement of the Department of Energy Operational Readiness Review of 105 KW/Annex Engineered Container Retrieval and Transfer System Activity” was approved and transmitted to RL certifying achievement of readiness to commence the DOE ORR.

The DOE ORR is forecasted to begin April 9, 2018.

Project breakdown structure (PBS) RL-0012 scope is 97.1 percent complete, with a cumulative schedule performance index (SPI) of 1.00 and a Cost Performance Index (CPI) of 1.04.

KEY ACCOMPLISHMENTS

RL-0012 C1 1 Accomplishments

KW Basin Sludge Removal Capital Asset Project

- The 100K operations team continued conducting performance demonstrations in support of successful completion of the contractor ORR accomplished March 7, 2018.
- The 100K operations support team performed preventive maintenance and calibrations on both Engineered Container Retrieval and Transfer System (ECRTS) components and Annex Utility System components.
- The project team prepared for commencing DOE ORR on April 9, 2018.
- The project technical staff updated the critical decision (CD)-4, project closeout submittal, to incorporate RL comments. Formal transmittal to RL is forecasted in early May.

MAJOR ISSUES

No major issues to report at this time.

CORRECTIVE ACTION LOG

Reference Appendix C.3 Format 5 for specific corrective actions for this CAP.

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-0012/WBS-012 (CAP)						
Explanation of major changes to the project monthly spotlight chart: Risk STP-154, <i>ORR Results in Delays to the Project</i> , was added to the Realized Risk portion of the spotlight report in March.						
Realized Risks (Risks that are currently impacting project cost/schedule)						
STP-154: <i>ORR Results in Delays to the Project</i>	Impacts stemming from the contractor ORR, the DOE ORR, or a combination of the two; impacts the project's operational activities and jeopardizes the project's ability to achieve PM-12-2-18, due June 30, 2018. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$216K, 24 days			Risk Event: Execution of the contractor ORR and execution of the DOE ORR.		
				Risk recovery action(s)	FC Date	%
				Complete necessary preventative maintenance and calibration activities prior to re-initiation of the contractor ORR and prior to initiating the DOE ORR.	3/06/18	100
				Continue performing operation demonstrations in presence of senior supervisor watches, with the intent on identifying and resolving emergent challenges.	3/06/18	100
Risk Action Assessment: The contractor ORR was completed on March 6, 2018. This risk will continue to monitored through completion of DOE ORR.						
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)						
No critical risks identified in <i>March</i> .						
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)						
FY2017 Risk Triggers (Risk could be realized in FY2017)						
No high risk threat value risks identified in <i>March</i> .						
Unassigned Risks (Pending ownership of identified threats/opportunities)						
No unassigned risks identified in <i>March</i> .						

CRITICAL PATH SCHEDULE

The critical path runs through completion of the DOE ORR. The project schedule reflects RL providing authorization to commence retrieval operations following the review and approval of the Sludge Removal Project (SRP) CD-4 submittal in parallel with review/approval of the CHPRC Request for Startup Approval letter. Completing retrieval operations, including the filling of Sludge Transport and Storage Container (STSCs) with sludge and transporting them to T Plant, to complete Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone M-016-176, *Complete Sludge Removal from 105-KW Fuels Storage Basin*, is required by September 2019.

SCHEDULE MARGIN/MANAGEMENT RESERVE

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

CRITICAL DECISION MILESTONE STATUS

Number	Title	*Due Date	**Forecast Date	Status/ Comment
15-D-401	CD-4, Project Completion	11/30/2019	5/14/2018	The forecast date includes schedule margin from the project's risk analysis. The forecast date is 2 weeks later than last month due to unanticipated revisions to procedures and complications with completion of the Contractor ORR. The project schedule margin is 123 days.

*Due date reflects CD-4 due date with DOE contingency.

