

Monthly Performance Report

September 2017

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

By Janis Aardal at 7:30 am, Oct 30, 2017

Release Approval

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L. Ty Blackford
President and Chief
Executive Officer

Monthly Performance Report

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September 2017
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EXECUTIVE SUMMARY

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

- **Plutonium Finishing Plant (PFP) Closure Project:** 234-5Z pre-demolition activities completed on September 7, 2017, marking the end of over 10 years of preparation. The demolition of the last and largest structure at PFP is now underway. PFP also resolved a stop work by moving employees and equipment outside of an expanded demolition zone.
- **618-10 Project:** Pending verification sampling results, workers completed retrieval of 618-10 Burial Ground source term contamination to meet contract and U.S. Department of Energy (RL) Record of Decision requirements. Workers completed total remediation (including backfill) of the 600-63 Waste Site and 316-4 Waste Site.
- **Soil and Groundwater Remediation Project (S&GRP):** The S&GRP team reached the goal of 2.2 billion gallons of groundwater treated for fiscal year (FY) 2017. The team pulled through ahead of schedule, despite groundwater treatment challenges that included harsh weather and wildfire damage to some well systems.
- **Waste and Fuels Management Project (W&FMP):** The Management of Cesium and Strontium Capsule Project submitted the Critical Decision 1 (CD-1) document to RL in early September.
- **K Basins and Plateau Remediation Project:** The Sludge Treatment Project successfully pumped water from the 105KW Basin to the Annex utilizing the Sludge Removal Process System hardware. With the final phase of acceptance testing at 90 percent complete, the facility is now focusing on the operational readiness reviews that must be completed prior to moving sludge.
- **324 Building Disposition Project:** The project met the FY2017 key performance goal of completing mockup modifications to support installation of remote-operated soil removal equipment. During the month of September, workers also began removing large radioactive waste items from the airlock.
- **Plutonium Uranium Extraction Plant (PUREX) Tunnel:** Workers completed final site preparations for placement of engineered grout into Tunnel 1, with grouting to begin the week of October 2, 2017.

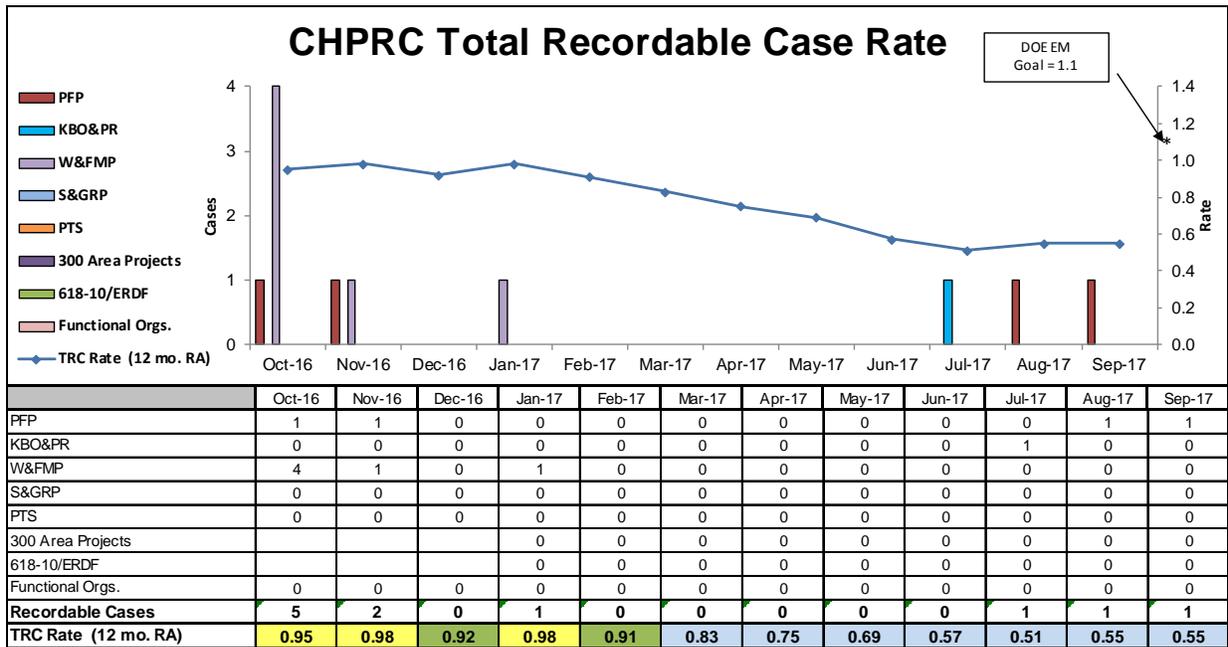


Demolition of the main processing facility is now underway.

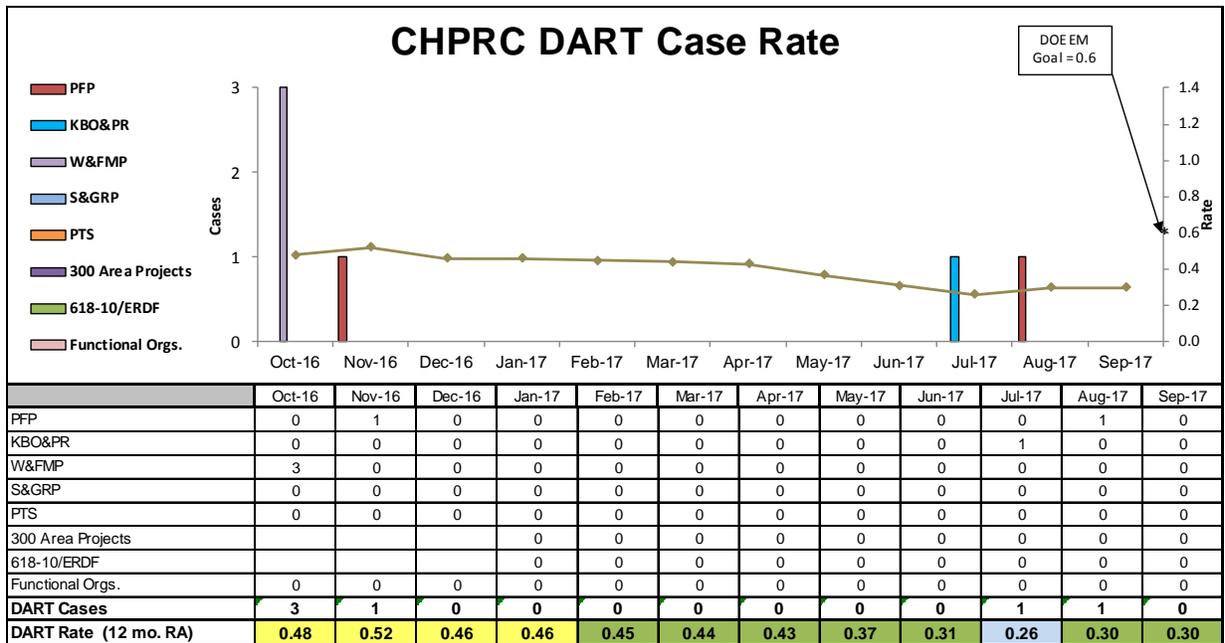
- The President's Zero Accident Council (PZAC) meeting for September was hosted by Safety, Health, Security & Quality. The three main ideas were:
 - Emergency Preparedness.
 - Health & Wellness Preparedness.
 - Driving Preparedness.
- Four "Thinking Target Zero" (TTZ) bulletins were published to convey important occupational, safety, health, and environmental messages:
 - Environmental Regulatory Inspections.
 - National Preparedness Month.
 - CHPRC receives third Star of Excellence!
 - Fall into safety.
- *Weekly Safety Tailgate* briefing packages communicated relevant topics and safety information to the workforce:
 - One Lessons Learned:
 - San Onofre, Nuclear Generating Station – Avoid Distractions While Driving
 - Injury reports.
 - Weekly ethics moments.
 - Vehicle incidents.
 - Conduct of work focus topic.
 - Return to work safely.
 - Compliance with instructions.
 - Traffic safety concern.
 - September is National Preparedness Month.
 - Skill based work.
 - Distracted walking.
 - New hoisting and rigging webpage.
 - Driving safety: off-road.
 - Cold weather walking
 - Best Practice: Coordination between adjacent facilities/contractors ensures appropriate response actions during Emergency Preparedness Drills.

TARGET ZERO PERFORMANCE

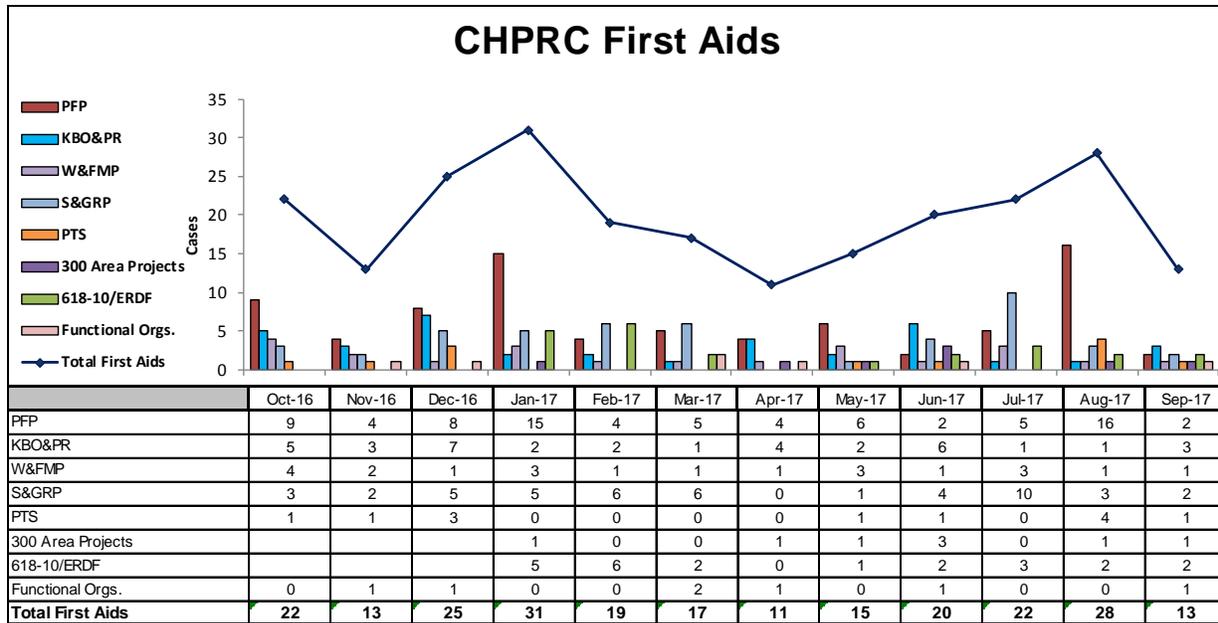
CHPRC continued focusing on integrating and implementing safety programs in all program and project areas.



Total Recordable Injury Case (TRC) Rate: The 12-month rolling average TRC rate of 0.55 is based on a total of 11 Recordable injuries. There was one Recordable case for September.



Days Away, Restricted or Transferred (DART) Workdays Case Rate: The 12-month rolling average DART rate of 0.30 is based upon a total of six Days Away cases. There were no DART cases in September.



First Aid Case Summary: CHPRC reported 13 First Aid cases in September. The contributors were three sprains/strains/pains, three abrasions/bruises/contusions, three miscellaneous (burns, rashes, repetitive motion, etc.), two insect bites, one cut/laceration/puncture, and one foreign bodies/irritation in the eye injury. In addition, two self-treat cases were reported in September.

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 (PTS)

- Refer to the Appendix B section of this report for specific overhead support 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 Plateau Remediation Contract (PRC) alignment for FY2017-2018.

- During September, RL and CHPRC reached agreement on the definitization of Change Order (CO) 313, Characterization/Sampling Analysis of the 236-Z and 242-Z Facilities. CHPRC also received two additional unilateral modifications for CO 314, OSA Closure Plan Revisions, and CO 316, Groundwater Engineering Reports and Groundwater Monitoring Plans for DMWUs.
- As of September month-end, there was a backlog of 44 undefinitized change proposals (CPs) and responses to requests for proposals (RFPs) – totaling approximately \$408 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/requests for equitable adjustment (REAs).

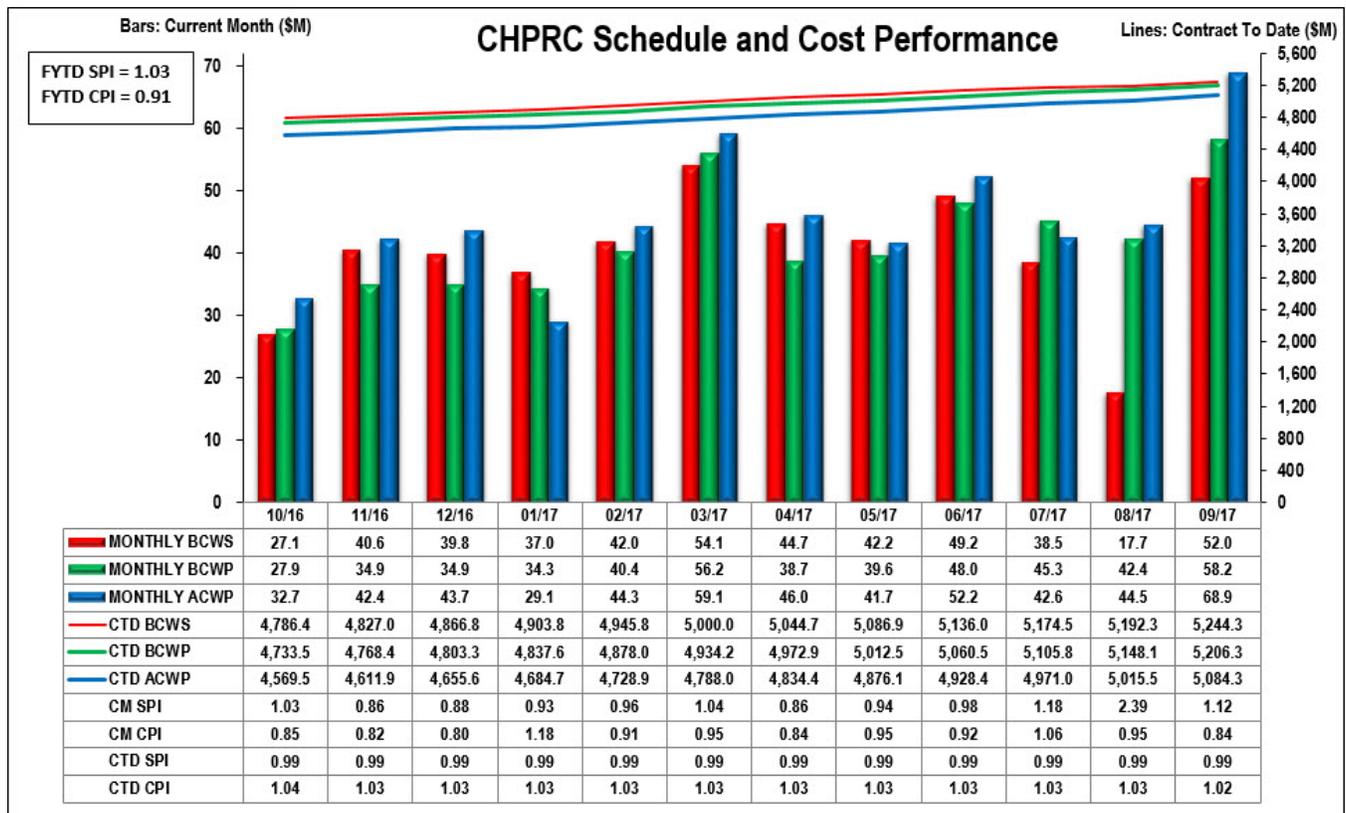
Status:

- CHPRC continues to discuss proposed alignment strategy with RL.

Projects

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

EARNED VALUE MANAGEMENT



	\$M					\$M					\$M			
	Current Period					Contract to Date					Contract Period			
	Budgeted Cost		Actual Cost	Variance		Budgeted Cost		Actual Cost	Variance		BAC	EAC	Variance	
	BCWS	BCWP	ACWP	Schedule	Cost	BCWS	BCWP	ACWP	Schedule	Cost				
RL-0011 - Nuclear Materials Stab & Disp PFP	7.6	10.5	11.9	2.8	(1.4)	987.9	963.6	1066.2	(24.3)	(102.6)	988.5	1,096.4	(107.8)	
RL-0012 - SNF Stabilization & Disposition	6.1	7.9	7.0	1.8	0.8	698.0	697.8	664.2	(0.2)	33.5	739.3	704.3	35.1	
RL-0013 - Solid Waste Stab & Disposition	9.2	10.6	11.9	1.4	(1.3)	1190.7	1194.4	1116.6	3.7	77.7	1,355.2	1,235.7	119.5	
RL-0030 - Soil & Water Rem-Grndwtr/Vadose	12.2	10.4	15.7	(1.8)	(5.3)	1407.8	1390.2	1363.0	(17.6)	27.3	1,564.0	1,534.1	29.9	
RL-0040 - Nuc Fac D&D - Remainder	5.5	5.5	7.7	(0.0)	(2.2)	458.2	452.4	424.3	(5.8)	28.1	496.0	458.4	37.6	
RL-0041 - Nuc Fac D&D - RC Closure Project	11.2	13.1	14.4	1.9	(1.3)	477.5	483.7	429.9	6.2	53.8	579.8	487.2	92.6	
RL-0042 - Nuc Fac D&D - FFTF Project	0.2	0.3	0.2	0.1	0.1	24.2	24.2	20.1	0.0	4.1	26.5	23.1	3.4	
Total		52.0	58.2	68.9	6.1	(10.7)	5,244.3	5,206.3	5,084.3	(38.0)	121.9	5,749.3	5,539.1	210.2

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

* In regards to RL-0041, CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized values.

Performance Summary

The \$210.2 million Variance at Completion (VAC) increased \$68.8 million from August to September reporting. This change is due to forecasting errors of \$68.8 million, \$43.8 million associated with the project breakdown structure (PBS) RL-0013 W-135, Cesium/Strontium Capsule Dry Storage Project, which was not discovered in the review process prior to month-end closing. Additionally, there was approximately \$21 million of scope deferred based on FY2018 funding priorities and schedule logic in PBS RL-0040 and RL-0041. However, the budget for the scope remains until a contract modification is received. That work scope is not expected to be performed in the CHPRC contract period. CHPRC is currently discussing with RL the disposition of that scope.

CHPRC continues to track completion of the contract scope within budget and is currently projecting a corrected VAC of \$145 million, with \$66.0 million of management reserve (MR), for a total positive variance of \$211 million. For September, the project was 11.7 percent ahead of schedule and 18.4 percent over planned cost. Contract to Date (CTD), the project was 0.7 percent behind schedule and 2.3 percent under planned cost.

The current month (CM) positive schedule variance is primarily due to PBS RL-0011 working historical budgeted cost of work scheduled (BCWS) on discrete demolition activities (apportioned). The majority of the scope was originally planned to begin during the third quarter of 2016. However, delays in getting 236-Z ready for demolition negatively impacted the start of 236-Z demolition.

Also contributing to the positive schedule variance is PBS RL-0041 backfill activities at the 316-4 Waste Site completing ahead of schedule.

The positive schedule variance is partially offset by PBS RL-0030 agreement to delay 300-FF-5 Stage B injections for up to one year. The scope of work planned to be performed during this period was delayed at the May 30, 2017, meeting between RL, Environmental Protection Agency (EPA), and the Yakama Indian Nation. A workshop was held August 31, 2017, to address Yakama Nation concerns and develop a path forward.

The current month negative cost variance is primarily due to PBS RL-0030 \$2.4 million in spending incurred in support of FY2017 Pump and Treat (P&T) optimization activities that are not planned in the performance measurement baseline (PMB). Further, a CM negative cost variance (CV) of \$2.2 million in PBS RL-0040 is due to increased labor support for min safe activities due to the degradation of aging facilities, increased number of inactive waste sites, daily PUREX tunnel surveillance requirements, as well as PUREX tunnel stabilization effort requiring additional labor support necessary recover field investigation activities, complete mobile trailer installation, issue work packages, and obtain required permits. Also contributing is unplanned mass excavation efforts at the 618-10 Burial Ground due to RL direction to continue excavation to achieve shallow zone cleanup levels in the deep zones of the trench and 100K soil remediation performed under a not-to-exceed (NTE) that had not yet been implemented into the baseline.

The current month negative cost variance is partially offset by PBS RL-0012 completion of level-of-effort activities with fewer personnel than planned. Personnel are supporting PUREX, 300-296, and various other CHPRC projects. All work is being accomplished with available resources. In addition, earned value for development and approval of the as-built Documented Safety Analysis (DSA)/Technical Safety Requirements (TSR) was during September. The DSA/TSR that was submitted in April 2017 included the as-built design of the Engineered Container Retrieval and Transfer System (ECRTS).

FUNDING ANALYSIS

FY2017 Funds vs. Fiscal Year Spend Forecast (\$M)

PBS	Project	FY2017		Variance
		Total Funding	Actual Cost	
Estimate at Complete				
RL-0011	Nuclear Materials Stabilization and Disposition	154.5	124.5	30.0
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	34.4	32.2	2.2
RL-0012	15-D-401 Sludge Retrieval Project	65.0	36.2	28.8
RL-0013	Waste and Fuels Management Project	108.0	95.9	12.1
RL-0030	Soil, Groundwater and Vadose Zone Remediation	133.3	123.4	9.8
RL-0040	Nuclear Facility D&D, Remainder of Hanford	47.6	35.7	11.9
RL-0041	Nuclear Facility D&D, River Corridor	146.3	116.3	30.0
RL-0042	Fast Flux Test Facility Closure	3.9	2.1	1.8
Total Estimate at Complete		692.9	566.4	126.6
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	0.0	0.0
RL-0012	15-D-401 Sludge Retrieval Project	0.0	0.0	0.0
RL-0013	Waste and Fuels Management Project	0.0	0.0	0.0
RL-0030	Soil, Groundwater and Vadose Zone Remediation	0.0	0.0	0.0
RL-0040	Nuclear Facility D&D, Remainder of Hanford	0.0	0.0	0.0
RL-0041	Nuclear Facility D&D, River Corridor	0.0	0.0	0.0
RL-0042	Fast Flux Test Facility Closure	0.0	0.0	0.0
Total Incremental Work Scope		0.0	0.0	0.0
Total Fiscal Year Spend Forecast				
RL-0011	Nuclear Materials Stabilization and Disposition	154.5	124.5	30.0
RL-0012	Spent Nuclear Fuel Stabilization and Disposition	34.4	32.2	2.2
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RL-0041	Nuclear Facility D&D, River Corridor	146.3	116.3	30.0
RL-0042	Fast Flux Test Facility Closure	3.9	2.1	1.8
Total		692.9	566.4	126.6

Funds/Variance Analysis

FY2017 expected funding was increased with a final allotment for RL to provide additional funds for FY2018 startup. Funding was increased by \$33 million for new total funding of \$693.9 million. Final costs were in line with September forecasts. FY2017 carryover is \$126.6 million.