**Forecasted Date reflects CD-4 due date without DOE contingency.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Perform ORR - Team Lead	04/09/18	04/17/18
RL Issue Findings / Discrepancy List	04/18/18	04/20/18
RL Approve CD-4 Submittal Package	05/01/18	05/14/18
RL Approve Request for Startup Letter	05/01/18	05/14/18

Appendix C.3

RL-0012_C1_1 – Sludge Retrieval Project 15-D-401

Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis



March 2018
CHPRC-2018-03, 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 15_D_401 KW Basin Sludge Removal Project		a. FROM (YYYYMMDD) 2018 / 02 / 19										
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25										
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18										
5. CONTRACT DATA																
a. QUANTITY 1	b. NEGOTIATED COST 295,873	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0	d. TARGET PROFIT/FEE 7,950	e. TARGET PRICE 303,823	f. ESTIMATED PRICE 297,024	g. CONTRACT CEILING 303,823	h. ESTIMATED CONTRACT CEILING 297,024									
6. ESTIMATED COST AT COMPLETION																
		MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)	7. AUTHORIZED CONTRACTOR REPRESENTATIVE		i. DATE OF OTB/OTS (YYYYMMDD)									
		283,653			a. NAME (Last, First, Middle Initial) Dickerson, Kala K		b. TITLE Prime Contract Compliance Manager									
a. BEST CASE		289,074			c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)									
b. WORST CASE		289,074														
c. MOST LIKELY		289,074	295,873	6,799												
8. PERFORMANCE DATA																
CAPN.PBS Control Account.PARS 2 WBS (2)		CURRENT PERIOD				CUMULATIVE TO DATE				REPROGRAMMING ADJUSTMENTS			AT COMPLETION			
ITEM (1)		BUDGETED COST		ACTUAL COST WORK PERFORMED		BUDGETED COST		ACTUAL COST WORK PERFORMED		COST VARIANCE (12a)		SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
		WORK SCHEDULED (2)	WORK PERFORMED (3)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	SCHEDULE (10)	COST (11)							
RL-0012 SNF Stabilization & Disp																
RL_0012_C1_1.16 Sludge Treatment Project		0	0	0	0	156,861	156,861	0	75	0	0	0	156,861	156,786	75	
RL_0012_C1_1.17 D-401 KW Basin Sludge Removal Project		338	377	1,826	40	133,385	133,087	-298	8,813	0	0	0	133,421	126,867	6,554	
b. COST OF MONEY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
c. GENERAL AND ADMINISTRATIVE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
d. UNDISTRIBUTED BUDGET													0	0	0	
e. SUBTOTAL		338	377	1,826	40	290,246	289,948	-298	8,888	0	0	0	290,282	283,653	6,629	
f. MANAGEMENT RESERVE													5,421			
g. TOTAL		338	377	1,826	40	290,246	289,948	-298	8,888	0	0	0	295,703			
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																
a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE														295,703	283,653	12,050

CLASSIFICATION (When Filled In)

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 15_D_401 KW Basin Sludge Removal Project			a. FROM (YYYYMMDD) 2018 / 02 / 19		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2018 / 03 / 25		
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES (YYYYMMDD) 2009 / 09 / 18					

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)						
3G - K Basin Oper & Plateau Remediation Project	338	377	1,826	40	-1,449	290,246	289,948	281,060	-298	8,888	0	0	0	290,282	283,653	6,629
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET																
e. SUBTOTAL (Performance Measurement Baseline)	338	377	1,826	40	-1,449	290,246	289,948	281,060	-298	8,888	0	0	0	290,282	283,653	6,629
f. MANAGEMENT RESERVE														5,421		
g. TOTAL	338	377	1,826	40	-1,449	290,246	289,948	281,060	-298	8,888	0	0	0	295,703		

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 15_D_401 KW Basin Sludge Removal Project		a. FROM (YYYYMMDD) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

5. PERFORMANCE DATA		FORECAST (Non-Cumulative)												AT COMPLETION	
WBS.Resp Org Group	ACTUAL CURRENT PERIOD	ACTUAL END OF CURRENT PERIOD (Cumulative)	SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 APR 2018 (4)	+2 MAY 2018 (5)	+3 JUN 2018 (6)	+4 JUL 2018 (7)	+5 AUG 2018 (8)	+6 SEP 2018 (9)	FY19 (10)	1st QTR FY19 (11)	2nd QTR FY19 (12)	FY19-LC (13)	ATCOMPLETE (14)		
3G - K Basin Oper & Plateau Remediation Project	64	7525	52	43	0	0	0	0	0	0	0	0	0	0	7620
g. TOTAL DIRECT	64	7525	52	43	0	0	0	0	0	0	0	0	0	0	7620

Appendix C.4
Capital Asset Project
RL-0041_C1 – Project 618-10, 316-4 and
600-63 Waste Sites



T. L. Hobbes
Vice President for
618-10 Burial Ground

March 2018
CHPRC-2018-03, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

In March, workers at the 618-10 Burial Ground Complex completed backfill of the 618-10 Burial Ground, continued site recontouring, and continued to demobilize the site.

KEY ACCOMPLISHMENTS

618-10 Burial Ground Backfill (100 percent complete)

- Crews completed backfill activities on March 6, 2018.

618-10 Burial Ground Complex Demobilization

- The hog shack was fully dismantled and removed from project to the 200 East area.
- Completed gravel removal from the container transfer area (CTA).
- Crews continued site recontouring and applying earthbound fixatives to all disturbed soils.
- Removed two trailers from the project.
- Continued road removal.
- Shipped five conex boxes off project for use at other CHPRC projects.
- Shipped a telehandler to Plutonium Finishing Plant (PFP) for reuse.
- Began relocating staff to off-site facilities to allow earlier removal of remaining trailers.
- Mission Support Alliance, LLC, (MSA) electrical utilities (EU) completed the second of three required disconnects.
- Continued consolidation and removal of supplies that are no longer being used.

River Corridor Contract CD-4 Closeout and Documentation

- Received comments from RL on the Energy Systems Acquisition Advisory Board (ESAAB)/ Environmental Management Acquisition Advisory Board (EMAAB) presentation and began comment resolution.
- Drafted the Lessons Learned document for project closeout.
- Worked on the Building Completion report for MO-998 for the Turnover and Transition Package (TTP) for long-term stewardship.

MAJOR ISSUES

No major issues to report at this time.

CORRECTIVE ACTION LOG

Reference Appendix C.4 Format 5 for specific corrective actions for this Cap Asset Project (CAP).

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-0041/WBS-041			
Explanation of major changes to the project monthly spotlight chart: No major changes 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)			
Lifecycle Risk Triggers (Risk could be realized at any point of the project)			
Unassigned Risks (Pending ownership of identified threats/opportunities)			
No unassigned risks identified in March .			

Contract-to-Date

WBS 041/ RL-0041 Capital Asset 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	61.0	64.6	44.7	3.6	6.0%	20.0	30.9%	68.9	48.5	3.8	20.3

Numbers are rounded to the nearest \$0.1 million

Reference Appendix C.4 Format 5 for narrative on Contract-to-Date performance analysis.

CRITICAL PATH SCHEDULE

The critical path flows through 618-10 Burial Ground demobilization activities, including trailer removal and the demobilization of equipment.

SCHEDULE MARGIN/MANAGEMENT RESERVE

Reference Appendix C.4 Formats 1, 2, 3, and 5 for specific schedule margin/management reserve utilization for this CAP.

CRITICAL DECISION (CD) MILESTONE STATUS

Number	Title	Due Date	Actual Date	Forecast Date	Status/ Comment
KPP 1	Complete the 618-10 Burial Ground Remediation	1/31/2020		6/7/2018	Completion Criteria: Complete remediation, closeout sampling, issuing the closeout verification package, and backfill of the 618-10 Burial Ground.
KPP 2	Complete the Remediation of the 316-4 and 600-63 Waste Sites	1/31/2020	1/25/2018 (A)		The 316-4 Waste Site closeout verification package (CVP) was issued on January 25, 2018, completing requirements of KPP 2.
	CD-4 Closeout	1/31/2020		9/30/2018	