BASELINE CHANGE REQUESTS

In September 2017, CHPRC approved and implemented 32 baseline change requests (BCRs) into the PMB. Thirteen of the 32 BCRs impacted the PMB. Each change request is identified in the table below:

Change Request #	Title	PBS	Summary of Change
BCR-000-17-005R0	<i>Re-plan FY2018 Indirect Budget</i>	000	This BCR re-planned the FY2018 work breakdown structure (WBS) 000 Closure Services to better align with changes in organizations performing the work. This BCR did not change the PMB value.
BCR-011C-17-010R0	<i>Move Balance of FY2017 RL-011 Management Reserve to FY2018 - PFP CAP 1</i>	RL-0011	This BCR moved unused FY2017 MR associated with PFP CAP1 Project Scope to FY2018. This BCR did not change the PMB value.
BCR-011C-17-011R0	<i>Move Balance of FY2017 RL-011 Management Reserve to FY2018 - PFP CAP 2</i>	RL-0011	This BCR moved unused FY2017 MR associated with PFP CAP2 Project Scope to FY2018. This BCR did not change the PMB value.
BCR-011C-17-013R0	<i>Allocation of PBS RL-0011 CAP 2 Project DOE Contingency</i>	RL-0011	This BCR incorporated direction from RL to incorporate RL held contingency into the RL-0011 CAP 2 baseline for realized RL risks. This BCR increased the PMB value by \$7,058K.
BCR-011C-17-014R0	<i>FY2017 G&A Rate Adjustment – RL-0011 CAP 2</i>	RL-0011	This BCR incorporated an FY2017 G&A rate adjustment. This BCR decreased the PMB value by \$463K.
BCR-012-17-016R0	<i>RL-0012 Re-Plan Maintenance Scope Into Single Work Package</i>	RL-0012	This BCR incorporated maintenance scope and cost collection into a single work package. This BCR did not change the PMB value.
BCR-012C-17-014R0	<i>Move Balance of FY2017 RL-012 Management Reserve to FY2018 - SRP CAP</i>	RL-0012	This BCR moved unused FY2017 MR associated with SRP CAP project scope to FY2018. This BCR did not change the PMB value.
BCR-012C-17-015R0	<i>Convert LOE Activities to 7-Day Calendar - SRP CAP</i>	RL-0012	This BCR revised the calendar for LOE activities to more accurately reflect full time employee (FTE) profiles. This BCR did not change the PMB value.
BCR-012C-17-018R0	<i>FY2017 G&A Rate Adjustment – SRP CAP</i>	RL-0012	This BCR incorporated an FY2017 G&A rate adjustment. This BCR decreased the PMB value by \$937K.
BCR-013-17-021R1	<i>Incorporate CO #327 Accelerating the Shipment of Sludge from 100-K West Basin to T Plant</i>	RL-0013	This BCR incorporated clarification to the scope and NTE for Contract Modification 595 for CO 327 authorizing CHPRC to begin staff transitions to support accelerating the shipment of sludge from the 100-K West Basin to T Plant. This BCR did not change the PMB value.
BCR-013-17-023R0	<i>Incorporate CO #323 NTE Increase for Management of the Hanford Site Transportation Safety Document</i>	RL-0013	This BCR incorporated the scope associated with the NTE increase for CO 323, Management of Hanford Site Transportation Safety Document. This BCR increased the PMB value by \$100K.
BCR-013-17-026R0	<i>RL-0013 Revise EVM Type for BE Program Support</i>	RL-0013	This BCR revised Beryllium Program Support for FY2018 from LOE to apportioned to better align with the discrete work it supports. This BCR did not change the PMB value.
BCR-013C-17-028R0	<i>Convert W-135 Planning Packages to Work Packages</i>	RL-0013	This BCR converted planning packages to detail planned work packages to support the scope for the W-135 Project and drew down MR for

Change Request #	Title	PBS	Summary of Change
			realized risk for Waste Encapsulation and Storage Facility (WESF) modifications. This BCR increased the PMB value by \$1,866K.
BCR-030-17-024R0	<i>Composite Analysis MR Draw</i>	RL-0030	This BCR incorporated an MR draw for in-scope unplanned work associated with the proposed technical approach to complete the composite analysis for FY2018 work. Additionally, modified currently planned level-of-effort scope, which is currently planned in WBS element 030.01.02.01.01, Technical Integration, into WBS element 030.01.02.01.05, Composite Analysis, with a percent-complete earned value technique to enable more accurate measurement of performance. This BCR increased the PMB value by \$1,785K.
BCR-030-17-033R0	<i>RL-0030 Remove Project Milestone</i>	RL-0030	This BCR removed the project milestone associated with the 100-NR-2 OU Permeable Reactive Barrier expansion scope that was previously deferred. This BCR did not change the PMB value.
BCR-030-17-035R0	<i>Re-plan AEA Groundwater Data Management and Evaluation</i>	RL-0030	This BCR incorporated WBS element 030.06.07.01.02.17, AEA Groundwater Data Evaluation, and re-planned the AEA-associated BCWS within the new AEA WBS element, allowing for separate performance measurement for the AEA program. This BCR did not change the PMB value.
BCR-030-17-036R0	<i>Align 200-UP-1 SE Well Drilling Campaign to Execution Plan</i>	RL-0030	This BCR aligned the wells planned for 200-UP-1 southeast chromium well drilling campaign into a single work package level WBS element. This BCR did not change the PMB value.
BCR-040-17-021R0	<i>RL-0040 Move Unfunded Work Activities to Planning Packages</i>	RL-0040	This BCR converted FY2018 unfunded RL-0040 scope into Planning Packages in September FY2018 where it will be held pending agreement between RL and CHPRC on a path forward. This BCR did not change the PMB value.
BCR-040-17-022R0	<i>Incorporate CO #329 PUREX Tunnel NTE Authority Increase</i>	RL-0040	This BCR incorporated scope associated with the NTE increase for CO 319, PUREX Tunnel Recovery and Stabilization. This BCR increased the PMB by \$4,053K
BCR-041-17-038R0	<i>Incorporate CO #328 Revised Scope for 300-296 Waste Site Project</i>	RL-0041	This BCR incorporated scope revisions and cleanup of the scope planned for the current NTE value for CO 328. This BCR did not change the PMB value.
BCR-041-17-039R0	<i>Incorporate CO #305 Revised Scope for 300-296 Waste Site Project</i>	RL-0041	This BCR incorporated scope revisions and cleanup of the scope planned for the current NTE value for CO 305. This BCR did not change the PMB value.
BCR-041-17-041R0	<i>Incorporate CO #319 NTE Funding Authorization</i>	RL-0041	This BCR incorporated the scope associated with the NTE increase for CO 319, Contract Modification 620, scope includes activities associated with completing fabrication through startup of the Garnet Filter Media Retrieval System. This BCR increased the PMB by \$499K.
BCR-041-17-042R0	<i>RL-0041 Move Unfunded Work Activities to Planning Packages</i>	RL-0041	This BCR converted FY2018 unfunded RL-0041 scope into planning packages in September FY2018, where it will be held pending agreement between RL and CHPRC on a path forward. This BCR did not change the PMB value.
BCR-041C-17-037R0	<i>Convert LOE Activities to 7-Day Calendar -RL-0041 CAP</i>	RL-0041	This BCR revised the calendar for LOE activities to more accurately reflect FTE profiles. This BCR did not change the PMB value.
BCR-041C-17-043R0	<i>FY2017 G&A Rate Adjustment -RL-0041 CAP</i>	RL-0041	This BCR incorporated an FY2017 G&A rate adjustment. This BCR decreased the PMB value by \$1,638K.

Change Request #	Title	PBS	Summary of Change
BCR-PRC-17-037R0	<i>Move Balance of FY2017 Management Reserve to FY2018 – OA</i>	RL-0012, RL-0030, RL-0041, RL-0042	This BCR moved unused FY2017 MR to FY2018. This BCR did not change the PMB value.
BCR-PRC-17-038R0	<i>Convert LOE Activities to 7-Day Calendar - OA</i>	RL-0012, RL-0013, RL-0030, RL-0040, RL-0041, RL-0042, 000s	This BCR revised the calendar for LOE activities to more accurately reflect FTE profiles. This BCR did not change the PMB value.
BCR-PRC-17-039R0	<i>Incorporate Hanford RCRA Permit Activities</i>	RL-0013, RL-0030, RL-0040, RL-0041, RL-0042	This BCR incorporated the scope for the NTP/NTE for the second review cycle effort associated with the Hanford Site Resource Conservation and Recovery Act Permit for CHPRC permitted activities. This BCR increased the PMB value by \$1,965K.
BCR-PRC-17-042R0	<i>FY2017 Workforce Restructuring MR Draw</i>	RL-0011, RL-0012, RL-0030, RL-0040, RL-0041, RL-0042	This BCR incorporated MR draw for impacts of workforce restructuring for FY2017. This BCR increased the PMB value by \$5,133K.
BCR-PRC-17-043R0	<i>FY2017 G&A Rate Adjustment - OA</i>	RL-0011, RL-0012, RL-0030, RL-0040, RL-0041, RL-0042	This BCR implemented an FY2017 G&A rate adjustment for OA projects. This BCR decreased the PMB value by \$8,069K.
BCRA-PRC-17-041R0	<i>HPIC Updates September 2017</i>	RL-0011, RL-0012, RL-0013, RL-0030, RL-0040, RL-0041	This BCR incorporated September FY2017 HPIC updates. This BCR did not change the PMB value.

The Allocated (Distributed) Budget increased by \$11,352K.

Undistributed Budget Activity

BCR Number	Title	PBS	Fiscal Year	UB
BCR-PRC-17-040R0	<i>Undistributed Budget Adjustments September 2017</i>	RL-0013, RL-0030, RL-0040, RL-0041	2017-2018	\$11,093K

The Undistributed Budget increased by \$11,093K.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
BCR-011C-17-010R0	<i>Move Balance of FY2017 RL-011 Management Reserve to FY2018 - PFP CAP 1</i>	RL-0011	2017 – 2018	\$0
BCR-011C-17-011R0	<i>Move Balance of FY2017 RL-011 Management Reserve to FY2018 - PFP CAP 2</i>	RL-0011	2017 – 2018	\$0
BCR-011C-17-014R0	<i>FY2017 G&A Rate Adjustment – RL-0011 CAP 2</i>	RL-0011	2017 – 2018	\$463K
BCR-012C-17-014R0	<i>Move Balance of FY2017 RL-012 Management Reserve to FY2018 - SRP CAP</i>	RL-0012	2017 – 2018	\$0
BCR-012C-17-018R0	<i>FY2017 G&A Rate Adjustment – SRP CAP</i>	RL-0012	2017-2018	\$937K
BCR-013C-17-028R0	<i>Convert W-135 Planning Packages to Work Packages</i>	RL-0013	2017 – 2018	\$-1,866K.
BCR-030-17-024R0	<i>Composite Analysis MR Draw</i>	RL-0030	2017 – 2018	\$-1,785K.
BCR-041C-17-043R0	<i>FY2017 G&A Rate Adjustment –RL-0041 CAP</i>	RL-0041	2017 – 2018	\$79K.
BCR-PRC-17-037R0	<i>Move Balance of FY2017 Management Reserve to FY2018 – OA</i>	RL-0012, RL-0030, RL-0041, RL-0042	2017 – 2018	\$0
BCR-PRC-17-042R0	<i>FY2017 Workforce Restructuring MR Draw</i>	RL-0011, RL-0012, RL-0030, RL-0040, RL-0041, RL-0042	2017 – 2018	\$-5,133K.
BCR-PRC-17-043R0	<i>FY2017 G&A Rate Adjustment - OA</i>		2017 – 2018	\$6,835K.

Overall, there was a decrease in Management Reserve (MR) of \$471K during September.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2017 – 2018	N/A

Overall, there was no change to the Fee during September.

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):

September 2017 Summary of Changes

	FY 2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FYs 2014-2018	Contract Period Total	Total PMB
August 2017 Estimate									
PMB	3,391,477	391,653	471,323	504,826	484,609	482,952	2,335,362	5,726,839	5,726,839
MR	0	0	0	0	29,847	36,593	66,439	66,439	66,439
Fee	155,504	14,325	14,501	27,804	10,612	18,636	85,877	241,381	241,381
Total	3,546,981	405,978	485,824	532,630	525,068	538,180	2,487,679	6,034,660	6,034,660
September 2017 Change									
PMB									
Change to PMB	0	0	0	0	418	22,026	22,444	22,444	22,444
MR									
Change to MR	0	0	0	0	-29,847	29,376	-471	-471	-471
Fee									
Change to Fee	0	0	0	0	0	0	0	0	0
Total Change	0	0	0	0	-29,428	51,402	21,973	21,973	21,973
September 2017 Estimate									
PMB	3,391,477	391,653	471,323	504,826	485,028	504,977	2,357,806	5,749,283	5,749,283
MR	0	0	0	0	0	65,969	65,969	65,969	65,969
Fee	155,504	14,325	14,501	27,804	10,612	18,636	85,877	241,381	241,381
Total	3,546,981	405,978	485,824	532,630	495,639	589,582	2,509,652	6,056,633	6,056,633

Changes to/Utilization of Management Reserve in September 2017

	FY2009-2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2014-2018	Total
August 2017 MR Totals								
RL-0011	0	0	0	0	6,875	0	6,875	6,875
RL-0012	0	0	0	0	6,240	3,262	9,502	9,502
RL-0013	0	0	0	0	869	7,208	8,077	8,077
RL-0030	0	0	0	0	7,794	15,175	22,969	22,969
RL-0040	0	0	0	0	0	0	0	0
RL-0041	0	0	0	0	8,031	10,847	18,878	18,878
RL-0042	0	0	0	0	38	101	139	139
Total	0	0	0	0	29,847	36,593	66,439	66,439
September 2017 MR Changes/Utilization								
RL-0011	0	0	0	0	(6,875)	5,980	-895	-895
RL-0012	0	0	0	0	(6,240)	7,663	1,423	1,423
RL-0013	0	0	0	0	(869)	92	-777	-777
RL-0030	0	0	0	0	(7,794)	8,026	232	232
RL-0040	0	0	0	0	0	382	382	382
RL-0041	0	0	0	0	(8,031)	7,152	-879	-879
RL-0042	0	0	0	0	(38)	82	44	44
Total	0	0	0	0	-29,847	29,376	-471	-471
September 2017 MR Totals								
RL-0011	0	0	0	0	0	5,980	5,980	5,980
RL-0012	0	0	0	0	0	10,925	10,925	10,925
RL-0013	0	0	0	0	0	7,300	7,300	7,300
RL-0030	0	0	0	0	0	23,201	23,201	23,201
RL-0040	0	0	0	0	0	382	382	382
RL-0041	0	0	0	0	0	17,999	17,999	17,999
RL-0042	0	0	0	0	0	183	183	183
Total	0	0	0	0	0	65,969	65,969	65,969

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 - 9/30/2017				Planned Subcontracting:	\$2,720,084,369
Reporting Category				Contract-to-date awards:	\$2,619,876,496
				Bal remaining to award:	\$100,207,873
	\$ Value	%	Goal %	Goal award\$	Bal to Goal
SB	\$1,461,799,979	55.80%	49.3%	\$1,341,001,594	-\$120,798,385
SDB	\$277,020,595	10.57%	8.2%	\$223,046,918	-\$53,973,677
SWOB	\$274,997,431	10.50%	7.5%	\$204,006,328	-\$70,991,104
HUB	\$69,457,348	2.65%	2.2%	\$59,841,856	-\$9,615,492
VOSB	\$209,751,862	8.01%	3.5%	\$95,202,953	-\$114,548,909
SDVO	\$126,278,698	4.82%	1.3%	\$35,361,097	-\$90,917,601
NAB	\$63,481,867	2.42%	N/A	PRC clause H.20 small business requirement ≥ 17% of CHPRC Contract Price performed by SB.	
Large	\$666,626,139	25.44%	N/A		
GOVT	\$3,852,650	0.15%	N/A		
GOVT CONT	\$483,186,359	18.44%	N/A		
EDUCATION	\$113,799	0.00%	N/A	CHPRC Contract Value:	\$5,732,255,464
NONPROFIT_	\$3,865,938	0.15%	N/A	17% rqmt:	\$974,483,429
FOREIGN	\$431,633	0.02%	N/A	SB actual:	\$1,461,799,979
Total	\$2,619,876,496	100.00%	N/A	Bal to rqmt	-\$487,316,550

Notes:

1. Since the CHPRC contract award in October 2008, CHPRC has subcontracted over \$2.6 billion in goods and services, with more than 55 percent going to small businesses. Nearly 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, Inc. (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) 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 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)



T. E. Bratvold
Vice President for
Plutonium Finishing
Plant Closure
Project

September 2017
CHPRC-2017-09, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The Plutonium Finishing Plant (PFP) completed pre-demolition activities for 234-5Z facility on September 7, 2017, and demolition was initiated September 13, 2017. This marks the end of over ten years of preparation for demolition activities to begin on all facilities at PFP. All gloveboxes have been removed from E4 ventilation, and all preparations for demolition are complete. Initiation of demolition on the PRF started in early November 2016 and is ongoing. Initiation of demolition on the 242-Z facility started in early January 2017, and was completed in April 2017. Demolition activities for 291-Z were initiated on June 30, 2017 and waste loadout was completed on September 29, 2017. Demolition of the 291-Z stack was completed on July 15, 2017 and waste loadout was completed July 27, 2017. Demolition of the 234-5ZA facility was initiated on July 27, 2017 and waste loadout was completed on September 15, 2017. PFP also resolved a stop work by moving employees and equipment outside of an expanded demolition zone.

PFP Closure Project continues to maintain PFP facilities compliant with authorization agreement requirements.

Significant accomplishments in September included:

- Completed waste loadout of 291-Z.
- Completed demolition and waste loadout on the 234-5ZA facility.
- Completed demolition of 2735Z, 2734ZA, ZB, ZC, ZD, and ZL.
- Initiated demolition of 234-5Z.
- Removed glovebox 145-1 from 234-5Z.
- Readied the remaining 12 rooms associated with RL-011.C1 KPP for demolition.
- Shipped 490 cubic meters (m³) transuranic (TRU) waste.
- Shipped 1,190 m³ of low-level waste/mixed low-level waste (LLW/MLLW).

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	12	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	-	1,525 feet
COMPLETE Pencil Tank Units Removed (Shipped)	-	196 pencil tank units
Buildings Ready for Demo	9	64 structures
Buildings Demolished or Removed	8	59 structures
Non-radioactive Waste Shipped	0 m ³	85 m ³
Transuranic/Transuranic Mixed (TRU/TRU-M) Shipped	490 m ³	3,050 m ³
LLW/MLLW Shipped	1,190 m ³	11,329 m ³

Environmental Management System (EMS) Objectives and Target Status

Objective #	Objective	Targets	Actions	Due Date	Status
16-EMS-PFP-OB1-T1	Minimize emissions resulting from demolition of 234-5Z, 236-Z, 242-Z, and 291-Z.	Inspect 234-5Z, 236-Z, 242-Z, and 291-Z for the presence of asbestos-containing materials (ACM) and produce a report identifying ACM, requiring removal or abatement and methods for protecting remaining ACM from resulting in visible emissions.	<ol style="list-style-type: none"> 1. Issue report documenting thorough inspection of 236-Z. 2. Issue report documenting thorough inspection of 242-Z. 3. Issue report documenting thorough inspection of 234-5Z. (Scheduled to complete in early June 2017.) 4. Issue report documenting thorough inspection of 291-Z. 	<p>08/16/16</p> <p>05/26/16</p> <p>04/30/17</p> <p>05/30/17</p>	<p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p>
17-EMS-PFP-OB1-T1	Reduce the risk of noncompliance with environmental requirements during demolition at PFP.	Reduce risk of noncompliance with applicable environmental requirements by enhancing the environmental screening process for demolition packages for 242-Z, 234-5Z, and 291-Z, thereby reducing the overall impacts from PFP's significant aspects.	<ol style="list-style-type: none"> 1. Create ready-for-demolition checklist for 242-Z/ZA. 2. Review 242-Z/ZA demolition work package against environmental requirements. 3. Create ready-for-demolition checklist for 291-Z. 4. Review 291-Z demolition work package against environmental requirements. 5. Create ready-for-demolition checklist for 234-5Z. 6. Review 234-5Z demolition work package against environmental requirements. 	<p>11/30/16</p> <p>12/29/16</p> <p>02/28/17</p> <p>03/30/17</p> <p>03/30/17</p> <p>04/27/17</p>	<p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p>

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	<ul style="list-style-type: none"> N/A
Total Recordable Injuries	1	2	09/20/17-The employee was in the process of relocating an unused Supersac when one of the Supersac straps got caught on the edge of their utility vehicle causing the employee to sprain his lower back. The employee initially reports experiencing slight back pain that eventually progressed from his lower back area and down his left leg. (24623)
First Aid Cases	2	80	<p>09/23/17-Worker stepped on a wire in the dirt in the demo zone. The wire bent upwards and punctured threw his outer rubber shoe cover into worker's right foot of safety boot. Wire did not breach through worker's bottom boot into foot. Worker realized after he took another step that wire punctured and breached his outer protection clothing and his scrub pants and felt his skin was cut in his left lower calf. Worker did not want to take another step until assistance came and helped remove wire out of bottom of right foot and PPE so no further damage would take place on his calf. Worker was escorted to HPMC by RCS and released with no restrictions. Then worker was sent to the wound count facility. (24627)</p> <p>09/27/17-When the employee got home she noticed a small insect bite on her right knee. When she woke up this morning it was redder and swollen. After the pre-job she reported it to her manager. Because it was swollen, it was decided she should be taken to HPMC and have it evaluated. Employee taken to HPMC and returned to work with no restrictions and given a non-prescription strength medication. (24636)</p>
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0011 Accomplishments

234-5Z

- Completed all isolations, hazmat removal, and ready-for-demo activities.
- Readied the remaining 12 rooms associated with RL-011.C1 KPP for demolition.

PFP Waste Operations

- Shipped 490 m³ TRU/TRUM waste.
- Shipped 1,190 m³ LLW/MLLW.
- Shipped glovebox HA-7A.
- Shipped seven filter boxes to Perma-Fix Northwest (PFNW) and 11 to Central Waste Complex (CWC).

Demolition Activities

- Completed waste loadout of 291-Z.
- Completed demolition and waste loadout of 234-5ZA.
- Completed demolition of 2735Z, 2734ZA, ZB, ZC, ZD, and ZL
- Initiated demolition of 234-5Z
- Removed 145-1 glovebox from 234-5Z

PTS

- Training and Procedures
 - Implemented Stage three of 234-5Z transition to Documented Safety Analysis Demolition phase (17 Procedures processed).
- Operations Program
Emergency Preparedness (EP)
 - Conducted PFP-EPDE-092617 Full Up Drill.
- Project Delivery
 - Completed work scope and Construction Completion Document for the Plutonium Finishing Plant high-density polyethylene water line.

MAJOR ISSUES

Nothing to report at this time.

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 spotlight chart: No major changes in the month of September.												
Realized Risks (Risks that are currently impacting project cost/schedule)												
PFP-DEMO-05: Inclement Weather	Inclement weather, including moderate winds, low or high temperatures, and thunderstorms will impact the demolition of PFP. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$0K, 32 days *Cost increase will result in cost-per-day impacts from crews and hotel load.	●	↓	Risk Event: This risk was realized during the month of May due to high winds and lightening, limiting demolition activities. <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>Implement "tropical" shift and OT shifts as necessary to mitigate further impacts associated with weather.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Recovery Assessment: During the month of September , there were no weather impacts. However, the risk remains critical due to upcoming high-wind and continued high-heat weather 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.	Risk Recovery Action(s)	FC Date	%	Implement "tropical" shift and OT shifts as necessary to mitigate further impacts associated with weather.	Ongoing	N/A		
Risk Recovery Action(s)	FC Date	%										
Implement "tropical" shift and OT shifts as necessary to mitigate further impacts associated with weather.	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	●	↑	Risk Event: A Continuous Air Monitoring (CAM) alarm sounded while crews were removing and packaging the third section of GB3 the PRF on Thursday, June 8, 2017. Demolition activities were stopped, and RCTs began surveys in preparation to egress personnel. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width: 75%;">Risk Recovery action(s)</th> <th style="width: 10%;">Risk Date</th> <th style="width: 10%;">FC Date</th> <th style="width: 5%;">%</th> </tr> </thead> <tbody> <tr> <td> 1. Add caution to work package direction to not apply a focused beam of water to high materials at risk (MAR) components that have been breached. 2. Evaluate the use of the foggers. 3. Revise or incorporate additional controls into the work package as appropriate. 4. Evaluate the boundaries to incorporate available radiological data. 5. Evaluate the fixative concentration. 6. Incorporate case-by-case consideration when handling items of accessible gram values during adverse weather conditions into the work package. 7. Evaluate the method for determining acceptable wind speed. 8. PFP provides real-time data from the event to Dr. Napier (PNNL) for consideration with future models. </td> <td style="text-align: center;">6/8/17</td> <td style="text-align: center;">11/2/17</td> <td style="text-align: center;">25%</td> </tr> </tbody> </table> Recovery Assessment: No change in the month of September . The work package for the remaining activities for the 236-Z demolition work has been revised to incorporate corrective actions 1 and 3. The remaining corrective actions continue to be evaluated, with implementation forthcoming.	Risk Recovery action(s)	Risk Date	FC Date	%	1. Add caution to work package direction to not apply a focused beam of water to high materials at risk (MAR) components that have been breached. 2. Evaluate the use of the foggers. 3. Revise or incorporate additional controls into the work package as appropriate. 4. Evaluate the boundaries to incorporate available radiological data. 5. Evaluate the fixative concentration. 6. Incorporate case-by-case consideration when handling items of accessible gram values during adverse weather conditions into the work package. 7. Evaluate the method for determining acceptable wind speed. 8. PFP provides real-time data from the event to Dr. Napier (PNNL) for consideration with future models.	6/8/17	11/2/17	25%
Risk Recovery action(s)	Risk Date	FC Date	%									
1. Add caution to work package direction to not apply a focused beam of water to high materials at risk (MAR) components that have been breached. 2. Evaluate the use of the foggers. 3. Revise or incorporate additional controls into the work package as appropriate. 4. Evaluate the boundaries to incorporate available radiological data. 5. Evaluate the fixative concentration. 6. Incorporate case-by-case consideration when handling items of accessible gram values during adverse weather conditions into the work package. 7. Evaluate the method for determining acceptable wind speed. 8. PFP provides real-time data from the event to Dr. Napier (PNNL) for consideration with future models.	6/8/17	11/2/17	25%									

Risk Title	Unmitigated Risk Impacts	Assessment		Comments									
		Month	Trend										
RL-0011/WBS-011.OA													
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)													
FY2017 Risk Triggers (Risk could be realized in FY2017)													
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) 2017.</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: 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 needed.</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											
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: Likely (75% to 90%) Worst Case Impacts: \$3 million, 60 days			<p>Risk Trigger: During pre-demolition/demolition activities in FY2017. Dates tracked in the field execution schedule (FES).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify and pre-rig equipment with lifting slings.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: Efforts have been completed to create a removal path for several of the gloveboxes to meet Criticality Incredibility. The HC-7C and 227T glovebox was slated for removal during demolition but has been removed during pre-demolition as risk mitigation strategy. At this time, no alternative course of actions are needed.</p>	Mitigation action(s)	FC Date	%	Identify and pre-rig equipment with lifting slings.	Complete	100	Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.	Complete	100
Mitigation action(s)	FC Date	%											
Identify and pre-rig equipment with lifting slings.	Complete	100											
Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.	Complete	100											
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)													
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 Trigger: During pre-demolition/demolition activities in FY2017. Dates tracked in the FES.</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 the month of September. At the end of January 2017, contamination was discovered outside the HCA/ARA/RA Zone established for demolition of the Plutonium Reclamation Facility (PRF) after a Continuous Air Monitor (CAM) alarm sounded just outside the HCA/ARA/RA during relocation of the debris pile. The alarm resulted in the evaluation of employees from the zone and could have resulted in contamination of PFP personnel. As a result of this event, lessons learned have been incorporated in the future demolition work packages to ensure the suppression misting instructions are stated clearly with no subjective verbiage. In addition, in-process monitoring of the pile/bucket has been incorporated during movement of the debris pile.</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 the month of September .													

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	7.6	10.5	11.9	2.8	37.4%	(1.4)	-13.6%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Variance: (+\$2.8M/+37.4%)

The current month positive schedule variance is primarily the result of working historical budgeted cost of work scheduled (BCWS) on discrete demolition activities (apportioned). The majority of the scope was originally planned to begin during the third quarter of 2016. However, delays in getting 236-Z ready for demolition negatively impacted the start of 236-Z demolition. Completion of ready for demolition activities for the 234-5Z facility, demolition of the 234-5ZA Facility, loadout of waste from the 291-Z facility, demolition of the 2735Z, 2734ZA, ZB, ZC, ZD, and ZL facilities, removal of the 145-1 glovebox and completion of the removal of 10,000 feet of unplanned asbestos removal activities are contributing to this positive variance. Demolition of 236-Z and 234-5Z are currently scheduled to complete in December 2017. Because all work is historical, the current schedule variance will be favorable going forward.

CM Cost Variance: (-\$1.4M/-13.6%)

The current month negative cost variance is primarily due to the delay in completion of the PFP Project to achieve slab on grade. The delay is causing needed extensions of hotel load resources, without BCWS, to support the remaining D&D work scope until the facility becomes ready for demolition. Further, working historical BCWS for removal of focus decontamination, hazmat removal, and fixative applications requiring more effort than expected (apportioned). The variance is also attributed to additional insulators brought onto the project to support unplanned asbestos abatement. As delays in ready-for-demo activities have been recognized, continued waste support resources are required to support waste loadout and shipping efforts. The resources are expected to be needed through completion of demolition activities. Unplanned shipments to PFNW for the size reduction of gloveboxes and E4 in 234-5Z caused additional costs to support ready-for-demo activities. Shipping the waste to PFNW helped realize schedule and safety improvements but has resulted in increased size reduction costs. Additional unplanned shipping materials (waste shipping containers such as TL-1800s, SLB2s, IP-1 bags, etc.) were required to support waste loadout activities. In addition, recovery from contamination events during demolition of 236-Z contributed to this variance. Resources supported implementation of corrective actions including expanding the demo boundary and relocation of equipment. Due to contamination found on trailers and vehicles (e.g., trucks, van, JLG Lift Equipment, generators, etc.) within the new demo boundary, the project was forced to purchase the previously leased facilities and vehicles. Finally, unplanned work on the High Density Polyethylene (HDPE) water loop is also contributing to this variance. The costs associated with the HDPE water loop will be transferred to the Mission Support Alliance Contractor in the month of November to align with requirements of the J3 Table. This is partially offset by implementation of a BCR that 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 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.

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 Completi on (BAC)	Estimate at Completi on (EAC)	Estimate to Complete (ETC)	Variance at Completion (VAC)
Total	987.9	963.6	1,066.2	(24.3)	-2.5%	(102.6)	-10.6%	988.5	1,096.4	30.2	(107.8)
Numbers are rounded to the nearest \$0.1 million											

Contract-to-Date (CTD) Schedule Variance (-\$24.3M/-2.5%)

The CTD schedule variance is within threshold.

CTD Cost Variance (-\$102.6M/-10.6%)

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 and support services, consistent with delayed activities, in support of completing Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone M-083-00A. In addition, unplanned costs to support implementation of efficiency initiatives at PFP (i.e., foaming and PremAire Breathing Air), and increased training as a result of assignment of new Health Physics Technicians, and D&D workers (as the result of Hanford Atomic Metal Trades Council lamping process) to PFP have also contributed to this variance. Additional resources to recover schedule for asbestos removal activities and to cover the additional asbestos needing to be removed that was recently identified (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 TRU waste disposition efforts. Unplanned shipments to PFNW for the size reduction of 236-Z gloveboxes (MT-4 and 18M) and E4 ducting in 234-5Z have caused additional costs to support ready-for-demo activities also contributing to the unfavorable variance. Finally, unplanned work on the HDPE water loop is also contributing to this variance. The costs associated with the HDPE water loop will be transferred to the Mission Support Alliance Contractor in the month of November to align with requirements of the J3 Table. The negative cost variance is partially offset by utilizing fewer breathing air suits and hoses being used than originally planned for 242-Z entries as a result of fewer fieldwork team members required to perform hands-on work in 242-Z because of the confined space and size of suits (three suits per day vs. five), and 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 have also proved to take less time than anticipated due to the main electrical power being cut outside of the building rather than performing individual isolations within the facility. Hazardous material removal and decontamination/fixative applications demonstrated effective with less effort than originally planned using methods proven more efficient (e.g., using powerful fans to assist with vertical fixative flow up the stack). In addition, implementation of a BCR that was processed in the month of September, 2017 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.

Variance at Completion (-\$107.8M/-10.9%)

The Variance at Completion (VAC) unfavorable variance is reflective of previous inability to achieve 20 percent increased efficiency associated with time on respirator as assumed in the baseline plan. The Collective Bargaining Agreement was accepted, and efficiencies are continuing to be recognized with more time on mask and implementation of the value engineering initiatives associated with high-mass

gloveboxes and grouting. Extended hotel loading costs as a result of delays in demolition-ready and demolition activities caused by issues identified in the CTD schedule variance above are also driving the negative VAC. As a result of wall removals and electrical isolations, it was discovered that approximately 10,000 feet of additional asbestos was between the walls that would need to be removed. This is a recognized risk (PFP-092-02) and has been incorporated into the VAC. Of note, CHPRC is working with RL to utilize contingency for the additional 10,000 feet of asbestos identified during walkdowns and inspections, impacts from the criticality alarm, and relief from the 30 days of weather delays experienced from December 2016 through March 2017. Finally, increased utilization of overtime was used to ready the 234-5Z facility for demolition by September 2017. Also, unplanned work on the HDPE water loop is also contributing to this variance. The costs associated with the HDPE water loop will be transferred to the Mission Support Alliance Contractor in the month of November to align with requirements of the J3 Table. 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 variance at completion is reflective of PFP's current projected date to reach slab on grade no later than December 18, 2017.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 011/RL-0011 Nuclear Matl Stab & Disp PFP	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	154.5	124.5	30.0
Incremental Scope Pending Change Management	0.0	0.0	0.0
RL-0011 - Total	154.5	124.5	30.0

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

Fiscal year (FY) 2017 expected funding for the project breakdown structure (PBS) RL-0011 was adjusted to \$154.5 million to allow for carryover dollars to ensure the PFP could complete the activities required to achieve the slab on grade end point for closure of the project. The FY spend forecast (FYSF) for September decreased to \$124.5 million as a result of workforce restructure costs being allocated to other PBS's within the CHPRC. The funds in this control point for estimate to complete (ETC) for regular scope are adequate to support current work. Recognized efficiencies will be necessary to support slab removal if RL direction to perform this work is received.

Critical Path Schedule

The PFP Critical Path schedule begins with the continuation of demolition on the A-labs in 234-5Z. After A-labs is complete, the 234-5Z front side will be demolished. After the front side is complete, the gallery gloveboxes and 236-Z Canyon demolition will run in parallel with the Backside Rooms/Plutonium Process Support Laboratories (PPSL), Remote Mechanical A (RMA) Process Line, and RMC Process Line, and RADTU of 234-5Z demolition. The 236-Z canyon demolition completes on December 18, 2017, meeting the requirements for the 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.

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 Baseline Change Requests (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	PFP Facility Transition and Selection Disposition Activities	09/30/17		12/18/17	During the month of September, the PFP project lost 46 days associated with the impacts from a stop work associated with the June PRF contamination event. These events impacted the forecasted completion date as identified in the September month end forecast completion date of the Tri-Party Agreement milestone for the PFP Project to reach slab-on-grade.

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)



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

September 2017
CHPRC-2017-09, 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 project completed the final two fiscal year (FY) 2017 Performance Measures (PMs) during the month of September. The receipt of the first production run of 12 Sludge Transport and Storage Container (STSC) Assemblies was completed on August 21, 2017 (PM-12-1-17), and implementation of the approved integrated KW Basin Documented Safety Analysis (DSA)/Technical Safety Requirements (TSR) was completed on September 21, 2017 (PM-12-3-17).

The K Basin Pre-operational Acceptance Testing (KPAT) continued through September, with the test team initiating integrated testing between the 105KW Basin and the KW Annex during the fiscal month. Testing fieldwork is approximately 90 percent complete and forecast to complete by October 31, 2017. Following KPAT completion, the Construction Completion Document (CCD) will be signed, and Operational Acceptance Testing (OAT) will commence.

CHPRC personnel are finalizing Sludge Removal Project (SRP) training materials, operating/maintenance procedures, and readiness preparation activities prior to the Operational Readiness Reviews (ORRs) authorizing full-up Engineered Container Retrieval and Transfer System (ECRTS) Operation.

Based upon discussions between RL and CHPRC senior management, the Sludge Treatment Project (STP) team has modified the field execution schedule (FES) to implement acceleration opportunities, which could facilitate the transfer of all sludge to T Plant in FY2018. On March 27, 2017, CHPRC formally submitted letter CHPRC-1701045 R1 - *Contract Number DE-AC06-08RL14788 – Change Proposal CP 012 PRC 1646, Revision 0, Sludge Removal Project Acceleration of 105K and T Plant* for RL approval. In order to meet the accelerated schedule, support from CHPRC and RL is required for the following assumptions:

- Significant overtime/weekend work is required to reduce the schedule duration (overtime/weekend work expected to continue through ORR).
- Approval of the integrated 105KW DSA must not affect the project's critical path. This integrated DSA/TSR includes as-built information from installation activities, and therefore, a subsequent "as-built" DSA/TSR submittal is not required (DSA/TSR became project critical path on July 1, 2017, and delayed the start of implementation activities until it was approved on September 1, 2017. CHPRC personnel are working to mitigate impacts to the SRP critical path).
- SRP critical decision (CD)-4 approval must occur concurrently with commencing sludge retrieval operations (this is being worked through RL).
- Approval of the T Plant safety documentation must be completed within 120 days of submittal (approved July 31, 2017).

To demonstrate the current forecast date of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) M-016-175, *Begin Sludge Removal From 105-KW Fuel Storage Basin*, the milestone has been disconnected from the risk analysis schedule margin. The current non-risk adjusted forecast date to begin sludge removal is February 17, 2018.

The effort to retrieve and containerize the sludge pile in the KW Basin Center Bay discovered during debris mapping continued. Work is forecast to be complete prior to the start of sludge retrieval (Tri-Party Agreement M-016-175).

Project breakdown structure (PBS) RL-0012 scope is 94.3 percent complete, with a cumulative Schedule Performance Index (SPI) of 1.00 and a Cost Performance Index (CPI) of 1.05.

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	17	<ul style="list-style-type: none"> 9/28/17: While operating a radio, employee sustained a shock from a defective antenna, causing a burn. Body part affected: right middle finger (24635)
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 debris dose mapping, relocation activities in 105KW Basin, and performance of several monthly and quarterly routines during the period.
- KW Nuclear Chemical Operators (NCOs) are observing KPAT and are shadow testing personnel in the KW Basin.
- Tabletop drills of ECRTS upset conditions are being conducted weekly with participation by NCOs, health physics technician (HPTs), engineering, and operations management.

KW Basin Sludge Removal Capital Asset Project

- KPAT
 - The KPAT test team initiated integrated testing during the month; as of September month-end, the overall test is approximately 90 percent complete.
 - Completed the Management Assessment (MA) that authorizes work activities leading to the transfer of water from the 105KW Basin to the Annex and back.
 - Testing of the Overfill Recovery Tool (ORT) was successfully completed, demonstrating functionality of the system designed to remove sludge from an overfilled STSC and move that material back to an engineered container in the 105KW Basin. Water was transferred from an STSC in the Annex back to the 105KW Basin.
 - The KPAT test team completed the Annual Sludge Transportation System (STS) Cask 1 Leak Test. This was a significant accomplishment, as it was the first time this leak test had been executed on a production STS Cask Assembly.
- 17-NSD-0034_RL/Contract Number DE-AC06-08RL14788 - Approval of the One-Time Request for Shipment (OTRS) for Sludge Transport from K West Basin to T Plant, CHPRC-03111, Revision 0 was

approved on July 21, 2017, and was transmitted to CHPRC on July 24, 2017. CHPRC Transportation Safety personnel are focused on finalizing the OTRS formal implementation activities.

- ECRTS Procurement: Installation of STSC Instrumentation & Appurtenances continued through the fiscal month. The project received the first 12 STSC assemblies, completing PM-12-1-17. The remaining 11 STSC assemblies are forecast for completion in early spring 2018.
- American Boiler Works (ABW) personnel have completed fabrication of eight of 11 STSC shells, with the final three scheduled to be delivered to HiLine by October 31, 2017.
- Development of the Operations and Maintenance Procedures supporting sludge removal and packaging operations continues. Status of procedures required to declare readiness for the 105KW Facility Sludge Removal Project:
 - o Seventeen of 25 operation procedures have had their initial reviews completed, two are currently in the review process, and six are being developed.
 - o Four of four alarm response procedures have been drafted and are in the final comment incorporation phase.
 - o Ten of 13 maintenance procedures have been reviewed, with the remaining three being drafted or considered for post start.
 - o Two of five administration procedures have been published, one is in the review process, and two are being drafted.

T Plant Preparations

- Responsible managers are working to complete the Readiness Self-Assessments (RSAs).
- Completed all prerequisites to perform dry runs and mock ups.
- Developed Operational and Emergency Preparedness drill scenarios.
- Completed Operational Drill 1.
- Completed gap training for Master Documented Safety Analysis (MDSA) revision 12.
- Completed grading and graveling for second route of entry inside T Plant Complex for STS.
- The Solid Waste Operations Complex (SWOC) MDSA/TSR SER was approved by RL on July 31, 2017. The MDSA/TSR/Safety Evaluation Report (SER) implementation activities are in progress and are forecast to complete on November 20, 2017.

MAJOR ISSUES

Sludge Removal Project Issue: 105KW Facility Documented Safety Analysis/Technical Safety Requirements (DSA/TSR) Approval.

Corrective Action:

CHPRC updated the DSA/TSR to incorporate RL comments and retransmitted the document sent to RL for approval. Approval of these documents precedes preparation of SRP training material, procedures, formal safety basis implementation, and completion of readiness preparation activities prior to the ORR authorizing full-up ECRTS operation.

Status: Closed

The SER was approved by RL September 1, 2017. The DSA/TSR was implemented by CHPRC on September 21, 2017.