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None to report at this time.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit 10	3/15/18 (A)	3/16/18 (A)
RL and Regulator Review of closeout verification package (CVP) and Waste Site Reclassification Form for 618-10 Burial Ground	3/26/18	5/9/18

Appendix C.4

RL-0041_C1 – Project 618-10, 316-4 and 600-63 Waste Sites

Contract Performance Reports

Format 1 - Work Breakdown Structure

Format 2 - Organizational Categories

Format 3 - Baseline

Format 4 - Staffing

Format 5 - Explanation and Problem Analysis



March 2018
CHPRC-2018-03, 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 PARS II - RL-0041.C1 Base Funded Nuc Fac D&D River Corr				a. NAME PARS II - RL-0041.C1 Base Funded Nuc Fac D&D River Corr				a. FROM (YYYYMMDD) 2018 / 02 / 19							
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788				b. PHASE				b. TO (YYYYMMDD) 2018 / 03 / 25							
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE		NO <input type="checkbox"/> X YES <input checked="" type="checkbox"/> (YYYYMMDD) 2009 / 09 / 18									
5. CONTRACT DATA																	
a. QUANTITY 1	b. NEGOTIATED COST 0	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 68,921	d. TARGET PROFIT/FEE 0	e. TARGET PRICE 0	f. ESTIMATED PRICE 48,619	g. CONTRACT CEILING 0	h. ESTIMATED CONTRACT CEILING 48,619		i. DATE OF OTB/OTS (YYYYMMDD)								
6. ESTIMATED COST AT COMPLETION						7. AUTHORIZED CONTRACTOR REPRESENTATIVE											
		MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)	a. NAME (Last, First, Middle Initial) Dickerson, Kala K			b. TITLE Prime Contract Compliance Manager									
a. BEST CASE		48,619			c. SIGNATURE			d. DATE SIGNED (YYYYMMDD)									
b. WORST CASE		49,011															
c. MOST LIKELY		48,619	68,809	20,190													
8. PERFORMANCE DATA																	
CAPN.PBS Control Account.PARS 2 WBS (3)		CURRENT PERIOD				CUMULATIVE TO DATE				REPROGRAMMING ADJUSTMENTS			AT COMPLETION				
ITEM (1)	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)							
RL-0041 Nuc Fac D&D - RC Closure Proj																	
RL_0041_C1.05.02 618-10 Burial Ground	1,222	1,286	987	64	298	48,356	51,897	39,948	3,541	11,949	0	0	0	56,014	43,794	12,220	
RL_0041_C1.05.03 316-4 Waste Site	377	43	1	-334	42	11,183	11,183	4,259	0	6,924	0	0	0	11,183	4,259	6,924	
RL_0041_C1.05.04 600-63 Waste Site	93	72	0	-22	72	1,444	1,536	445	92	1,091	0	0	0	1,611	445	1,167	
RL_0041_C1.05.06 RCC CD 4 Closeout and Doc	16	16	1	0	15	28	28	1	0	27	0	0	0	112	121	-9	
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	1,708	1,416	989	-292	427	61,011	64,644	44,652	3,633	19,992	0	0	0	68,921	48,619	20,302	
f. MANAGEMENT RESERVE														0			
g. TOTAL	1,708	1,416	989	-292	427	61,011	64,644	44,652	3,633	19,992	0	0	0	68,921			
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																	
a. VARIANCE ADJUSTMENT																	
b. TOTAL CONTRACT VARIANCE													3,633	19,992	68,921	48,619	20,302

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 PARS II - RL-0041.C1 Base Funded Nuc Fac D&D River Corr		a. NAME PARS II - RL-0041.C1 Base Funded Nuc Fact D&D River Corr		a. FROM (YYYYMMDD) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES (YYYYMMDD) 2009 / 09 / 18			

WBS.FOC Control Account.PARS 2 WBS (3) ITEM (1)	CURRENT PERIOD					CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)
	WORK SCHEDULED (2)	WORK PERFORMED (3)	COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)						
041.6 - 618 10 Projects																
RL_0041_C1.05.02 618-10 Burial Ground	1,222	1,286	987	64	298	48,356	51,897	39,948	3,541	11,949	0	0	0	56,014	43,794	12,220
RL_0041_C1.05.03 316-4 Waste Site	377	43	1	-334	42	11,183	11,183	4,259	0	6,924	0	0	0	11,183	4,259	6,924
RL_0041_C1.05.04 600-63 Waste Site	93	72	0	-22	72	1,444	1,536	445	92	1,091	0	0	0	1,611	445	1,167
RL_0041_C1.05.06 RCC CD 4 Closeout and Documenta	16	16	1	0	15	28	28	1	0	27	0	0	0	112	121	-9
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)	1,708	1,416	989	-292	427	61,011	64,644	44,652	3,633	19,992	0	0	0	68,921	48,619	20,302
f. MANAGEMENT RESERVE														0		

CONTRACT PERFORMANCE REPORT															Form Approved	
FORMAT 3 - BASELINE															OMB No. 0704-0188	
DOLLARS IN THOUSANDS																
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 a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE d. SHARE RATIO: YES X 9/18/2009			4. REPORT PERIOD a. FROM: 2018/02/19 b. TO: 2018/03/25							
5. CONTRACT DATA																
a. ORIGINAL NEGOTIATED COST 0				b. NEGOTIATED CONTRACT CHANGE \$0		c. CURRENT NEGOTIATED COST (A + B) \$0		d. ESTIMATED COST AUTH UNPRICED WORK \$68,921		e. CONTRACT BUDGET BASE (C + D) \$68,921		f. TOTAL ALLOCATED BUDGET \$68,921		g. DIFFERENCE (E - F) \$0		
h. CONTRACT START DATE 6/19/2008				i. DEFINITIZATION DATE 6/19/2008		j. PLANNED COMPL DATE 9/30/2018		k. CONT COMPLETION DATE 9/30/2018				l. EST COMPLETION DATE 9/30/2018				
6. PERFORMANCE DATA																
ITEM (1)	BCWS CUM TO DATE (2)	BCWS FOR REPORT PERIOD (3)	SIX MONTH FORECAST						BUDGETED COST FOR WORK SCHEDULED (NON - CUMULATIVE)						UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)
			+1 Apr-18 (4)	+2 May-18 (5)	+3 Jun-18 (6)	+4 Jul-18 (7)	+5 Aug-18 (8)	+6 Sep-18 (9)	FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)		
a. PM BASELINE (BEGIN OF PERIOD)	59,290	1,692	940	1,222	1,242	1,568	2,086	769	0	0	0	3,497	47,591	17,833	0	68,921
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																
RL_0041_C1.05.02 618-10 Burial Ground																
None at this time													0	0	0	0
RL_0041_C1.05.03 316-4 Waste Site																
None at this time													0	0	0	0
RL_0041_C1.05.04 600-63 Waste Site																
None at this time													0	0	0	0
c. PM BASELINE (END OF PERIOD)	61,011	1,708	953	1,238	1,254	1,579	2,102	785	0	0	0	3,497	47,591	17,833	0	68,921

**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 PARS II - RL-0041.C1 Base Funded Nuc Fac D&D River Corr		a. NAME PARS II - RL-0041.C1 Base Funded Nuc Fact D&D River Corr		a. FROM (YYYYMMDD) 2018 / 02 / 19	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25	
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18			