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-0012/WBS-012																
Explanation of major changes to the project monthly stoplight chart:																
Risk STP-067A <i>Safety Classification of SSCs - DSA/TSR</i> was removed from the stoplight chart in the month of September, as it no longer poses a threat to the project.																
Realized Risks (Risks that are currently impacting project cost/schedule)																
No realized risks identified in the month of September.																
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																
No critical risks identified in the month of September.																
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																
FY2017 Risk Triggers (Risk could be realized in FY2017)																
STP-103: K Basin Pre-Operational Acceptance Testing (KPAT) & ECRTS Startup	The ECRTS equipment does not operate as expected, requiring increased engineering, startup, operations, and construction Firm Fixed Price contractor support; as well as equipment replacement, procurement, and retesting. Realization of this risk would also require additional training, procedure revision, and design modifications because of construction testing and/or Lines of Inquiry for Readiness Review resulting in cost impacts and schedule delays. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$4.5 million, 90 days	●	↑	Risk Trigger: 1) The ECRTS equipment does not operate as expected. 2) Unexpected attrition of critical testing personnel. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Mitigation action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>Use overtime to offset schedule impacts.</td> <td>As Needed</td> <td>N/A</td> </tr> <tr> <td>Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.</td> <td>As Needed</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in the month of September. KPAT testing is in progress. No significant equipment failures as of September 30, 2017.	Mitigation action(s)	FC Date	%	Use overtime to offset schedule impacts.	As Needed	N/A	Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.	As Needed	N/A			
Mitigation action(s)	FC Date	%														
Use overtime to offset schedule impacts.	As Needed	N/A														
Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.	As Needed	N/A														
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: Low (10% to 25%) Worst Case Impacts: \$2 million, 48 days	●	↔	FY2018 Risk Triggers: 1) An operational upset or spill results in work shutdown at K Basin. This risk will commence in FY2018 and continue throughout the project lifecycle until the sludge is removed from 105KW Basin. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Mitigation action(s)</th> <th style="width: 15%;">FC Date</th> <th style="width: 15%;">%</th> </tr> </thead> <tbody> <tr> <td>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 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>Evaluate the potential for installation of camera systems to allow Operations and Radiation Protection management to monitor testing and operation dry runs to ensure appropriate discipline and PPE are utilized to complete STSC connect/disconnect evolutions.</td> <td>TBD</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in the month of September. Training and procedure development are nearing completion. Readiness Self-Assessment affidavits will be completed in November 2017.	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 MASF and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.	Complete	100	Evaluate the potential for installation of camera systems to allow Operations and Radiation Protection management to monitor testing and operation dry runs to ensure appropriate discipline and PPE are utilized to complete STSC connect/disconnect evolutions.	TBD	N/A
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 MASF and develop procedures that use the information and knowledge gained during the activity for use at the KW Basin.	Complete	100														
Evaluate the potential for installation of camera systems to allow Operations and Radiation Protection management to monitor testing and operation dry runs to ensure appropriate discipline and PPE are utilized to complete STSC connect/disconnect evolutions.	TBD	N/A														

Unmitigated Risk Impacts	Assessment		Comments						
	Month	Trend							
RL-0012/WBS-012									
STP-073-C: Processing Efficiency - Retrieval & Shipping	The realized processing efficiency associated with sludge retrieval and shipping operations does not match the baseline plan. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$0K, 48 days	● ↔	<p>FY2018 Risk Triggers: Actual processing efficiency associated with sludge retrieval and shipping operations does not match baseline assumptions. This risk will commence in FY2018, beginning with operations campaign.</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 the month of September. Operations personnel were given training on the process system equipment and will continue to participate in training activities through readiness preparations. No foreseeable impacts in the future and no alternative course of actions are needed at this time.</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 threats/opportunities)									
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 No. 1701045 providing direction to accelerate the capital portion of the SRP. The risks listed, however, are for the non-capital scope. If contract direction is given to accommodate the acceleration opportunities to the SRP non-capital scope and the transfer of all sludge to T Plant is incorporated into FY2018, then CHPRC would re-assume ownership of these risks once change is definitized. As part of the SRP acceleration, risks were re-evaluated and used as the basis for the risk analysis.									

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	6.1	7.9	7.0	1.8	29.1%	0.8	10.3%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (+\$1.8M/+29.1%)

The current month positive schedule variance is due to significant progress made on the KPAT as integrated testing was initiated during September. In addition, following receipt of the SER from RL on September 1, 2017, the KW Basin integrated DSA/TSR was implemented on September 21, 2017. Both of these scopes of work were recovery of work that was previously behind schedule. The project is on track with schedule contract to date with an overall SPI of 1.00.

CM Cost Performance (+0.8M/+10.3%)

The current month positive cost variance is due to the completion of level-of-effort activities with fewer personnel than planned. Personnel are supporting PUREX, 300-296, and various other CHPRC projects. All work is being accomplished with available resources. In addition, earned value for development and approval of the as-built DSA/TSR was during September. The DSA/TSR submitted in April 2017 included the as-built design of the ECRTS.

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	698.0	697.8	664.2	(0.2)	-0.0%	33.5	4.8%	739.3	704.3	40.1	35.1

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (-\$0.2M/-0.0%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$33.5M/+4.8%)

The variance is within reporting thresholds.

Variance at Completion (+\$35.0M/+4.7%)

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	FY2017		Variance
	Projected Funding	Spending Forecast	
Expense - Spending Forecast	34.4	32.2	2.2
Incremental Scope Pending Change Management	0.0	0.0	(0.0)
Expense - Subtotal	34.4	32.2	2.2
Line Item (LI)	65.0	36.2	28.8
Incremental Scope Pending Change Management	0.0	0.0	(0.0)
LI -Subtotal	65.0	36.2	28.8
RL-0012 – Total	99.4	68.4	31.0

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

FY2017 funding for PBS RL-0012 is \$99.4 million. Positive variance of \$2.2 million in expense funding is the result of reclassification of Garnet Filter Media Removal and Sand Filter Media Removal scopes from PBS RL-0012 to PBS RL-0041, savings forecast for sample maintenance from Pacific Northwest National Laboratory (PNNL), and savings forecast for project management scope – work is being performed with reduced staff. Positive variance in LI for FY2017 is due to receipt of entire LI funding in the current year. Unused funding will be carried over to support work planned for FY2018.

Critical Path Schedule

The critical path is being driven by completion of testing, updating of technical documentation, development/delivery of staff training, development/approval of procedures, and final readiness preparations. Following a successful Contractor and DOE ORR, RL will provide authorization to commence retrieval operations in parallel with the DOE-HQ review/approval of CD-4. Completing retrieval operations, including the filling of STSCs with sludge and transporting them to T Plant, to complete Tri-Party Agreement Milestone M-016-176, *Complete Sludge Removal from 105-KW Fuels Storage Basin* (September, 2019); however, the STP team has modified the FES to implement acceleration opportunities, which could facilitate the transfer of all sludge to T Plant by September 30, 2018.

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 Baseline Change Request (BCRs) define CHPRC planning with respect to Tri-Party Agreement milestones. The following table is the Tri-Party Agreement milestones 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		2/17/2018	The forecast date does not include schedule margin from the project's risk analysis and assumes CD-4 is not required to begin sludge removal.
M-016-177	Complete installation of sludge transfer equipment in KW Reactor facilities	9/30/2017		4/20/2017(A)	Complete

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Prepare KW Facility DSA/TSR SER	4/11/17(A)	8/29/17(A)
RL SRB Review of KW Facility DSA/TSR	4/11/17(A)	8/29/17(A)
RL Issue SER for KW Facility DSA/TSR	4/11/17(A)	9/01/17(A)
RL Review & Comment on Emergency Planning Hazard Assessment (EPHA)	5/22/17(A)	9/19/17(A)
RL Approve IKPAT SNR	8/14/17(A)	8/22/17(A)
RL Final Approval of POA - K Basins	9/13/17(A)	10/28/17
RL POA Issued and Distributed	11/29/17	12/08/17
RL IP Issued	12/09/17	12/18/17

Section C

Solid Waste Stabilization and Disposition (RL-0013)



C. J. Simiele
Vice President for
Waste and Fuels
Management Project

September 2017
CHPRC-2017-09, 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 September reporting period, August 21 – September 30, 2017, Waste and Fuels Management Project (W&FMP) maintained facilities in a safe and compliant condition. Overall, the project continues to deliver ongoing efficiencies identified and planned 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), the Waste Encapsulation and Storage Facility (WESF) Modifications and Capsule Storage Area (CSA) conceptual design documents were approved and a Request for Proposal (RFP) released for bids to perform detailed design for CSA and WESF modifications. The CD-1 package was transmitted to RL for approval. Also during the month, the Safety Design Strategy (SDS) and major modification documents were approved by RL. A public meeting to convey notice of intent (NOI) for construction of the CSA was held on September 21, 2017. The Cask Storage System Conceptual Design Report (CDR) is complete. Modifications to the preliminary design specifications were provided to NAC International to increase the Universal Capsule Sleeve (UCS) diameter and modify the confinement boundary location as a result of updating the borehole disposal criteria.
- T Plant completed training and qualification for the new 90-day accumulation area operation, performed the first two sludge full-up emergency preparedness (EP) drills and developed Receipt of Sludge training and Master Documented Safety Analysis (MDSA) gap training. Roads were repaired for the primary route inside T Plant Complex for Sludge Transport & Storage Container (STSC) receipt.
- Completed M-091-52 transmittal of Hanford Federal Facility Agreement and Consent Order Milestone Change Request as required by milestone M-091-52. Also completed repack of 280 cubic meters (m³) satisfying M-91-47D (completed this FY2018 milestone a full year ahead of schedule), and also updated M-091 Transuranic Mixed (TM)/Mixed Low-Level Waste (MLLW) project management plan (PMP), HNF-19169, Revision 19 to incorporate Washington State Department of Ecology (WDOE) comments.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
17-EMS-WFMP-OB1-T1	Implement the requirement to provide a "full printed name" in CHPRC W&FMP controlled Resource Conservation and Recovery Act of 1976 (RCRA) inspection work packages and procedures.	<ul style="list-style-type: none"> • Review W&FMP inspection procedures, checklists, and work packages/PMS, which implement RCRA inspection criteria for direction to use the full printed name. • Initiate modifications to necessary procedures, checklists, and work packages/PMS, which implement RCRA inspection criteria to include the full printed name. 	5/31/17 9/28/17	100%
17-EMS-WFMP-OB2-T1	Implement 40 CFR 265 regulatory requirements identified by the Compliance Matrix for T Plant and Central Waste Complex (CWC) at the project level.	<ul style="list-style-type: none"> • Review the applicable 40 CFR 265 requirements to verify the implementing mechanisms and methods, and to identify compliance gaps. • Resolve identified gaps by initiating modifications to procedures into the PRC Procedure System (PPS) system. 	5/31/17 9/30/17	97%

Objective #	Objective	Target	Due Date	Status
17-EMS-WFMP-OB3-T1	Ensure W&FMP procedure inspection forms, checklists, and work packages, which implement RCRA inspection requirements, are capturing the RCRA inspection requirements and are appropriately located in the facility operating record.	<ul style="list-style-type: none"> Review all inspection procedures, checklists, and work packages to identify, which are used to meet RCRA inspection requirements. Initiate updates into PPS and/or Job Control System (JCS) systems to ensure RCRA inspection requirements are met and documentation is appropriately placed into the facility operating record. 	5/31/17 9/30/17	100%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	3	
Total Recordable Injuries	0	2	
First Aid Cases	1	*24	9/14/2017 – Employee was walking toward WESF shift office when an insect or piece of debris flew into right eye. Employee was wearing approved safety glasses at the time. There was stinging, redness, and irritation in the eye, which prompted the employee to get evaluation at HPMC. (24625) *Two First Aid cases; PTS in support of RL-0013.
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

13.01 Project Management

- o Performed/Completed:
 - Developed and issued work authorization documents (WAD) and work charging authorizations (WCA) for FY2018 fiscal year start up.

13.02 Capsule Storage & Disposition

- o Performed/Completed:
 - Decontamination and survey of operations gallery in support of down posting radiological buffer area.
 - Replacement of G cell inlet high-efficiency particulate air filter in WESF canyon.
 - Removal of more than 80 cubic yards of sanitary waste from lay-down yard and support facilities.
- o Surveillances/Preventive Maintenance (PM):
 - 46 PM packages.

13.03 Canister Storage Building (CSB)

- o Performed/Completed:
 - The rad air license change for the CSB stack flow rate was effective on September 5, 2017.

- o Surveillances/PMs:
 - 35 PM packages.
- 13.06 Transuranic (TRU) Repackaging**
- o Performed/Completed:
- o M-091 TPA Milestones:
 - Transmitted Hanford Federal Facility Agreement and Consent Order Milestone Change Request to RL as required by milestone M-091-52.
 - Repackaged 280m³, satisfying TPA milestone M-91-47D (FY2018 milestone).
 - Issued M-091 TM/MLLW PMP, HNF-19169, Revision 19 incorporating WDOE comments.
- o Repackaging:
 - One return shipment of size reduced/repackaged M-091 legacy suspect TRUM waste was received into Central Waste Complex (CWC) from Perma-Fix Northwest (PFNW), contributing 11.0m³ toward proposed M-091-47E.
- 13.07 Waste Receiving and Processing (WRAP)**
- o Performed/Completed:
 - Dry-run of Hazard Review Board (HRB) for removal of combustibles from glovebox in preparation to deactivate the dry chemical fire suppression system.
- o Surveillances/PMs:
 - 213 surveillances.
 - 29 PM packages.
- 13.08 T Plant**
- o Surveillances/PMs:
 - 586 surveillances.
 - 59 PM packages.
- Sludge Receipt**
- o Performed/Completed:
 - Training and qualification for new 90-day accumulation area operation.
 - First of two sludge full-up EP drills.
 - Received increase in the authorized not-to-exceed (NTE) supporting continuation of sludge acceleration.
 - Development of Receipt of Sludge and MDSA gap training.
 - Road repair for primary route inside T Plant complex for STSC receipts.
- 13.09 Central Waste Complex (CWC) and Low-level Burial Ground (LLBG)**
- o Performed/Completed:
 - Lighting upgrades at 2402-WH and 2402-WF.
 - Receipt of new Super 7A shipping container into the Outdoor Storage Area (OSA) A, providing additional shipping capability for TRU/M shipments.
 - Receipt of Navy reactor compartment USS Baltimore into Trench 94.
 - Floor repairs at 2403-WD.
- o Surveillances/PMs:
 - 509 surveillances.
 - 43 PM packages.
- o Shipments received:
 - Six Standard Large Box 2 (SLB2) and 10 standard waste boxes (SWBs) from the Plutonium Finishing Plant (PFP) into CWC in four shipments.
 - Six 1800 Top Load (TLs) TRU containers from PFP into Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) North Outside Storage Area (NOSA) in six shipments.
 - Eleven drums from Pacific Northwest National Laboratory (PNNL) into CWC in one shipment.

13.12 Integrated Disposal Facility (IDF)

- o Performed/Completed:
 - Approval of Performance Assessment supporting documents, monitoring, maintenance, and closure plans. Documents were also submitted for release.
 - Approval of Performance Assessment supporting procedure, Unreviewed Disposal Question Evaluation.

13.15 TRU Disposition

- o Performed/Completed:
 - Transmitted letter to RL documenting completion of the Hanford TRU Waste Program upgrades.
 - TRU program procedures and waste management procedures impacted by Waste Isolation Pilot Plant (WIPP) Washington Administrative Code (WAC), Revision 8 are approved and awaiting RL approval of the waste acceptance criteria.

13.16 Offsite Spent Nuclear Fuel Disposition

- o Maintained coordination for offsite Spent Nuclear Fuel Disposition.

13.21 Mixed Waste Disposal Trenches (MWT)

- o Surveillances/PMs:
 - 197 surveillances.
- o Shipments received:
 - Seven boxes and two drums received from PFNW into MWT 31 in two shipments.
 - One box received from PFNW into MWT 34 in one shipment.

13.24 Management of Cesium and Strontium Capsules Project

- o Performed/Completed:
 - WESF Modifications and CSA Conceptual Design: Design documents were approved and a RFP released for bids to perform detailed design for the CSA and WESF modifications.
 - Project Management: The CD-1 package was transmitted to RL for approval. The SDS and major modification documents were approved by RL.
 - Environmental: A public meeting to convey NOI for construction of the CSA was held on September 21, 2017.

13.25 Capsules Interim Storage Operations

- o Performed/Completed:
 - Cask Storage System Design: The CDR was completed. Modifications to the preliminary design specifications were provided to NAC to increase the UCS diameter and modify the confinement boundary location as a result of updating the borehole disposal criteria.

Project Technical Services (PTS) Support**Project Delivery****CWC Roof Repairs**

- o Performed/Completed:
 - Roof repairs to 2404-WA.
 - Commenced repairs to 2403-WD.

Canister Storage Building Door Refurbishment

- o Performed/Completed:
 - All lead abatement.
 - North side concrete cuts for both doors.

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 facility 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, and Ecology to agree on the required document changes and schedule to provide needed SEPA coverage. The revised draft permitting plan that Ecology will distribute for review in October will reflect the approach of using a ROD amendment.

Status:

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

Issue:

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

Corrective Action:

Work with Ecology to provide 30 percent design (as previously 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 project continues to await a response.

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. The project continues to await direction from RL.

Issue:

Deteriorating Waste Containers: Retrieved and repackaged containers in storage continue to show 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:

Continuing to use the best demonstrated available technology to provide adequate configuration and minimize the potential for contamination spread during the long-term storage (i.e., protecting boxes with tarps or protective shoring; overpacking drums). Streamlining and consolidating existing container management procedures. RL authorized the acceleration of FY2018 TRU commercial repackaging, allowing shipments to PFNW for repackaging to continue.

Issue:

Mission Support Alliance, LLC (MSA) Cross-Connection Control Program performed a Health Hazard Level Re-Evaluation following the guidance listed in 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-connection 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.

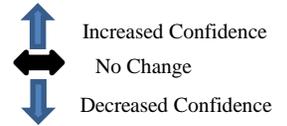
Status:

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 required, unless RL approves an alternate (no action) approach transmitted on July 6, 2016 (CHPRC-1602928). A meeting was held with RL on January 12, 2017, to discuss the contractual direction necessary to proceed. The project continues to await RL direction for sanitary water system facility modifications. RL has not provided specific direction, the Department did not authorize this work scope for FY2018.

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: No major changes to the monthly spotlight chart in the month of September .																						
Realized Risks (Risks that are currently impacting project cost/schedule)																						
WSD-125: Multi-Year Pause in Waste Processing Results in Unexpected Container Integrity Issues	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. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$5 million, 0 day	●	↔	Risk Event: In November 2011, degraded containers were discovered in CWC. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 70%;">Risk recovery action(s)</th> <th style="width: 10%;">Risk Date</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>Perform daily/weekly waste container surveillances to identify container abnormalities.</td> <td rowspan="3" style="text-align: center; vertical-align: middle;">11/01/11</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">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 style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Process waste packages at a rate funded by RL.</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Procuring stainless steel 85 gallon over packs for alternative storage of containers showing signs of degradation.</td> <td></td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> </tbody> </table> Recovery Action Assessment: No significant changes in the month of September . Project continued to perform container surveillances in the month of September to identify container and container cover abnormalities. Twenty-four containers in 2404WC had signs of exterior corrosion that were placed on the watch-list and are being scheduled for overpack. The delivery of the stainless steel overpacks is complete, and the project is prepared to overpack the twenty-four containers by the end of October. The project completed overpack and plans to move storage box 75DMA16F3 into 2403WD when work priorities allow. The remaining containers will continue to require surveillance and continued enhanced monitoring.	Risk recovery action(s)	Risk Date	FC Date	%	Perform daily/weekly waste container surveillances to identify container abnormalities.	11/01/11	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 over packs for alternative storage of containers showing signs of degradation.		Complete	100
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Risk Title	Unmitigated Risk Impacts	Assessment		Comments																	
		Month	Trend																		
RL-0013/WBS-013																					
WSD-143 Safety Classification of SSCs - MDSA Rev. 12	RL approval of the MDSA Revision 12 takes longer than the negotiated assumption planned in the baseline and/or the safety classification of Systems, Structures, and Components (SSCs) is more conservative than the safety analysis dictates, resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Very Likely (>90%) Worst Case Impacts: \$600K, 120 days			Risk Event: On November 28, 2016, CHPRC submitted letter CHPRC-1604566A R1 -MDSA, Revision 12, the TSR Revision 12, the <i>T PLANT FHA</i> , and the SWOC FHA, Revision 6. While the baseline plan assumed that RL would review and approve this submittal within 120 calendar days (or by March 3, 2017), RL senior management had informally agreed to accelerate review/approval of this submittal within 60 days to facilitate moving all 100K sludge from the 105KW basin to T Plant by September 8, 2018. RL transmitted letter 17-NSD-0018_RL to CHPRC on March 30, 2017, providing a 35-page Review Comment Record (RCR), with comments that must be resolved prior to resubmitting the updated MDSA & TSR. The updated MDSA/TSR was submitted to RL on May 18, 2017.																	
				<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>Obtain written comments from RL Nuclear Safety Division personnel against the submittal described above.</td> <td rowspan="4" style="text-align: center;">2/19/17</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Conduct interface meetings between RL and CHPRC senior management to ensure MDSA approval challenges are discussed and resolved, if possible, prior to any action that delays approval of the MDSA.</td> <td style="text-align: center;">As Needed</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Resolve RL NSD comments (17-NSD-0018_RL) and solicit RL NSD concurrence.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Prepare analysis on installing seismic cutoff switches in each of the SWOC facilities/buildings, and restricting drum storage to two tiers. Develop strategic plan for vehicle barrier replacement to protect high-MAR containers from vehicle impacts.</td> <td style="text-align: center;">10/27/2017</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>	Risk recovery action(s)	Risk Date	FC Date	%	Obtain written comments from RL Nuclear Safety Division personnel against the submittal described above.	2/19/17	Complete	100	Conduct interface meetings between RL and CHPRC senior management to ensure MDSA approval challenges are discussed and resolved, if possible, prior to any action that delays approval of the MDSA.	As Needed	N/A	Resolve RL NSD comments (17-NSD-0018_RL) and solicit RL NSD concurrence.	Complete	100	Prepare analysis on installing seismic cutoff switches in each of the SWOC facilities/buildings, and restricting drum storage to two tiers. Develop strategic plan for vehicle barrier replacement to protect high-MAR containers from vehicle impacts.	10/27/2017	0
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Prepare analysis on installing seismic cutoff switches in each of the SWOC facilities/buildings, and restricting drum storage to two tiers. Develop strategic plan for vehicle barrier replacement to protect high-MAR containers from vehicle impacts.	10/27/2017	0																			
Recovery Action Assessment: No significant changes in the month of September. CHPRC received the Safety Evaluation Report (SER) 17-NSD-0041_from RL on July 31, 2017, and began implementation of MDSA Revision 12. Preparation of Revision 13 requires addressing all outstanding comments from Revision 12 SER. Accident analysis may have to be revised to include additional controls or SSCs to reduce the unmitigated risk of the accident scenario. The seismic event with fire was added to Revision 12, and as a result, imposed restrictions that prohibits retrieval activities. Further analysis is in the process and will be submitted to RL to address action items from the Revision 12 SER as a result of the added seismic event with fire.																					
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)																					
WSD-097: Major Equipment Failure - T-Plant	T Plant suffers a major equipment failure (crane, primary power supply, etc.), resulting in cost impacts and schedule delays. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$3 million, 96 days			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.																	
				<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 style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table>	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																			
Mitigation Assessment: No significant changes in the month of September. 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 first order for mechanical parts is complete. The project has completed the crane bridge drive bearing repairs discovered during preventive maintenance.																					

Risk Title	Unmitigated Risk Impacts	Assessment		Comments															
		Month	Trend																
RL-0013/WBS-013																			
WSD-019: MLLW & TRU Treatment Impacts	MLLW and TRU treatment capacity/capability does not meet Hanford needs or treatment does not occur as scheduled, resulting in cost impacts. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$2.5 million, 0 day			Risk Trigger Metric: Will continue throughout contract (September 30, 2018).															
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				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 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 Assessment: No significant changes in the month of September. 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 a Parma-Fix treatment facility in Tennessee (ME). Additional treatment capability will be needed to meet all 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. 295 m ³ of legacy M -91 TRUM waste was authorized by DOE during FY2017, of which all (295m ³) has been shipped to date. Along with the oversized TRUM waste item shipments from PFP during FY2017, enough waste has been shipped to PFNW to meet their minimum optimal processing volumes. Additional authorizations has been received by DOE for FY2018, which will maintain PFNW's minimum optimization processing volumes.																			
Risk Trigger Metric: This risk has been triggered due to the current condition of 221-T Dock number 2.																			
<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>11/1/2017</td> <td>80</td> </tr> <tr> <td>Submittal of a BCR to break out the planning package planned for May.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Repairs to 221-T Dock number 2 in support of sludge receipt	11/1/2017	80	Submittal of a 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	11/1/2017	80																	
Submittal of a BCR to break out the planning package planned for May.	Complete	100																	
Mitigation Assessment: Deterioration of the steel decking and steel support structure for 221-T dock number 2 has required that the dock be taken out of service. A new loading dock is necessary, as one of the Life Safety Code required emergency egress points and to support the receipt of sludge. This dock also provides storage areas for various gas bottles. T Plant completed removal of dock number 2 and poured associated concrete pads. An onsite inspection of the bottle rack and stair fabrication was performed by the project in August. Dock installation is anticipated in mid October 2017.																			
FY2017 Risk Triggers (Risk could be realized in FY2017)																			

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0013/WBS-013										
WSD-W135-15: Utilization of 2003 Pre-Conceptual Design	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. Risk Handling Strategy: Accept Probability: Very Likely (>90%) Worst Case Impacts: \$5,100K, 0 days	●	↔	<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 the month of September. 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 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-W135-16: Content and Approval of Critical Decision Packages	The content of the critical decision 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 critical decision 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 the month of September. The pre-conceptual design of the project was based on DOE O 413.3A; the current version is DOE O 413.3B, change 2. New requirements will impact the content of the critical decision packages or impact the duration and extent of the RL review. Working closely with RL on the tailoring strategy to meet the DOE O 413.3B requirements. 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 the 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 the month of September. 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% 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% 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: CHPRC continues to have regular interfaces with Ecology to discuss the issue and are evaluating options should the 90% be required.</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 the month of September .										

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	9.2	10.6	11.9	1.4	14.9%	(1.3)	(12.6%)

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (+\$1.4M/+14.9%)

The current month favorable schedule variance is primarily associated with acceleration of FY2018 work scope into FY2017 for Large Box Repackaging coupled with completion of W-130 contract change order negotiations and accelerated progress on W-135 Cask Storage System preliminary design.

CM Cost Performance (-\$1.3M/-12.6%)

The current month unfavorable cost variance is the result of a reduction of BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33 percent applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58 percent was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool. A variance distribution of the G&A over-liquidation occurred in September 2017, which represented the June-September time frame (there was a separate variance distribution in June), offset against the effective G&A rate adjustment for the entire year, resulting in a negative CM CV. Additional impact to the CV results from the variance distribution was calculated on actual costs compared to the BCWS/BCWP reduction for the effective G&A rate calculated based on the budgeted value.

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	1,190.7	1,194.4	1,116.6	3.7	0.3%	77.7	6.5%	1,355.2	1,235.7	119.1	119.5

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (\$+3.7M/+0.3%)

The CTD schedule variance is within threshold.

CTD Cost Performance (+\$77.7M/+6.5%)

The contract-to-date favorable cost variance is due to the continued implementation of the majority of planned efficiencies.

Variance at Completion (+\$119.5M/+8.8%)

The Variance at Completion increased \$43.8 million due to an inadvertent forecasting error of \$43.8 million associated with the PBS RL-0013 W-135, Cesium/Strontium Capsule Dry Storage Project, which was not discovered in the review process prior to month-end closing. The remaining corrected variance at completion of \$75.7 million is associated with the continued implementation of the majority of planned efficiencies.

Contract Performance Report Formats are provided in Appendix A

FUNDS vs. SPEND FORECAST (\$M)

WBS 013/RL-0013 Waste and Fuels Management Project	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	108.0	95.9	12.1
Incremental Scope Pending Change Management	0.0	0.0	(0.0)
RL-0013 – Total	108.0	95.9	12.1

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

The FY2017 projected funding for Project Breakdown Structure (PBS) RL-0013 of \$108.0 million is based on RL funding guidance. The total fiscal year spend forecast (FYSF) of \$95.9 million was decreased by approximately \$.1.3 million (1.2 percent) from last month primarily due W-130 contract change order negotiations, continued T-Plant Base Operations efficiencies including tagging out unnecessary equipment, reducing the number and size of RMAs, removing waste inventories, streamlining procedures and processes, optimizing engineering and support resources, and reducing the number of frequency of PMs, and cost efficiencies from DSA chapter 3 development for IDF.

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 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 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		9/30/18	On schedule
M-091-52	Submit change request with target dates for new/modified capabilities to process TRUM waste.	12/29/17		12/28/17	On schedule (RL requested a 90-day extension to this milestone)
M-091-47D	Certify or Treat 280 Cubic Meters of TRUM/MLLW Waste	8/8/17	8/8/17 (A)	8/8/17	Complete
M-091-03L	Submit Revision of TRUM Waste and MLLW PMP to Ecology.	6/30/18		6/30/18	On schedule
C-026-07L	Tritium Treatment Technology Developments to Ecology and EPA.	3/31/18		2/5/18	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 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 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

Contract Section	Project	GFS/I	Status
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
RL Review and Approve Critical Decision 1 (CD-1) Package for Management of the Cesium and Strontium Capsules (MCSC) Project (W-135)	08/25/17 (A)	01/02/18

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

September 2017
CHPRC-2017-09, 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 and well drilling (including development) completed in the current month 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	27.6	392.2	2.2	33.5						
HX P&T	20.6	371.7	1.8	25.3						
KR-4 P&T	9.5	144.4	0.1	1.4						
KW P&T	14.2	71.3	3.0	14.6						
KX P&T	19.0	379.6	1.1	21.6						
200 West P&T	93.9	945.7	7.2	83.9	179.0	1,778.0	.3x10 ¹²	2.62x10 ¹²	23.5	328.0
Combined	184.8	2,304.8	15.4	180.3	179.0	1,778.0	.3x10¹²	2.62x10¹²	23.5	328.0
FY2017 KPG	--	2,200.0	--	160.0	--	1,700.0	--	N/A	--	45.0

Well Drilling by Area	FY2017 Planned	Current Month	FY2017 Cumulative
100-KR-4	5	1	5
100-HR-3	0	1	1
200-UP-1	11	1	11
200-ZP-1	2	-	2
M-24 Milestone	5	-	5
300 Area	67	-	67
200-DV-1	5	-	5
Total Wells	95	3	96
Site Wide Boreholes	4	1	3

EMS Objectives and Target Status

Objective #	Target	Actions	Due Date	Status
17-EMS-SGWR-OB1 Monitor and confirm low carbon tetrachloride emissions at the 200 West P&T Facility.	T1 – Evaluate treated off gas analytical results from compliance sampling and process sampling each quarter.	Monitor and confirm low-carbon tetrachloride emissions at the 200 West P&T Facility.	9/30/17	100%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	NA
Total Recordable Injuries	0	0	NA
First Aid Cases	2	*49	<ul style="list-style-type: none"> 9/18/2017 While removing a tarp from a roll-off box, an employee felt what was described as a bite under the sleeve of the left arm. After removing the sweatshirt, two to three bite marks surrounded by an area of red skin were observed. An examination was conducted and the employee returned to work with no restrictions. (24621) 9/25/2017 An employee suffered a contusion of a toe on the right foot after kicking a piece of wood while attempting to loosen the metal banding holding unistruts together. The individual was examined at HPMC, no treatment was provided, and returned to work with no restrictions. (24628) <p>*2 First Aid cases, PTS in support of RL-0030.</p>
Near-Misses	0	0	NA

KEY ACCOMPLISHMENTS

RL-0030 Accomplishments

RL-0030.01 RL 30 Operations

Environmental Integration

- Transmitted the Decisional Draft Biointrusion/Biomobilization Sampling and Analysis Plan (SAP) to RL for review on September 27, 2017.

River Corridor

300-FF-5 Operable Unit (OU)

- On August 31, 2017, RL, Environmental Protection Agency's (EPA), and CHPRC met for a full day workshop with representatives of the Yakama Nation. The purpose of the workshop was to provide a technical response to an email from Rose Longoria dated June 28, 2017, and discuss overall performance of the Stage A Uranium Sequestration.

100-HR-3 OU

- Completed drilling of six P&T extraction wells in the 100-H Area.
- Transmitted the Decisional Draft Remedial Design/Remedial Action Work Plan (RD/RAWP) for the 100-DR-1, 100-DR-2, 100-HR-1, 100-HR-2, and 100-HR-3 OUs to RL for review on September 21, 2017.

100-KR-4 OU

- Transmitted the decisional draft, KW Soil Flushing/Infiltration Treatability Test Plan, to RL for review on September 18, 2017.
- Completed the optimization well drilling campaign for fiscal year (FY) 2017.

100-NR-2 OU

- Initiated formal consultation with the Yakama Nation on September 28, 2017, regarding the cultural resource review for reinjection and expansion of the Permeable Reactive Barrier. The meeting resulted in an agreement to proceed with the Section 106 process for this project.

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

- Completed installation of the new uranium plume extraction well and project turnover of the expanded uranium extraction system to operations.
- Completed drilling the fourth (699-E31-50) of four calendar year 2017 chromium plume wells. Completed construction of the third well (200-E29-55).
- Received EPA approval of a Tri-Party Agreement Change Notice for the 200-UP-1 Waste Management Plan and the Drilling SAP to add an additional (eleventh) southeast chromium plume characterization well.
- Transmitted the Decisional Draft Revision 1 200-UP-1 Groundwater OU RD/RAWP to RL on September 14, 2017, for review. Provided a presentation to RL on September 13, 2017, summarizing the results of 200-UP-1 remedy fate and transport modeling performed in support of the 200-UP-1 RD/RAWP update.

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

- Developed general responses to Ecology comments on the Draft A 200-BP-5 Remedial Investigation (RI) and 200-PO-1 RI Addendum. Met with Ecology on September 28, 2017, to discuss an interim Record of Decision (ROD) strategy to streamline the completion process for the remedial investigation reports. Ecology is evaluating this approach.
- Submitted the Revision 0 Central Plateau Groundwater Tracer Study Work Plan to RL on September 7, 2017.

200-EA-1 OU

- Submitted an informal draft of the 200-EA-1 RI/Feasibility Study (FS) work plan chapters five, six, and seven to RL and Ecology on September 21, 2017, for concurrent review.
- Submitted chapter three (initial evaluations), appendices C (waste site specific initial evaluations), D (calculation listing), and E (ARARs) to RL on September 29, 2017, for informal review.
- Provided Ecology with Revision 0 200-EA-1 OU Scoping document on September 27, 2017.
- Provided RL with requested evaluations and comparisons to previous site comments based on the Ecology Principle and Parameter text on September 19, 2017.
- Received Ecology signature on five waste site reclassification forms (200-E-99, 200-E-100, 200-E-301, 216-B-64, and UPR-200-E-101) on September 5, 2017.
- Placed environmental calculation file assessment and presentation of available waste site data for the 200-EA-1 OU into the administrative record on August 28, 2017.

200-SW-2

- Provided the Trench 94 draft procedural closure letter to RL for review on September 19, 2017.

Central Plateau Closure Plans

- Provided letter materials to the RL team on September 6, 2017, in support of initiating the workflow for the 216-A-29, 216-B-63, and 216-B-3 procedural closure letters.
- Completed preparation of draft 216-S-10 waste designation calculation on September 19, 2017.

200-DV-1 OU

- Completed design of the ammonia site sensors and wellhead for the Uranium Reactive Gas Sequestration (URGS) Treatability Test on September 28, 2017. Completed project review of the piping and instrument diagram and process flow diagram for the URGS on September 14, 2017.
- Initiated assembly of the URGS injection trailers on September 27, 2017.

- Completed internal review of the draft final report for Deep Vadose Zone Treatability Test of Soil Desiccation for the Hanford Site Central Plateau on September 28, 2017.
- Completed drilling and decommissioning the third deep borehole located near the 216-S-13 Crib on September 6, 2017. Drilling is nearing completion of the final deep borehole near the 216-T-3 Reverse Well, reaching 225.3 feet below ground surface of the planned 274 feet.

200-ZP-1 OU

- Submitted the Decisional Draft Revision 1 200-ZP-1 Groundwater Operable Unit RD/RAWP to RL on September 6, 2017, for review. Provided a presentation to RL on September 18, 2017, summarizing the results of 200-ZP-1 remedy fate and transport modeling performed in support of the 200-ZP-1 RD/RAWP update.
- Completed drilling and initiated construction of the remaining two injection wells.

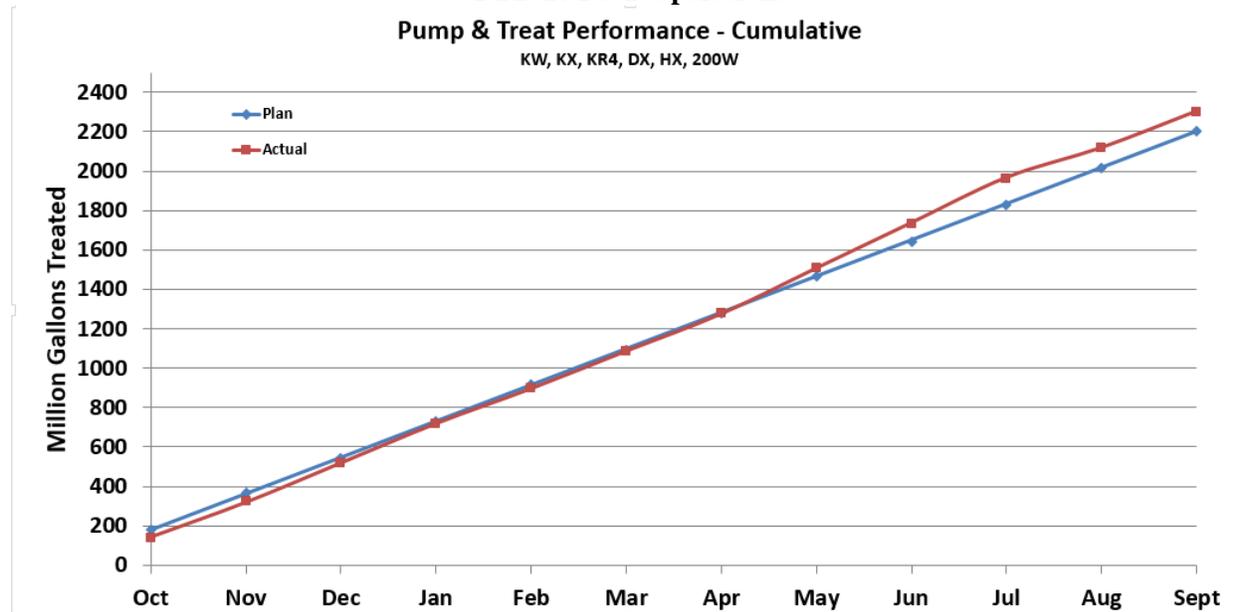
Groundwater P&T Facilities**200 West P&T**

- Operated the 200 West P&T at an average of 2,174 gallons per minute (gpm).
- Connected and placed into service new injection well YJ32.

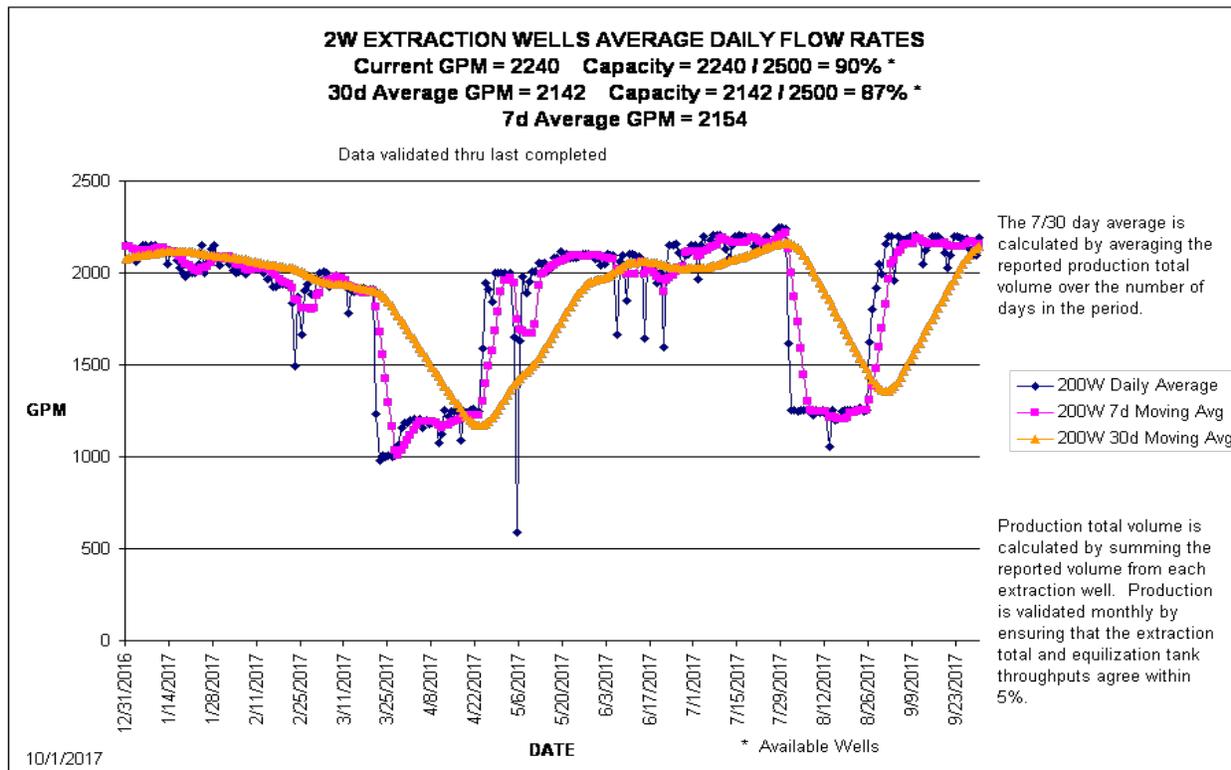
100 Area P&Ts

- Operated the DX P&T at 638 gpm, below the facility capacity of 775 gpm.
- Operated the KR-4 P&T at 220 gpm, below the facility capacity of 330 gpm.
- Operated the KW P&T at 329 gpm, near facility capacity of 330 gpm.
- Operated the KX P&T at 441 gpm, below the facility capacity of 900 gpm. Completed operations acceptance testing for new feed pump PF-X3F. Commenced conversion of the booster pump discharge header to stainless steel.
- Operated the HX P&T at 476 gpm, below the facility capacity of 900 gpm.

FY2017 P&T Operations Pump & Treat Performance - Cumulative KW, KX, KR4, DX, HX, 200W



200 West P&T



Project Technical Services (PTS) Accomplishments

Training and Procedures

- Published the Soil and Groundwater Remediation Project (S&GRP) Operations Supervisor on-the-job training guide.

Project Delivery

- S&GRP Wells
 - Completed fabrication of six 100-HR-3 electrical and mechanical racks.
 - 200-ZP-1 Injection Wells
 - Completed fabrication of two mechanical racks.
 - Completed bonding of high-density polyethylene (HDPE).
 - Completed YJ32 tie-in and construction completion document.
 - Initiated YJ29 tie-in.
 - 100-HR-3 Optimization Wells
 - Completed HDPE bonding and flushed lines for HE12, HE14, HE15, HE47, HE48, and HE49.
 - Completed running HE12, HE14, HE15, HE47, HE48, and HE49 Type W cable.
 - Completed running HE12, HE14, HE15, HE47, HE48, and HE49 fiber optic wire.
 - Completed XE36 and XE15 construction completion document for 100-KR-4 wells.
 - Completed DX fiber loop runs and testing.
 - Completed YE24 tie-in to the radiological building and construction completion document in support of the 200-UP-1 extraction system.
 - Continued to support site preparation at URGS Treatability Test site.
 - 600 Area Shower Trailer 600 Area
 - Completed electrical utilities tie into trailer.
 - Completed pouring of sidewalks and stripping of forms.
 - Installed underground electrical service.

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:

The final ROD was originally anticipated to be completed in September 2016. Completion of this ROD has further been delayed by the Yakama request for consultation, which is anticipated to take an additional six months to address their concerns/questions (April 2018).

Issue:

Range fire at the 100-HR-3 OU burned approximately five acres and damaged Type W cable and high-density polyethylene pipeline. The HX P&T facility was shut down on August 12, 2017, and the facility restarted on August 16, 2017, at a significantly reduced flow rate.

Corrective Action:

Initiate repairs as soon as possible.

Status:

The project will complete all fire-damaged equipment repair/replacement on October 2, 2017. All affected wells (seven extraction, one injection) will be placed back in service by this date. Issue closed.

Issue:

KX and KR-4 ion exchange vessels require diffuser repair. Approximately 14 of 36 vessels are in need of repair.

Corrective Action:

Repair all vessels with damaged diffuser.

Status:

All bottom-access vessel diffusers have been repaired/replaced at the KX facility (four vessels). The first top-access vessel was repaired at the end of September. Two top-access vessels still require diffuser repair at the KX facility and this is expected to be complete in October. Work on the KR-4 IX vessels is expected to commence once KX repairs are completed.

RISK MANAGEMENT STATUS

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

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

-  Increased Confidence
-  No Change
-  Decreased Confidence

Risk Title	Unmitigated Risk Impacts	Assessment		Comments								
		Month	Trend									
RL-0030/WBS-030												
Explanation of major changes to the project monthly spotlight chart: No major changes to the monthly spotlight chart in the month of September.												
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 14 of 36 KX and KR-4 P&T facility ion exchange vessels require diffuser repairs.</p> <table border="1" style="width: 100%;"> <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>1/31/18</td> <td>36</td> </tr> </tbody> </table> <p>Recovery Action Assessment: Five vessels have been repaired. Seven of the remaining nine vessels in need of repair are available for use with temporary screens in place. All bottom-access vessel repair is complete and the top-access vessel repair approach has been finalized and parts have been received. The project performed the first top-access vessel repair in September and the remainder of repairs will be completed prior to January 31, 2018.</p>	Risk recovery action(s)	Risk Date	FC Date	%	Repair all vessels with damaged diffusers	3/15/17	1/31/18	36
Risk recovery action(s)	Risk Date	FC Date	%									
Repair all vessels with damaged diffusers	3/15/17	1/31/18	36									
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)												
No critical risks identified in the month of September.												
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)												
No high risks identified in the month of September.												
Unassigned Risks (Pending ownership of identified risks/opportunities)												
No unassigned risks identified in the month of September.												