WBS.FOC Control Account.PARS 2 WBS (3) ORGANIZATIONAL CATEGORY (1)	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	FORECAST (Non-Cumulative)											AT COMPLETION (15)	
			SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 APR 2018 (4)	+2 MAY 2018 (5)	+3 JUN 2018 (6)	+4 JUL 2018 (7)	+5 AUG 2018 (8)	+6 SEP 2018 (9)	FY19 (10)	1st QTR FY19 (11)	2nd QTR FY19 (12)	FY19-LC (13)	ATCOMPLETE (14)		
041.6 - 618 10 Projects															
RL_0041_C1.05.02 618-10 Burial Ground	23	1196	23	22	18	4	4	4	4	0	0	0	0	0	1271
RL_0041_C1.05.03 316-4 Waste Site	0	69	0	0	0	0	0	0	0	0	0	0	0	0	69
RL_0041_C1.05.04 600-63 Waste Site	0	13	0	0	0	0	0	0	0	0	0	0	0	0	13
RL_0041_C1.05.06 RCC CD 4 Closeout and Documentation	0	0	1	1	1	1	1	1	1	0	0	0	0	0	4

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 041.6 - 618 10 Projects		a. FROM (YYYYMMDD) 2018 / 02 / 19
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE		b. TO (YYYYMMDD) 2018 / 03 / 25
	c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE No X Yes (YYYYMMDD)	2009 / 09 / 18

5. Evaluation

Direct Projects

	Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI
Current:	1,708.0	1,415.8	989.2	-292.2	-17.1%	426.6	30.1%	0.83	1.43
Cumulative:	61,010.7	64,644.1	44,652.2	3,633.4	6.0%	19,991.9	30.9%	1.06	1.45
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	68,920.9	48,618.5	20,302.4	29.5%	0.18	1.08			

Explanation of Variance/Description of Problem:

CURRENT MONTH
The current month unfavorable schedule variance is partially caused by 316-4 Waste Site backfill work scope that was budgeted to be completed in the current period, but was completed in prior months. Additionally, infrastructure demobilization activities at the 618-10 Burial Ground have been re-sequenced, causing the completion of some activities to be delayed. The project still anticipates that demobilization will finish ahead of schedule.
The current month cost variance is partially due to the use of existing crews to perform backfill at the 618-10 Burial Ground rather than hire a separate subcontractor. These efforts have led to increased efficiencies and fewer costs compared to the original plan. Additionally, resource sharing and staff attrition resulted in a reduction in staffing and therefore in cost in the current period.

CONTRACT TO DATE
The cumulative schedule variance is within reporting thresholds.
The cumulative favorable cost variance is partially due to the sharing of resources and materials among the projects, which has resulted in fewer purchased materials and lower labor costs. Attrition has led to a reduction in staffing and in cost with work still being completed as planned with the resources left. In addition, excavation efficiencies at the 316-4 Waste Site reduced the total volume of soil to be removed, and the availability of existing crews to perform backfill scope at both the 316-4 Waste Site and the 618-10 Burial Ground instead of hiring a separate subcontractor resulted in cost savings.

VARIANCE AT COMPLETION
The favorable variance at completion reflects the efficient use of shared resources and materials amongst the 618-10 Burial Ground Complex projects. Attrition has also led to a reduction in staffing and in cost with work still being completed as planned with the resources left. Excavation efficiencies and the ability to use existing crews to perform backfill instead of hiring a separate subcontractor at the 618-10 Burial Ground and 316-4 Waste Site reduced the total cost to complete the project, and the optimization of resources and equipment at the 618-10 Burial Ground Complex reduced the total cost to complete excavation at the 600-63 Waste Site.

IMPACTS
There are no current impacts to the project schedule or cost.

Corrective Action:

Corrective Action:
None.

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

- Schedule Margin Analysis: N/A, pending definitization of the scope.
- IMS Data dictionary Changes: None in the month of March.
- Forecast Schedule with No Baseline: None in the month of March.
- UB Balance: N/A
- Negative ACWP: There was negative ACWP in the current period in the 600-63 Waste Site account due to a timecard correction.
- EAC Analysis: Best Case: \$48.6M; Most Likely: \$48.6M; Worst Case: \$49.0M
- Negative CV > VAC: N/A
- MR Transactions: None in the month of March.
- Freeze Period Changes: None in the month of March.
- Retroactive Changes: None in the month of March.
- EVT Changes: None in the month of March.