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	12.2	10.4	15.7	(1.8)	-15.0%	(5.3)	-50.8%

Numbers are rounded to the nearest \$0.1 million.

CM Schedule Performance (-\$1.8M/-15.0%)

Primary contributor to current month negative schedule variance results from agreement to delay 300-FF-5 Stage B injections for up to one year. The scope of work planned to be performed during this period was delayed at the May 30, 2017, meeting between RL, EPA, and the Yakama Indian Nation. A workshop was held August 31, 2017, to address Yakama Nation concerns and develop a path forward.

CM Cost Performance (-\$5.3M/-50.8%)

The current month cost variance was eroded by the \$2.4 million in spending incurred in support of FY2017 P&T optimization activities that are not planned in the Performance Measurement Baseline (PMB). Further, CM negative CV of -\$2.9 million was the result of a reduction of BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33 percent applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58 percent was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool.

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	1,407.8	1,390.2	1,363.0	(17.6)	-1.2%	27.3	2.0%	1,564.0	1,534.1	171.1	29.9

Numbers are rounded to the nearest \$0.1 million.

CTD Schedule Performance (-\$17.6M/-1.2%)

The variance is within reporting thresholds.

CTD Cost Performance (+\$27.3M/+2.0%)

The variance is within reporting thresholds.

Variance at Completion (+\$29.9M/+1.9%)

The variance is within reporting thresholds.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

FY2017			
RL-0030 Soil and Groundwater Remediation	Projected Funding	Spending Forecast	Variance
Spending Forecast	133.3	123.4	9.8
Incremental Scope Pending Change Management	0.0	0.0	0.0
RL-0030 –Total	133.3	123.4	9.8

Numbers are rounded to the nearest \$0.1 million

Funds/Variance Analysis

FY2017 expected funding was increased with a final allotment from RL to provide additional funds for project breakdown structure (PBS) RL-0030 FY2018 startup.

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-015-21A	Submit 200-BP-5 & 200-PO-1 OU FS Report and PP(s) to Ecology	6/30/18		12/26/18	At risk.
M-015-92A	Submit RFI/CMS & RI/FS Work Plan for 200-EA-1 OU to Ecology	7/31/18		TBD	At risk. Project is not funded in FY2018.
M-024-69-T01	Conclude discussions of well commitments initiated under M-024-58	8/1/18		8/1/18	On schedule.
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		9/30/18	On schedule.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review of Decisional Draft Version A 200-ZP-1 RD/RAWP Rev I	9/6/17 (A)	10/30/17
RL Review of Decisional Draft 200-UP-1 RD/RAWP Rev I	9/14/17 (A)	10/13/17
RL Review of Decisional Draft 100-HR-3 RD/RAWP	9/21/17 (A)	10/21/17
RL Review of Decisional Draft Biomobilization/Biointrusion SAP	9/27/17 (A)	10/30/17
Concurrent RL and CHRPC Review of Internal Draft SST WMA U Engineering Evaluation Report	10/4/17	10/10/17
Concurrent RL and CHRPC Review of Internal Draft SST WMA T Engineering Evaluation Report	10/16/17	10/20/17
Concurrent RL and CHRPC Review of Internal Draft LLBG WMA-3 Engineer Evaluation Report	11/9/17	11/16/17
RL Transmit Draft Rev 0 200-BP-5 RAWP for Regulator Final Check Review	11/30/17	12/1/17
Concurrent RL and CHRPC Review of Internal Draft 216-S-10 Pond and Ditch Engineer Evaluation Report	12/13/17	12/20/17
Concurrent RL and CHRPC Review of Internal Draft LLBG WMA-4 Engineer Evaluation Report	12/13/17	12/20/17
RL Review Draft Central Plateau Tracer Test SAP	12/21/17	1/22/18

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



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

September 2017
CHPRC-2017-09, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

The fiscal year (FY) concluded with several project breakdown structure (PBS) RL-0040 performance measure milestones being completed in September 2017. They include performance of 400 preventive maintenances, completion of the reduction and oxidation (REDOX) roof construction, removal of 11 tons of legacy waste, REDOX steam line removal, and demolition of 217B, 2716B, and 292B.

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	2	17	<ul style="list-style-type: none"> 9/12/17 – Employee strained side while getting into vehicle. The employee was treated at HPMC and returned to work without restriction. (24614) 9/28/17 – An employee cut wrist on metal sheeting. Employee was bandaged at HPMC and returned to work with restriction to left arm. (24637)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0040 Accomplishments

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

- Completed demolition of 292-B.
- Moved Dress/Undress trailer to REDOX
- Supported asbestos inspection and sampling planning activities for the area south of B Plant.

Plutonium Extraction Facility (PUREX) Tunnels

- Received RL concurrence on trial batch and grout formula.
- Completed the overburden removal in preparation for tunnel grouting utilizing the excavator and guzzler truck.
- Approved work package for tunnel investigation and camera installation/operation.
- Complete development of grouting work package and issued for approval.
- Completed ground scanning, obtained permits, and mobilized light plants and generators to site.
- Completed installation of all four excavation boxes and six lances for grout injection/passive ventilation.



- Completed placing concrete thrust blocks and backfilling all four excavation boxes.
- Removed cap from Riser 6 (south of collapsed zone) and installed new riser in south-end plenum.
- Deployed camera and light in tunnel south air plenum and completed investigation for that area.
- Completed construction of grout wash-out pit.
- Delivered crushed rock to tunnel area, and started placing engineered fill for the work platform for west support and access ramp.
- Mobilized work platform to site and prepared for installation.

PUREX Tank V-11-10-1

- Loaded and shipped the filled totes to the Environmental Restoration Disposal Facility (ERDF) for disposal.

PUREX Stack Sampling System Replacement

- Issued the project design drawings and plans for construction release.
- Completed preparation of the construction request for proposal (RFP) and issued for bid.
- Received and dispositioned all of the questions received after the bidder's walk down for replacement of the stack sampling system.
- Finished addressing availability issues and quality requirements on some of the materials submitted for purchase, based on manufacturer and/or supplier materials availability and quality limitations.
- Continued issuing purchase orders for all of the system materials and continued receiving and staging materials already ordered.
- Identified a design change for the location of the mini-split air conditioning unit in the pump room to ensure National Electrical Code (NEC) compliance.

B Plant Pre-filter and HEPA Filter Change-out

- Packaged pre-filters into the staged ERDF container and performed waste inventory and release surveys on the container.
- Downposted ACT-001 enclosure tent to a radiological buffer area (RBA) to assist with final setup, smoke testing, and high-efficiency particulate air (HEPA) filter change-out setup.
- Modified/cut out sections of the back wall of the ACT-002 enclosure and taped the plastic wall to the side to enable HEPA filter removal.
- Completed a workability review of the HEPA removal work package. A work change notice (WCN) was developed to clarify a number of questions that were identified during the workability review and incorporate the revised Fire Marshal Permit.
- Commenced assembly and delivery of boxes and spacer pallets that will be used to package the removed HEPA filters into ERDF roll-on/roll-off containers.
- Received the first set of new HEPA filters and started acquisition verification services (AVS) inspection. The second set of tested HEPA filters were shipped from the testing facility to CHRPC. A total of 37 filters will be received upon arrival of the second set. Thirty-six filters are required to complete ACT-001 and ACT-002 change out.

Continued Progress on Canyon Stabilization Documents

- Completed Air Emissions Calculations: 203A, 211A, and REDOX Canyon.

REDOX Risk Mitigation

- Completed REDOX steamline asbestos abatement.
- Completed removal of legacy waste from the first, third, fourth, and fifth floors of the REDOX silo, and commenced removal of asbestos tiles from the seventh floor.

- Completed detailed radiological surveys to finalize baseline mapping for the first, second, third, fourth, fifth, and seventh floors of the silo, with the goal of down posting this area from a contamination area.
- Commenced exit sign visibility upgrades. Verified and approved emergency exit capabilities for REDOX silo intrusive work.
- Completed 90 percent of the approvals for the job hazard analyses (JHA) to support REDOX dock cleanout to enhance facility waste egress.
- Walked down area with additional craft personnel and commenced tent design for creating access into the west end of the REDOX north sample
- Continued characterization of the hazardous waste streams in the REDOX silo for final disposition.
- Completed a more detailed radiological survey of the eighth and final floor of the silo with the goal of using the information to down post the silo from a contamination area posting.
- Received sampling results, which demonstrate silo second-floor asbestos hazard does not exist and removed danger postings.
- Obtained paint field characterization data on silo third, fourth and fifth floors.
- Completed silo field walk down with soil and groundwater qualified samplers for all silo floors to finalize work scope and Sample Analysis Forms.
- Completed peer review of biological hazard removal work package for the REDOX loading dock and routed for approval.
- Continued integration of newly transferred craft employees into field walk downs in order to better familiarize staff with the facility.
- Completed beryllium sampling inside of REDOX Stack Sample Cabinet.

REDOX Roof

- Completed asbestos abatement on REDOX silo duct and demobilized crew.
- Completed removal of stair landing and installed new stair anchors and platform.
- Completed steel framing erection for complete building grid lines 17 – 1.2.
- Completed core drilling and setting column anchors and pins.
- Removed east side scaffold and installed sheeting grid line 17E to 17F.
- Applied polymeric barrier system coating to the final section of the roof.
- Performed a final inspection of the REDOX Roof.
- Completed the construction completion document (CCD), subject to completion of punch list items.

MAJOR ISSUES

Issue:

As a result of the PUREX Tunnel 1 collapse, CHPRC received a notification on May 9, 2017, from the Department of Ecology (DOE) of an administrative order, with which CHPRC must comply. The administrative order requires the following corrective actions.

Corrective Action:

- Identify and implement recovery actions associated with the collapsed PUREX Tunnel 1 – proposal schedule and estimate completed August 2017.
- By July 3, 2017, submit to Ecology the Nuclear Waste Program a structural integrity evaluation for both PUREX Storage Tunnels 1 and 2. (CA#1) – completed June 29, 2017.
- By August 1, 2017, submit a draft report detailing the corrective actions to ensure the safe storage of the waste in the PUREX Storage Tunnels 1 and 2 to RL the Nuclear Waste Program for comment and approval. (CA#2) – completed July 11, 2017.
- By October 2, 2017, submit a draft permit modification to the Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion Revision 8C to modify the permit. (CA#3) – on schedule.

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: No major changes to the monthly spotlight chart in the month of September .																					
Realized Risks (Risks that are currently impacting project cost/schedule)																					
WSR-202S-02: REDOX – Inclement Weather	Inclement weather, including moderate winds, low or high temperatures, heavy rain, or thunderstorms will impact the REDOX roof replacement. Risk Handling Strategy: Accept Probability: Likely (75% to 90%) Worst Case Impacts: \$0K, 32 day			Risk Event: For the duration of February through June, the REDOX roof construction activities were impacted by high wind and other weather events – four weather delays were experienced in June. No additional weather delays were experienced in September . <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk recovery action(s)</th> <th style="text-align: center;">Risk Date</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Crews working overtime to support schedule recovery.</td> <td style="text-align: center;">Multiple</td> <td style="text-align: center;">Ongoing</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> Recovery Action Assessment: No major changes in the month of September . CHPRC has realized cost and schedule impacts resulting from inclement weather conditions through the months of February through June. Schedule and cost impacts continue to be documented and projected. CHPRC has and continues to perform all actions that may mitigate impacts, such as changing working hours to avoid heat delays. However, weather delays are difficult to forecast and mitigate. CHPRC plans to capture any scope and cost changes resulting from the weather delays in the TCoPD submittal for the corresponding change proposal (CP 040 311 1625).	Risk recovery action(s)	Risk Date	FC Date	%	Crews working overtime to support schedule recovery.	Multiple	Ongoing	N/A									
Risk recovery action(s)	Risk Date	FC Date	%																		
Crews working overtime to support schedule recovery.	Multiple	Ongoing	N/A																		
D4-042: Unexpected Site Conditions - D4	Unexpected site conditions are encountered during D4 activities, resulting in schedule delays. Risk Handling Strategy: Accept 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 ACT001 filter bank. The result of this unexpected occurrence is that the pre-filters and HEPA filters in the ACT002 bank, and presumably the pre-filters and the HEPA filters in the ACT001 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. Delays in the fabrication, testing, and receipt of the HEPA filters also delayed replacement of the HEPA filters and subsequent system startup. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk recovery action(s)</th> <th style="text-align: center;">Risk Date</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Work Package 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 rowspan="4" style="text-align: center; vertical-align: middle;">Aug 2016</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100%</td> </tr> <tr> <td>Recovery actions were performed in April and May 2017 to fix contamination associated with ACT002 in and around the containment tent.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">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 style="text-align: center;">Complete</td> <td style="text-align: center;">100%</td> </tr> <tr> <td>Execute pre-filter and HEPA filter change out.</td> <td style="text-align: center;">10/30/2017</td> <td style="text-align: center;">33%</td> </tr> </tbody> </table> Recovery Action Assessment: Engineering evaluation of the water intrusion has been completed. Condensate buildup was identified as the most likely source of water. During pre-filter removal in the ACT-002 filter bank no residual water was detected where water was previously present in large quantities; however, residual water and water damage was clearly visible on the pre-filters and the filter access hatches. Similarly, no water was detected inside ACT-001 filter bank, but the filters also showed signs of water damage; assumption is high heat	Risk recovery action(s)	Risk Date	FC Date	%	Work Package 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.	Aug 2016	Complete	100%	Recovery actions were performed in April and May 2017 to fix contamination associated with ACT002 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.	10/30/2017	33%
Risk recovery action(s)	Risk Date	FC Date	%																		
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Execute pre-filter and HEPA filter change out.		10/30/2017	33%																		

Risk Title	Unmitigated Risk Impacts	Assessment		Comments						
		Month	Trend							
RL-0040/WBS-040										
				<p>inside the filter banks evaporated the water. HEPA filters will be replaced once the new filters are manufactured, tested at the off-site filter testing facility and shipped to Hanford. The first set of HEPA filters were received in mid-September and the acquisition verification services (AVS) inspection was started. The 2nd set of HEPA filters were shipped from the testing facility and are due in early October for CHPRC AVS inspection. Delays were encountered from the HEPA filter manufacturer; they had to wait for additional materials to fabricate the filters and ship the filters in batches. Additional delays were incurred at the testing facility due to testing equipment maintenance issues. In addition, all HEPA filters must be ground shipped between the manufacturer, testing facility, and CHPRC due to their large size which increased the procurement duration. An NCR was issued on the first set of received filters due to missing procurement specifications on the boxes and filter labels. The NCR was closed out in late September after receiving supplementary labels from the manufacturer.</p> <p>Once the pre-filters and HEPA filters are replaced in both ACT filter banks, the ventilation system will be restarted. This is expected to occur in late October. The system will be monitored closely to identify any increases in differential pressure and/or elevated radiation levels that would be leading indicators that water is accumulating in the system again. Buildup of condensate after filter replacement could result in further shutdown of the system; however, it would most likely impact the pre-filters rather than the HEPA filters if differential pressure fluctuations are identified early. Pre-filters are low-cost and are changed out more frequently than the high cost HEPA filters.</p>						
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
No critical risks identified in the month of September .										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
D4-064: Aging Building Systems/ Components	<p>Problems with aging building systems/ components (e.g., roofing/structures, etc.) result in inoperability or requires unscheduled maintenance/outages, resulting in cost impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Likely (75% to 90%)</p> <p>Worst Case Impacts: \$2 million, 0 Day</p>	●	↔	<p>Risk Event: During routine surveillance activities, unforeseen events cause systems to be compromised. This risk is a lifecycle risk and will continue through the CHPRC contract period (September 30, 2018). This risk was realized in March due to increased future maintenance costs; however, a BCR was implemented to utilize MR, and the risk has since been recovered from.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mitigation Action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>None identified at this time.</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Recovery Assessment: No major changes in the month of September. A pre-conceptual design was provided to RL with an estimate for a similar replacement of the entire PUREX stack sample system. CHPRC was provided a not-to-exceed (NTE) to complete a detailed design package for the system and to start demolition and installation activities; however, it is expected that the NTE amount will be expended early on during construction. The detailed design package for the replacement system was accepted in May 2017, and stamped/signed copies of the package were received in early June. Construction contract development and procurement of the system parts was started in July and continued through the remainder of FY2017. Ordered parts/materials will continue to be received through mid-October. Construction bids were received on September 28, 2017, and the contract award and notice to proceed are expected to be issued in October.</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 the month of September .										

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	5.5	5.5	7.7	0.0	-0.2%	(2.2)	-40.9%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance: (\$0.0M/-0.2%)
The cost variance is within reporting thresholds.

CM Cost Performance: (-\$2.2M/-40.9%)
The unfavorable cost variance is due to increased labor support for min safe activities due to the degradation of aging facilities, increased number of inactive waste sites, and daily PUREX tunnel surveillance requirements. Additionally, the PUREX tunnel stabilization negative cost variance was mostly attributed to additional labor support necessary recover field investigation activities, complete mobile trailer installation, issue work packages, and obtain required permits.

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	458.2	452.4	424.3	(5.8)	-1.3%	28.1	6.2%	496.0	458.4	34.1	37.6

Numbers are rounded to the nearest \$0.1 million

Cost to date (CTD) Schedule Performance: (-\$5.8M/-1.3%)
The schedule variance is within reporting thresholds.

CTD Cost Performance: (+\$28.1M/+6.2%)
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 utilization existing site equipment and fewer resources, and program management utilizing fewer resources.

Variance at Completion (+\$37.6M/+7.6%)
The Variance at Completion (VAC) is within reporting thresholds. However, the VAC increased \$10.3 million due to scope that was deferred based on FY2018 funding priorities and schedule logic. That work scope is not expected to be performed in the CHPRC contract period. CHPRC is currently discussing with RL the disposition of that scope. Also, the EAC of \$458.4 million does not include the balance of Change Order 311, aging structures planning and stabilization, or PUREX Tunnel 2 investigation.

Contract Performance Report Formats are provided in Appendix A.



FUNDS vs. SPEND FORECAST (\$M)

WBS 040/RL-0040 Nuclear Facility D&D	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	47.6	35.7	11.9
Incremental Scope Pending Change Management	0.0	0.0	0.0
RL-0040 – Total	47.6	35.7	11.9

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis

FY2017 projected funding for PBS RL-0040 is \$47.6 million.

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 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 subsequent 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-016-250b	Submit to Ecology a three-year rolling prioritized schedule to implement waste site removal actions.	3/31/2017	3/30/2017 (A)		Complete
M-085-80A	Submit to Ecology secondary document, a data quality objective (DQO) report to access structural integrity of PUREX storage Tunnels 1 and 2.	9/30/2017		9/30/2017	On schedule

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL Review of 202S Demo Prep / D&D / Annex Action Memo	11/21/16 (A)	11/10/17
RL Review of 202A Demo Prep / Annex / Vent Mods Action Memo	11/29/17	01/02/18
RL Review of 221B Demo Prep & Stabilization of Legacy Vent System Action Memo	03/18/18	05/01/18

Section F

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



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

September 2017
CHPRC-2017-09, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

T. L. Hobbes
Vice President for 618-10 Burial Ground
and Environmental Restoration
Disposal Facility

L. M. Douglas
(Acting) Vice President
for 324 Building
Disposition Project

M. A. Wright
Vice President for
Project Technical
Services

PROJECT SUMMARY

The project continued the following progress: 100K Waste Site remediation and K East Sedimentation Basin backfill; and 100K Closure Project long-range planning (LRP). Progress on the 300-296 Remote Soil Excavation Project included completion of modifications to the Mockup facility and award of the contract for the 324 facility modifications. Workers at the 618-10 Burial Ground Complex continued successful remediation activities in the month of September, and backfill at the 316-4 Waste Site and 600-63 Waste Site was completed ahead of schedule and under budget

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
17-EMS-KBOPR-OB1-T1	Increase compliance at KBOPR Project.	Develop compliance matrices for 100K CERCLA documents.	9/30/17	100%
17-EMS-KBOPR-OB2-T1	Universal Waste and Recycling Compliance and Spill Prevention.	Monitor and evaluate universal waste.	9/30/17	100%
17-EMS-KBOPR-OB3-T1	Reduce Waste	Reduce plastic water bottle use at project.	9/30/17	100%

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	*1	*Recordable incident 24238 on November 17, 2016, was recorded under Project Breakdown Structure (PBS) RL-0013; however, the incident occurred at the Environmental Restoration Disposal Facility (ERDF), which is part of PBS RL-0041.
First Aid Cases	3	36	<ul style="list-style-type: none"> 9/11/2017 – Employee smelled a strong odor during work activities and had a metallic taste in his mouth. Employee was taken to HPMC for potential exposure, an investigation was started, and the employee was released to work without restrictions. (24613) 9/11/2017 – Employee reported an odor that left a metallic taste in her mouth and later caused a bad cough and heavy chest. Employee was taken to HPMC for potential exposure, an investigation was started, and the employee was released to work without restrictions. (24615) 9/13/2017 – Employee experienced pain in the left side of their lower back while performing janitorial duties. Employee was taken to HPMC for evaluation and was released for work with restrictions. Employee was instructed to follow up with HPMC on October 2, 2017, for reassessment. (24618)
Near Misses	0	0	N/A

KEY ACCOMPLISHMENTS

RL-0041 Accomplishments

- 100K Closure Project:
 - o 100K Soil Remediation
 - Completed backfill (approximately 100,000 cubic yards) of the 18 remediated waste sites located near the 183.1 K East Headhouse. Started backfill of the 183.2 K East Sedimentation Basin.
 - Environmental Protection Agency (EPA) approved the Waste Site Reclassification Form (WSRF) and closure of the final 11 asbestos waste sites in the 100K Area.
 - EPA approved the WSRF and closure of waste site 1067-K5.
 - Completed excavation of waste site 1607-K1, and collected final in-process soil samples.
 - Received Change Order Number 330 on September 15, 2017, for fiscal year (FY) 2018 for 100K soil remediation and backfill with a notice to proceed and not to exceed of \$2.8 million.
 - o K West Basin Deactivation:
 - o Garnet Filter Media Removal System (GFMRs)
 - The procurement of raw material and instruments by Columbia Energy and Environmental Services, GFMRs component fabricator, is approximately 90 percent complete.
 - The procurement of raw materials by American Boiler Works (ABW) fabricator of Sludge Transport and Storage Container (STSC) Units numbers 425, 426, 427, and 428 is approximately 35 percent complete. ABW began cutting STSC fill and float pipes, and, following successful testing, observed by K Basin Operations and Plateau Remediation (KBO&PR) quality assurance (QA), shipped STSC heads to subcontractor Jetpoint for water jet cutting of nozzle holes.
 - Released the Facility Modification Package (FMP) to cut a hole in the garnet filter number three shield enclosure to allow work on the actuator for sluice outlet valve VW-305. The Buyers Technical Representative, from Project Technical Services, has been engaged to modify the Apollo construction contract to perform the core drill. Maintenance and Storage Facility (MASF) developed the tool, conducted a bolt shear test, and successfully sheared the bolts that will allow construction contractor to remove the valve actuator.
 - o Sand Filter Media Removal System (SFMRs)
 - Started work on the SFMRs piping mock-up. Performed early concept runs for the filter vessel sparge and retrieval heads, information gained of which will help develop the test procedure and work package for conceptual retrieval.
 - o KW Basin Characterization
 - Development of the gamma camera underwater enclosure, basin floor and debris sampling retrieval system continued at MASF. The sampling retrieval system uses a coring device, which poses less complexity for tool deployment and aligns with the physical sample form expected for receipt by Pacific Northwest National Laboratory (PNNL). It will also streamline final tool fabrication, as well as simplify the scope of the floor sampling test plan.
 - The project devised a means to commence dose rate surveys in advance of the development of the underwater enclosure for the gamma camera. This new approach relies on surveying basin residuals as “debris fields” instead of completing surveys of individual items. Items within a debris field that are in need of a refined characterization will be identified, and final surveys will then be performed using the gamma camera.
 - Completed review of Engineered Container Retrieval and Transfer System (ECRTS) decant sand filter media characterization calculation. Based on HNF-41051, *STP Container and Settler Sludge System Description and Material Balance*, this media will require discharge to

- STSC upon completion of the sludge removal campaign. The calculation of decant sand media filter loading in HNF-41051 is conservative. As such, opportunities exist through sampling during decanting operations to preclude the need for the final discharge to an STSC.
- Held meetings with Nuclear Safety to determine if a characterization risk prevails, i.e. the potential to discover through characterization a source term that challenges Documented Safety Analysis (DSA) assumptions. Risk potential exists in identifying more than 10Kg of residual fuel fragments.
 - 100K Closure Project and 100K Operations are planning to conduct characterization activities in concert with sludge removal activities in FY2018. Operations stands ready to support initial debris field characterization when associated survey plans have been prepared.
- Remaining Closure Operations
 - o Ecology has not progressed Class 1 Permit modification package for removal of the 1324-N/NA Liquid Waste Disposal Facility from the site-wide permit since they received comments from the Yakama Nation.
 - o Completed MO226 Building Completion Report and Environmental Compliance and Quality Assurance review of the completion letter for TPA-M-094-00, *Disposition of all 300 Area surplus facilities – excluding 324 Building*. M-094-00 due date: September 30, 2018.
 - o Completed development of draft computer-aided design (CAD) civil sketches for the impermeable barriers that will cover the 300-5, 400-37, and 400-38 interim stabilization sites.
 - o Continued development of the preliminary civil site plan layout sketches for the 331-LSLT1 and 331-LSLT2 interim stabilization sites.
 - o Continued shrub seed collection from various locations around the Hanford Site to support FY2019 revegetation efforts (includes 618-10).
 - o Mission Support Alliance, LLC (MSA) continued development of the ecological/cultural assessments for the 400 and 300 area interim stabilization sites; RL continued reviewing draft programmatic agreement for the ecological/cultural assessment for the 400 area interim stabilization sites.
 - o Completed cleanup activities and took verification samples at the 600-393 Waste Site and 600-403 Waste Site.
 - 618-10 Burial Ground:
 - o Pending verification sampling results, the project completed source term contamination removal on September 13, 2017.
 - o Initiated backfill on September 12, 2017.
 - o Received RL direction to continue excavation to meet shallow-zone levels as dictated in the record of decision (ROD) in the deep zone. RL subsequently rescinded this direction on September 27, 2017.
 - o Continued to work on environmental closeout documentation.
 - o Continued equipment decontamination and infrastructure demobilization activities.
 - o Project personnel remediated the 600-393 and 600-403 Waste Sites.
 - 316-4 Waste Site:
 - o Completed backfill of the waste site on September 19, 2017.
 - 600-63 Waste Site:
 - o Initiated backfill on August 31, 2017, and completed backfill on September 12, 2017.
 - 324 Building Minimum Safe:
 - o Moved Knaack boxes removed from Radiochemical Engineering Cells (REC) Airlock to the Container Transfer Area (CTA) south of 324.

- o Developed the new low-level waste (LLW) procedure (W-03, Rev. 0).
- o Revised the 324 Waste Packaging procedure (W-07, Rev. 1).
- o Established a process to quickly develop work documents for troubleshooting in REC Airlock.
- o Developed updated potential to emit (PTE) calculation for the 324 Disposition Project as a whole.
- o Provided noted issues on new stack cam software to vendor for correction.
- o Performed 16 monthly, semi-annual or annual preventive maintenance (PM) package activities.
- o PTS Support:
 - Training and Procedures
 - Converted about 90 percent of 324 facility Specific procedures to CHPRC format for vetting with 324 operations personnel.
 - Updated several 324 blue-sheeted procedures to accommodate cell cleanout activities.
 - Transitioned 25 Radiological Control procedures.
 - Transitioned 32 industrial safety program procedures, and converted four to CHPRC convention.
 - Revised and created three 324 facility specific procedures in line with transition from IWCP to PRC Work Control Program.
 - Operations Program
ConOps/Work Control/Conduct of Work
 - Provided support to facilitate transition of 324 to PRC work control – procedure publication, training, and orientation meetings.
 - Emergency Preparedness (EP)
 - Supported 300 Area protective action drill & completed report.
- 300-296 Soil Remediation Project:
 - o The following soil removal equipment procurements were initiated by Requests for Proposal (RFPs):
 - Radiation Assay and Crane Mounted Detectors on August 30, 2017.
 - Mockup Equipment Installation/CAT on September 6, 2017.
 - 324 Soil Remediation Contractor on September 6, 2017.
 - A, C, and D-Cell Dams on September 7, 2017.
 - Mockup Floor Saw System on September 13, 2017
 - HVAC Modification & Roughing Filters (ventilation system for the dams) on September 20, 2017.
 - o The MASF slab removal was successfully completed on September 12, 2017, and the contractor was demobilized on September 14, 2017.
 - o A conference for prospective bidders for the 324 Building Cell Dams was conducted on September 19, 2017.
 - o Air gapping of the compressed air system was completed in the 324 Building on September 19, 2017.
 - o The 324 Interference Removal/Cell Sealing, Core Drilling & Structural Modifications contract was awarded on September 21, 2017.
 - o A high-dose rate pump in the airlock was placed in A Cell on September 21, 2017.
 - o Crews successfully lowered the telelevator to the stowed position, cut/removed the telelevator outriggers, and scraped the floor to remove high dose material during an airlock entry on September 27, 2017.
 - o The FY2017 key performance goal (KPG) for the Mockup (modifications completed to support soil removal equipment installations) was successfully completed on September 28, 2017.
 - The IP2 Waste Container (prototype) Factory Acceptance Testing (FAT) was successfully completed on September 28, 2017.
 - o Project Delivery
 - Mockup Structural Modifications CS-17-942

- Completed Construction Completion Documents
- Environmental Restoration Disposal Facility:
 - o Receipt of 32,385 tons by CHPRC for the fiscal month of September.
 - o Receipt of 277,370 tons by CHPRC fiscal year to date (FYTD).
 - o Received four long-length items (LLI) from Washington River Protection Solutions, LLC (WRPS) for treatment.
 - o Off-loaded five LLIs with the non-standard crane that was mobilized last month.

MAJOR ISSUES

No major issues to report at this time.

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: No major changes in the month of September .													
Realized Risks (Risks that are currently impacting project cost/schedule)													
No realized risks identified in the month of September .													
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)													
RCC-300-296-03: Mockup testing and qualification of remote equipment / process identifies major modification requirements.	Issues such as equipment interferences, equipment reliability, etc., arise during mockup testing, leading to major re-design of equipment and resulting in cost and schedule delays. Risk Handling Strategy: Control Probability: Low (10% to 25%) Worst Case Impacts: \$86K, 80 days			Risk Trigger Metric: Risk could be triggered through the conduct of component testing or testing/training performed at the mockup that produced inadequate or unexpected test results. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Conduct Concrete Floor Saw Test (cut rate, embedment cutting), and determine P.O.P.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Perform Construction Acceptance Test at mockup facility – including REA System with HPUs, cameras, and lighting and transfer mechanisms.</td> <td>3/31/18</td> <td>0</td> </tr> </tbody> </table> Mitigation Assessment: The mockup will be used to validate equipment performance and to support establishing proficiency for personnel for installation, relocation, and operation of remote soil remediation equipment in the 324 Building. Remotely operated equipment (Remote Excavation Arm, transfer mechanism, cameras and lighting, and floor saw) could experience higher failure rates and/or performance issues from lack of personnel proficiency. Vendor contracts have been awarded for the REA, transfer mechanism, cameras and lighting systems, and equipment deliveries to the mockup are scheduled for January / February 2018 . The Request for Proposal for the Mockup Floor Saw was issued in September and proposals are due on October 12, 2017 . Mockup modifications to support equipment installations were completed on September 28, 2017 .	Mitigation action(s)	FC Date	%	Conduct Concrete Floor Saw Test (cut rate, embedment cutting), and determine P.O.P.	Complete	100	Perform Construction Acceptance Test at mockup facility – including REA System with HPUs, cameras, and lighting and transfer mechanisms.	3/31/18	0
Mitigation action(s)	FC Date	%											
Conduct Concrete Floor Saw Test (cut rate, embedment cutting), and determine P.O.P.	Complete	100											
Perform Construction Acceptance Test at mockup facility – including REA System with HPUs, cameras, and lighting and transfer mechanisms.	3/31/18	0											
RCC-300-296-11: Current REC cell seismic analysis is inadequate	Regulatory agencies require different seismic analysis criteria than the 1961 Uniform Building Code (UBC) methodology that was originally used, resulting in additional design and more significant structural alterations to the 324 Building, which would negatively impact project cost and schedule			Risk Trigger Metric: This risk would be triggered at the same time it is realized, with regulatory agencies requiring different seismic analysis criteria than what was used in the original estimates. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Engage Defense Nuclear Facility Safety Board (DNFSB) early concerning seismic design criteria.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table>	Mitigation action(s)	FC Date	%	Engage Defense Nuclear Facility Safety Board (DNFSB) early concerning seismic design criteria.	Ongoing	N/A			
Mitigation action(s)	FC Date	%											
Engage Defense Nuclear Facility Safety Board (DNFSB) early concerning seismic design criteria.	Ongoing	N/A											

	<p>Risk Handling Strategy: Control</p> <p>Probability: Low (10% to 25%)</p> <p>Worst Case Impacts: \$288K, 48 days</p>			<p>Mitigation Assessment: The original design of the 324 Building is based on the 1961 UBC. Facility structural modifications have been analyzed using the UBC 1961 methodology (Section 7.8, KUR-1782F-CALC-C001, and 324 Building REC Structural Stability Evaluation); as the most appropriate and cost effective approach given the overall intent to remediate the building following soil removal. The project conducts a bi-monthly update to DNFSB field and technical representatives, and the most recent update was provided on September 13, 2017. The contract for facility modifications, which includes structural design, and structural modifications, was approved for award on September 21, and the contractor schedule to conduct the work will be delivered by the contractor in late October. Continued engagement during the design process with both DOE and the DNFSB will be planned based on the contractor schedule.</p>						
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
Lifecycle Risk Triggers (Risk could be realized at any point of the project)										
RCC-618-10-07: Contamination Event at 618-10 Waste Site	<p>During fieldwork activities, a contamination event occurs or a change in cleanup requirements occurs that requires corrective actions, resulting in schedule and cost impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Low (10% to 25%)</p> <p>Worst Case Impacts: \$1,288K, 64 days</p>	●	↔	<p>Risk Trigger Metric: The risk could be triggered by high winds or operational upsets (i.e. spills or airborne release).</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Enhanced radiological controls implemented on project.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of September. Much of the 618-10 work is performed in hazardous and radioactive environments. By its nature, the work can be dangerous. Although CHPRC procedures, safety programs, and training programs are designed to minimize the potential loss of control of hazardous/radioactive substances, such an occurrence could be deemed significant enough to warrant corrective actions outside the baseline (i.e., a prolonged work shutdown).</p>	Mitigation action(s)	FC Date	%	Enhanced radiological controls implemented on project.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Enhanced radiological controls implemented on project.	Ongoing	N/A								
RCC-618-10-09: Discovery of Unexpected Waste/Contamination	<p>Discovery of unexpected waste/contamination, waste/contamination quantities above what is assumed, waste/contamination that is above and beyond COCs or waste profile, or waste/contamination is found in the assumed clean area of the design. Resulting in greater than planned RAD controls resulting in cost and schedule impacts.</p> <p>Risk Handling Strategy: Accept</p> <p>Probability: Very Low (<10%)</p> <p>Worst Case Impacts: \$1,280K, 64 days</p>	●	↓	<p>Risk Trigger Metric: Baseline assumed contamination is limited to design. This risk has the potential to occur again during mass excavation if additional waste/contamination is discovered.</p> <table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Closely managing waste inventories and discoveries, and making adjustments as required.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> <p>Mitigation Assessment: No changes in the month of September. The estimate for the remediation of the 618-10 Waste Site included an assumed amount of additional drums still to be remediated. The project identified unexpected additional drums that were not planned or estimated. The project will continue to closely monitor and manage waste inventories and any new discoveries.</p>	Mitigation action(s)	FC Date	%	Closely managing waste inventories and discoveries, and making adjustments as required.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Closely managing waste inventories and discoveries, and making adjustments as required.	Ongoing	N/A								
Unsigned Risks (Pending ownership of identified risks/opportunities)										
No unassigned risks identified in the month of September.										

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	11.2	13.1	14.4	1.9	16.9%	(1.3)	-9.8%

Numbers are rounded to the nearest \$0.1 million

CM Schedule Performance (\$1.9M/16.9%)

The current month favorable schedule variance is primarily due to backfill activities at the 316-4 Waste Site completing ahead of schedule as well as schedule recovery and completion of Mockup modifications. The favorable variance is partially offset by the 300-296 project experiencing delays fabricating the Remote Excavator Arm (REA) resulting from design revisions to meet performance specifications and from sub-vendor shop loading and REC Airlock cleanout and installation of the initial rail system impacts due to training/proficiency of a new crew.

CM Cost Performance (-\$1.3M/-9.8%)

The current month unfavorable cost variance is partially due to unplanned mass excavation efforts at the 618-10 Burial Ground due to RL direction to continue excavation to achieve shallow zone cleanup levels in the deep zones of the trench. In addition, the 300-296 project's unfavorable variance primarily reflects a reduction of budgeted cost of work scheduled (BCWS) and corresponding budgeted cost of work performed (BCWP) due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33 percent applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58 percent was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool. An additional unfavorable cost variance exists for 100K soil remediation performed under a not-to-exceed (NTE) that had not yet been implemented into the baseline. The unfavorable cost variance is partially offset by 316-4 Waste Site backfill activities that utilized design efficiencies and were self-performed with existing crews and equipment, which resulted in a significant cost underrun.

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	477.5	483.7	429.9	6.2	1.3%	53.8	11.1%	579.8	487.2	57.3	92.6

Numbers are rounded to the nearest \$0.1 million

CTD Schedule Performance (+\$6.2M/+1.3%)

The schedule variance is within reporting thresholds.

CTD Cost Performance (+\$53.8M/+11.1%)

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. 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. The positive cost performance was partially offset by the 300-296 Project vendor activities taking longer than expected due to design rework, resulting in additional engineering support costs than originally planned. In addition, difficulties maintaining a productive level of airlock entries to achieve planned scope while sustaining a constant crew size. Airlock entries have been impacted by training and proficiency during crew transition, inadequate shielding installed, airflow discrepancies and fan operability issues.

Variance at Completion (+\$92.6M/+16.0%)

The Variance at Completion increased \$10.7 million due to scope deferred based on FY2018 funding priorities and schedule logic. That work scope is not expected to be performed in the CHPRC contract period. CHPRC is currently discussing with DOE-RL the disposition of that scope. The remaining VAC is primarily due to the implementation of planned efficiencies.

Contract Performance Report Formats are provided in Appendix A.

FUNDS vs. SPEND FORECAST (\$M)

WBS 041/RL-0041 Nuclear Facility D&D – River Corridor	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	146.3	116.3	30.0
Incremental Scope Pending Change Management	0.0	0.0	0.0
RL-0041 - Total	146.3	116.3	30.0

Numbers are rounded to the nearest \$0.1 million.

Funds/Variance Analysis:

FY2017 projected funding for project breakdown structure (PBS) RL-0041 was \$146.3 million. The delta between the spending forecast and projected funding levels for FY2017 was partially due to work scope completing ahead of schedule, attrition and staffing ramp-downs, resource sharing among projects, and less material procurements at the 618-10 Burial Ground Complex. Backfill activities at the 316-4 Waste Site experienced cost efficiencies, as the project was able to self-perform the work with existing crews instead of hiring a separate subcontractor, as well as utilize site recontouring and existing soils for backfill material. Additionally, less waste volumes by waste generators early in the fiscal year and not hiring as many teamsters as planned resulted in an underspending at ERDF. Incorporating trends for cost underruns in Small Waste Site Surveillance and Maintenance, Interim Stabilization, KW Basin Characterization, as well as Sand and Garnet Filter Media Removal activities contributed to the decrease in the spending forecast. The 300 Area Projects FY2017 forecast decreased slightly in September due to some delays in equipment fabrication, but remains slightly over funding for the year due to acceleration of work 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 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-016-00A	Complete all response actions for 100 Areas except GW in M-016-00 and 100 K addressed in M-016-00C.	3/31/2017	3/8/2017 (A)		Completed ahead of schedule.
M-016-164	Complete 100-N Interim Response Actions & Close 100-N Ancillary Facilities Area of Contamination.	3/31/2017	3/8/2017 (A)		Completed ahead of schedule.
M-016-00B	Complete all 300 Area remedial actions in accordance with ROD requirements.	9/30/2018		1/22/2019	Revegetation for the 618-10 Complex falls outside of the planting window, which results in it falling outside of the TPA milestone due date.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

DOE ACTIONS / DECISIONS

Description	CHPRC Delivery Date	Expected RL Due Date
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #8	8/17/17 (A)	9/5/17 (A)
RL and Regulator Review of CVP and Waste Site Reclassification Form for 600-63 Waste Site	8/17/17 (A)	8/30/17 (A)
RL and Regulator Review of CVP and Waste Site Reclassification Form for 316-4 Waste Site	8/21/17 (A)	10/4/17
RL Approve 324 Interference Removal & Cell Sealing, Core Drilling & Structural Mods	8/31/17 (A)	9/21/17 (A)
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #2	9/7/17 (A)	9/11/17 (A)
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #7	9/18/17 (A)	9/22/17 (A)
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #1	9/21/17 (A)	10/2/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #6	9/28/17 (A)	10/2/17
RL/EPA Review of Closure Documentation for 600-403 Waste Site	10/12/17	11/25/17
RL/EPA Review of Closure Documentation for 600-393 Waste Site	10/13/17	11/26/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #11	10/19/17	10/25/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #5	10/20/17	10/26/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #3	11/8/17	11/14/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #4	11/8/17	11/14/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #10	12/1/17	12/7/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #9	12/12/17	12/18/17
RL and Regulator Review of CVP and Waste Site Reclassification Form for 618-10 Burial Ground	3/20/18	5/3/18

Section G

Fast Flux Test Facility Closure (RL-0042)



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

September 2017
CHPRC-2017-09, 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

- Awaiting receipt of the P-16 pump variable speed drive. This is required to complete the pump installation/start-up.
- Started developing new sketches to reflect welded piping versus Victaulic coupled-type piping for replacement of the leaking fire suppression riser in the 481 Building.
- Completed the updated Electronic Bill of Material (EBOM) for materials required to replace sections of the corroded 481 Building fire supply riser (e.g., bracing, Victaulic clamps, elbows).
- Completed forms and poured cement slab for the new 400 Area mobile trailer.

MAJOR ISSUES

None currently identified.

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	0.3	0.2	0.1	32.4%	0.1	19.9%

Numbers are rounded to the nearest \$0.1M

CM Schedule Performance: (\$0.1M/+32.4%)

The schedule variance is within reporting thresholds.

CM Cost Performance: (\$0.1M/+19.9%)

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	24.2	24.2	20.1	0.0	0.0%	4.1	17.0%	26.5	23.1	2.9	3.4

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 (+\$4.1M/+17.0%)

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

Variance at Completion (+\$3.4M/+13.0%)

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	FY2017		Variance
	Projected Funding	Spending Forecast	
Spending Forecast	3.9	2.1	1.8
Incremental Scope Pending Change Management	0.0	0.0	0.0
RL-0042 – Total	3.9	2.1	1.8

Numbers are rounded to the nearest \$0.1 million

Funds Analysis

Fiscal year (FY) 2017 projected funding for project breakdown structure (PBS) RL-0042 is \$3.9 million. The spending forecast of \$2.1 million is in line with the FY2017 budget at completion (BAC) of \$2.1 million.

Critical Path Schedule

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



September 2017
CHPRC-2017-09, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

**CONTRACT PERFORMANCE REPORT
FORMAT 1 - WORK BREAKDOWN STRUCTURE**

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD	
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME Plateau Remediation Contract		a. FROM (YYYYMMDD) 2017 / 08 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30	
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 5,584,248	c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 223,991	d. TARGET PROFIT/FEE 241,381	e. TARGET PRICE 5,825,630	f. ESTIMATED PRICE 5,846,409	g. CONTRACT CEILING 5,825,630	h. ESTIMATED CONTRACT CEILING 5,846,409	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 5,539,059						c. SIGNATURE		d. DATE SIGNED (YYYYMMDD)	
b. WORST CASE 5,784,954									
c. MOST LIKELY 5,605,028		5,808,239		203,211					

8. PERFORMANCE DATA																	
Control Account.PBS ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE					REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)							
RL-0011 Nuclear Mat Stab & Disp PFP	7,616	10,462	11,888	2,846	-1,426	987,899	963,629	1,066,226	-24,270	-102,597	0	0	0	988,527	1,096,349	-107,823	
RL-0012 SNF Stabilization & Disp	6,082	7,853	7,043	1,772	811	697,986	697,752	664,219	-235	33,533	0	0	0	739,165	704,115	35,050	
RL-0013 Solid Waste Stab & Disp	9,181	10,551	11,880	1,370	-1,330	1,190,702	1,194,375	1,116,629	3,673	77,746	0	0	0	1,351,215	1,231,726	119,489	
RL-0030 Soil & Water Rem-Grndwtr/Vadose	12,247	10,415	15,703	-1,832	-5,288	1,407,795	1,390,245	1,362,965	-17,550	27,280	0	0	0	1,562,472	1,532,557	29,915	
RL-0040 Nuc Fac D&D - Remainder Hanfrd	5,490	5,481	7,725	-9	-2,244	458,160	452,374	424,281	-5,785	28,094	0	0	0	493,980	456,380	37,600	
RL-0041 Nuc Fac D&D - RC Closure Proj	11,229	13,128	14,415	1,899	-1,287	477,525	483,675	429,912	6,151	53,763	0	0	0	563,143	470,588	92,556	
RL-0042 Nuc Fac D&D - FTF Proj	198	262	210	64	52	24,239	24,240	20,113	2	4,128	0	0	0	26,487	23,050	3,437	
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														24,293	24,293	0	
e. SUBTOTAL	52,043	58,153	68,864	6,110	-10,711	5,244,306	5,206,290	5,084,344	-38,015	121,946	0	0	0	5,749,283	5,539,059	210,224	
f. MANAGEMENT RESERVE														65,969			
g. TOTAL	52,043	58,153	68,864	6,110	-10,711	5,244,306	5,206,290	5,084,344	-38,015	121,946	0	0	0	5,815,252			

9. RECONCILIATION TO CONTRACT BUDGET BASELINE																
a. VARIANCE ADJUSTMENT																
b. TOTAL CONTRACT VARIANCE																
										-38,015	121,946			5,815,252	5,539,059	276,193

* In regards to RL-0041, CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized values.

*CPR Format 1 displays fully burdened dollars which includes indirect G&A that is distributed to each Project

CLASSIFICATION (When Filled In)

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

DOLLARS IN Thousands of \$ 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 Plateau Remediation Contract		a. FROM (YYYYMMDD) 2017 / 08 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30	
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 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)								
34 - Env Program & Strategic Plng	898	916	996	18	-80	74,990	74,920	69,170	-70	5,750	0	0	0	84,902	79,353	5,549		
35 - Business Services	4,772	4,772	3,986	0	785	477,296	477,296	453,513	0	23,783	0	0	0	477,296	457,013	20,283		
36 - Prime Contract & Proj Integr	182	182	217	0	-35	6,874	6,874	4,169	0	2,705	0	0	0	8,807	6,232	2,575		
3B - PFP Closure Project	6,093	8,939	11,278	2,846	-2,339	899,117	874,847	985,181	-24,270	-110,334	0	0	0	899,745	1,011,805	-112,060		
3C - Waste & Fuels Management Project	8,023	9,392	10,669	1,370	-1,277	1,080,960	1,084,632	1,006,994	3,673	77,638	0	0	0	1,241,244	1,121,640	119,604		
3D - Soil & Groundwater Remediation	10,484	8,633	13,800	-1,850	-5,166	1,231,801	1,214,321	1,186,611	-17,480	27,710	0	0	0	1,375,985	1,345,557	30,428		
3G - K Basin Oper & Plateau Remediation Project	12,825	14,690	15,630	1,865	-939	1,350,259	1,349,723	1,270,366	-536	79,358	0	0	0	1,486,560	1,358,320	128,241		
3H - 618-10 and ERDF	4,609	6,845	7,140	2,236	-295	79,742	83,535	66,147	3,793	17,388	0	0	0	97,575	79,791	17,784		
3J - Building 324 Disposition Project	4,158	3,783	5,149	-375	-1,366	43,266	40,142	42,193	-3,124	-2,052	0	0	0	52,877	55,056	-2,180		
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													24,293	24,293	0	0		
e. SUBTOTAL (Performance Measurement Baseline)	52,043	58,153	68,864	6,110	-10,711	5,244,306	5,206,290	5,084,344	-38,015	121,946	0	0	0	5,749,283	5,539,059	210,224		
f. MANAGEMENT RESERVE													65,969					
g. TOTAL	52,043	58,153	68,864	6,110	-10,711	5,244,306	5,206,290	5,084,344	-38,015	121,946	0	0	0	5,815,252				

* In regards to RL-0041, CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized values.

CONTRACT PERFORMANCE REPORT															Form Approved OMB No. 0704-0188			
FORMAT 3 - BASELINE															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 NO YES X 9/18/2009			4. REPORT PERIOD a. FROM: 2017/08/21 b. TO: 2017/09/30									
5. CONTRACT DATA			a. ORIGINAL NEGOTIATED COST 4,312,366		b. NEGOTIATED CONTRACT CHANGE \$1,271,882		c. CURRENT NEGOTIATED COST (A + B) \$5,584,248		d. ESTIMATED COST AUTH UNPRICED WORK \$223,991		e. CONTRACT BUDGET BASE (C + D) \$5,808,240		f. TOTAL ALLOCATED BUDGET \$5,815,252		g. DIFFERENCE (E - F) (\$7,012)			
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)	BCVS 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 Oct-17 (4)	+2 Nov-17 (5)	+3 Dec-17 (6)	+4 Jan-18 (7)	+5 Feb-18 (8)	+6 Mar-18 (9)								
a. PM BASELINE			5,192,263	51,625	26,677	39,051	33,287	25,146	35,779	41,263	3,391,477	391,653	471,323	504,826	484,609	471,449	11,502	5,726,839
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																		
BCR-011C-17-010R0, Move Balance of FY2017 RL-011 Management Reserve to FY2018 - PFP CAP 1														0	0			0
BCR-011C-17-011R0, Move Balance of FY2017 RL-011 Management Reserve to FY2018 - PFP CAP 2														0	0			0
BCR-011C-17-013R0, Allocation of PBS RL-0011 CAP 2 Project DOE Contingency														6,431	628			7,058
BCR-011C-17-014R0, FY2017 G&A Rate Adjustment -RL-0011 CAP 2														(463)	0			(463)
BCR-012-17-016R0, Re-Plan Maintenance Scope into Single Work Package														0	0			0
BCR-012C-17-014R0, Move Balance of FY2017 RL-012 Management Reserve to FY2018 - SRP CAP														0	0			0
BCR-012C-17-015R0, Convert LOE Activities to 7-Day Calendar -SRP CAP														0	0			0
BCR-012C-17-018R0, FY2017 G&A Rate Adjustment -SRP CAP														(937)	0			(937)
BCR-013-17-023R0, Incorporate CO #323 NTE Increase for Management of the Hanford Site TSD														30	70			100
BCR-013-17-026R0, RL-0013 Revise EVM Type for Be Program Support														0	0			0
BCR-013C-17-028R0, Convert W-135 Planning Package to Work Packages (CAP)														0	1,866			1,866
BCR-030-17-024R0, Composite Analysis MR Draw														0	1,785			1,785
BCR-030-17-033R0, PBS-0030 Remove Project Milestone														0	0			0
BCR-030-17-035R0, Re-plan AEA Groundwater Data Management and Evaluation														0	0			0
BCR-030-17-036R0, Align 200-UP-1 SE Well Drilling Campaign to Execution Plan														0	0			0
BCR-040-17-021R0, Move Unfunded Work Activities to Planning Packages														0	0			0
BCR-040-17-022R0, Incorporate CO #329 PUREX Tunnel NTE Authority Increase														1,566	2,487			4,053
BCR-041-17-038R0, Incorporate CO #328 Revised Scope for 300-296 Waste Site Project														(61)	61			0
BCR-041-17-039R0, Incorporate CO #305 Revised Scope for 300-296 Waste Site Project														43	(43)			0
BCR-041-17-041R0 Incorporate CO 319 NTE Funding Authorization KE														79	420			499
BCR-041-17-042R0 Move Unfunded Work Activities to Planning Packages														0	0			0
BCR-041C-17-037R0, Convert LOE Activities to 7-Day Calendar -RL-0041 CAP														0	0			0
BCR-041C-17-043R0, FY2017 G&A Rate Adjustment -RL-0041 CAP														(1,638)	0			(1,638)
BCR-PRC-17-037R0, Move Balance of FY2017 Management Reserve to FY2018 - OA														0	0			0
BCR-PRC-17-038R0, Convert LOE Activities to 7-Day Calendar -OA														0	0			0
BCR-PRC-17-039R0, Incorporate Hanford RCRA Permit Activities														3	1,962			1,965
BCR-PRC-17-042R0, FY2017 Workforce Restructuring MR Draw														5,133	0			5,133
BCR-PRC-17-043R0, FY2017 G&A Rate Adjustment - OA														(9,767)	0	1,698		(8,069)
BCRA-PRC-17-041R0, HPIC Updates September 2017														0	0			0
BCR-PRC-17-040R0, Undistributed Budget Adjustments September 2017														0	0	11,093		11,093
c. PM BASELINE (END OF PERIOD)			5,244,306	52,043	25,132	33,247	29,161	21,346	28,950	32,808	3,391,477	391,653	471,323	504,826	485,027	480,684	24,293	5,749,283
7. MANAGEMENT RESERVE																		65,969
8. TOTAL																		5,815,252

* CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized values.

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) 2017 / 08 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (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						AT COMPLETION (15)		
			+1	+2	+3	+4	+5	+6	3rd Qtr FY18	FY18	FY19	FY19-LC	ATCOMPLETE				
			OCT 2017	NOV 2017	DEC 2017	JAN 2018	FEB 2018	MAR 2018	(10)	(11)	(12)	(13)	(14)				
ORGANIZATIONAL CATEGORY (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)			
300 - Office of the President	7	724	6	6	6	6	6	6	6	6	6	18	18	0	0	0	796
303 - Internal Audit	6	474	5	5	5	5	5	5	5	5	5	15	15	0	0	0	534
304 - General Counsel	4	443	5	5	5	5	5	5	5	5	5	15	14	0	0	0	501
31 - Communications	9	1019	8	8	8	8	8	8	8	8	8	25	24	0	0	0	1118
32 - Safety Health Security & Quality	54	7147	55	55	55	55	55	55	55	55	55	164	161	0	0	0	7800
34 - Env Program & Strategic Plng	42	4810	53	50	49	48	48	48	48	48	48	142	141	1	0	0	5390
35 - Business Services	68	7691	68	68	68	68	68	68	68	68	68	204	200	0	0	0	8504
36 - Prime Contract & Proj Integr	69	5031	68	68	68	68	68	68	68	68	68	203	198	0	0	0	5838
38 - Project Technical Services	31	5571	35	35	35	35	35	35	35	35	35	105	103	0	0	0	5987
3B - PFP Closure Project	232	49219	221	177	167	78	47	24	28	0	0	0	0	0	0	0	49959
3C - Waste & Fuels Management Project	354	49676	352	334	328	329	339	330	987	985	17	366	0	0	0	54042	
3D - Soil & Groundwater Remediation	303	36137	262	252	247	243	241	255	780	784	392	1031	0	0	0	40625	
3G - K Basin Oper & Plateau Remediation Project	385	47268	489	366	345	321	320	291	726	686	57	0	0	0	0	50870	
3H - 618-10 and ERDF	119	1828	54	53	50	49	42	40	113	3	0	0	0	0	0	2231	
3J - Building 324 Disposition Project	125	1579	59	61	54	47	41	39	112	111	0	0	0	0	0	2102	
g. TOTAL DIRECT	1810	218617	1739	1542	1491	1364	1327	1275	3637	3442	467	1397	0	0	0	0	236297

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) 2017/08/21			
b. LOCATION (Address and ZIP Code) Richland, WA 99354		b. NUMBER DE-AC06-08RL14788		b. PHASE Base		b. TO (YYYY/MM/DD) 2017/09/30			
		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:	52,043	58,153	68,864	6,110	11.7%	(10,711)	-18.4%	1.12	0.84
Cumulative:	5,244,306	5,206,290	5,084,344	(38,015)	-0.7%	121,946	2.3%	0.99	1.02
	BAC	EAC	VAC in \$	VAC in %	TCPI				
At Complete:	5,749,283	5,539,059	210,224	3.7%	1.19				
Explanation of Variance/Description of Problem:									
<p>Current Period Schedule Variance: The current month positive schedule variance is primarily due to project breakdown structure PBS RL-0011 working historical budgeted cost of work scheduled (BCWS) on discrete demolition activities (apportioned). The majority of the scope was originally planned to begin during the third quarter of 2016. However, delays in getting 236-Z ready for demolition negatively impacted the start of 236-Z demolition.</p> <p>Also contributing to the positive schedule variance is PBS RL-0041 backfill activities at the 316-4 Waste Site completing ahead of schedule.</p> <p>The positive schedule variance is partially offset by PBS RL-0030 agreement to delay 300 FF 5 Stage B injections for up to one year. The scope of work planned to be performed during this period was delayed at the May 30, 2017, meeting between RL, EPA, and the Yakama Indian Nation. A workshop was held August 31, 2017, to address Yakama Nation concerns and develop a path forward.</p> <p>Current Period Cost Variance: The current month negative cost variance is primarily due to PBS RL-0030 \$2.4 million in spending incurred in support of FY2017 Pump and Treat (P&T) optimization activities that are not planned in the performance measurement baseline (PMB). Further, a CM negative cost variance (CV) of \$2.2M in PBS RL-0040 is due to increased labor support for min safe activities due to the degradation of aging facilities, increased number of inactive waste sites, daily PUREX tunnel surveillance requirements, as well as PUREX tunnel stabilization effort requiring additional labor support necessary recover field investigation activities, complete mobile trailer installation, issue work packages, and obtain required permits. Also contributing is unplanned mass excavation efforts at the 618-10 Burial Ground due to RL direction to continue excavation to achieve shallow zone cleanup levels in the deep zones of the trench and 100K soil remediation performed under a not-to-exceed (NTE) that had not yet been implemented into the baseline.</p> <p>The current month negative cost variance is partially offset by PBS RL-0012 completion of level-of-effort activities with fewer personnel than planned. Personnel are supporting PUREX, 300-296, and various other CHPRC projects. All work is being accomplished with available resources. In addition, earned value for development and approval of the as-built Documented Safety Analysis (DSA)/Technical Safety Requirements (TSR) was during September. The DSA/TSR that was submitted in April 2017 included the as-built design of the Engineered Container Retrieval and Transfer System (ECRTS).</p> <p>Cumulative Schedule Variance: The variance is within reporting thresholds.</p> <p>Cumulative Cost Variance: The variance is within reporting thresholds.</p>									
Impact:									
Current Period Schedule: The current month schedule variance is within reporting thresholds.									
Current Period Cost: Delays in achieving slab-on-grade for PBS RL-0011 is requiring both Minimum Safe, and D&D Project Management resources to remain on project without BCWS.									
Cumulative Schedule: N/A									
Cumulative Cost: N/A									

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

Corrective Action:

Current Period Schedule: The current month schedule variance is within reporting thresholds.

Current Period Cost: Costs associated with the HDPE water loop will be transferred to the Mission Support Alliance Contractor in the month of November to align with requirements of the J3 Table.

Cumulative Schedule: N/A

Cumulative Cost: N/A

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

CHPRC continues to track completion of the contract scope within budget and is currently projecting a Variance at Completion of \$210.2 million, with \$66.0 million of Management Reserve (MR), for a total positive variance of \$276.2 million. For September, the project was 11.7 percent ahead of schedule and 18.4 percent over planned cost. Contract to Date (CTD), the project was 0.7 percent behind schedule and 2.3 percent under planned cost.

There were 13 of the 32 BCRs in the period that impacted the PMB;

- BCR-011C-17-013R0, RL-0011 CAP 2 Incorporate DOE Contingency
- BCR-013-17-023R0, Incorporate CO #323 NTE Increase for Management of the Hanford Site TSD
- BCR-013C-17-028R0, Convert W-135 Planning Package to Work Packages (CAP)
- BCR-030-17-024R0, Composite Analysis MR Draw
- BCR-040-17-022R0, Incorporate CO #329 PUREX Tunnel NTE Authority Increase
- BCR-041-17-041R0, Incorporate CO 319 NTE Funding Authorization KE
- BCR-PRC-17-039R0, Incorporate Hanford RCRA Permit Activities
- BCR-PRC-17-042R0, FY2017 Workforce Restructuring MR Draw
- BCR-PRC-17-043R0 FY17 G&A Rate Adjustment
- BCR-041C-17-043R0 FY17 G&A Rate Adjustment
- BCR-012C-17-018R0 FY17 G&A Rate Adjustment
- BCR-011C-17-014R0 FY17 G&A Rate Adjustment
- BCR-PRC-17-040R0 Undistributed Budget

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 + \$210.2 million, +3.7% and is within reporting thresholds.

Format 1 and 3 Contract Data:

Contract Price Adjustments

CPs - In Process		
	Total Authorized Unpriced Work	\$223,991
Approved Adjustments to Contract Price (not reflected in B.4-1 Table)		
	Total Negotiated Cost Changes	-
	Grand Total Adjustments	\$223,991

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-17-040R0	<i>Undistributed Budget Adjustments September 2017</i>	RL-0013, RL-0030, RL-0040, RL-0041	2017-2018	\$11,093K

The Undistributed Budget increased by \$11,093K.

Management Reserve Activity

BCR Number	Title	PBS	Fiscal Year	MR
BCR-011C-17-010R0	<i>Move Balance of FY2017 RL-011 Management Reserve to FY2018 - PFP CAP 1</i>	RL-0011	2017 – 2018	\$0
BCR-011C-17-011R0	<i>Move Balance of FY2017 RL-011 Management Reserve to FY2018 - PFP CAP 2</i>	RL-0011	2017 – 2018	\$0
BCR-011C-17-014R0	<i>FY2017 G&A Rate Adjustment – RL-0011 CAP 2</i>	RL-0011	2017 – 2018	\$463K
BCR-012C-17-014R0	<i>Move Balance of FY2017 RL-012 Management Reserve to FY2018 - SRP CAP</i>	RL-0012	2017 – 2018	\$0
BCR-012C-17-018R0	<i>FY2017 G&A Rate Adjustment – SRP CAP</i>	RL-0012	2017-2018	\$937K
BCR-013C-17-028R0	<i>Convert W-135 Planning Packages to Work Packages</i>	RL-0013	2017 – 2018	\$-1,866K.
BCR-030-17-024R0	<i>Composite Analysis MR Draw</i>	RL-0030	2017 – 2018	\$-1,785K.
BCR-041C-17-043R0	<i>FY2017 G&A Rate Adjustment –RL-0041 CAP</i>	RL-0041	2017 – 2018	\$79K.
BCR-PRC-17-037R0	<i>Move Balance of FY2017 Management Reserve to FY2018 – OA</i>	RL-0012 RL-0030 RL-0041 RL-0042	2017 – 2018	\$0
BCR-PRC-17-042R0	<i>FY2017 Workforce Restructuring MR Draw</i>	RL-0011 RL-0012 RL-0030 RL-0040 RL-0041 RL-0042	2017 – 2018	\$-5,133K.
BCR-PRC-17-043R0	<i>FY2017 G&A Rate Adjustment - OA</i>		2017 – 2018	\$6,835K.

Overall, there was a decrease in Management Reserve (MR) of \$471K during September.

Fee Activity

BCR Number	Title	PBS	Fiscal Year	Fee
N/A	N/A	N/A	2017 – 2018	N/A

Overall, there was no change to the Fee during September.

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: 10/25/2017	Approved by:	Date:
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* In regards to RL-0041, CHPRC has implemented the River Corridor Closure Contract (RCCC) transitioned scope into the Performance Measurement Baseline (PMB) for Earned Value Management (EVM) reporting purposes. When the change orders (CO #304, #305, #306) are definitized, BCRs will be processed to align the PMB with the definitized 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

September 2017
CHPRC-2017-09, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

M. N. Jaraysi
Vice President for
Environmental Program
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S. E. Johnson
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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.

EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
17-EMS-ADMIN-OB1-T1	Reduce energy intensity.	Increase facility occupancy rates to greater than 83 percent by compressing occupancy and vacating underutilized facilities. Vacated/unoccupied facilities declared unusable and designated inactive; placed in Care Taker system.	9/30/17	95%
17-EMS-ADMIN-OB2-T1	Maximize the acquisition and use of environmentally preferable products in the conduct of operations.	Establish/utilize green catalogs to maximum extent for products beyond office supply purchases on the website.	10/9/17	100%
17-EMS-PTS-OB1-T1	Universal Waste, Recycling Compliance, Spill Prevention, and Satellite Accumulation Area Inspections.	Monitor and evaluate universal waste, other recycling, and satellite accumulation areas for compliance with CHPRC procedures and WAC 173-303 regulations.	9/30/17	100%
17-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.	9/30/17	100%

TARGET ZERO PERFORMANCE

(Reported on a calendar month basis.)

	Current Month	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	0	N/A
Total Recordable Injuries	0	0	N/A
First Aid Cases	2	13	<ul style="list-style-type: none"> 9/13/2017 – Employee went to sit in a chair and an armrest tore, exposing metal support, causing laceration to left palm. (24616) 9/26/2017 – Employee was walking down stairs and felt a pop in the left calf. Employee was diagnosed with a tear in the soleus muscle. (24630)
Near-Misses	0	0	N/A

KEY ACCOMPLISHMENTS

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

- There were two reported First Aid cases during the month of September in the functional groups.
 - Occupational Safety and Industrial Hygiene (OS&IH) accomplishments:
 - Completed transition of River Corridor Closure Contract (RCCC) OS&IH procedures.
 - Revised and issued the Industrial Hygiene Exposure Assessments procedure and the Industrial Hygiene Monitoring, Reporting and Records Management procedure to support RCCC transition.
 - Supported development of an Industrial Hygiene Technician Fundamentals training program to be provided by HAMMER.
 - Provided technical support for fall protection program implementation at the Environmental Restoration Disposal Facility (ERDF).
 - Published third poster for the Driver Awareness safety campaign.
 - Completed assessment of ERDF beryllium work permit implementation.
 - Performed technical reviews of Project Drill Packages.
 - Initiated dialogue with other prime contractors to evaluate the need for an endorsed vehicle safety procedure.
 - Radiological Control accomplishments:
 - Continued to provide health physicist support to the Waste Encapsulation and Storage Facility (WESF) and Central Plateau Surveillance and Maintenance.
 - Completed reviews and approved Technical Evaluations (TE) for:
 - Plutonium Finishing Plant (PFP) Area Monitoring Program.
 - U Plant Canyon Entry to Support T Plant Facility Operations.
 - ERDF, Characterization, Workplace Air Monitoring and Dosimetry TE.
 - ERDF TE Survey Techniques for Elevated Alpha and/or Beta Background Count Rates.

- 324 Facility Characterization, Workplace Air Monitoring and Dosimetry Technical Evaluation.
- Supported completion of transition and implementation of ERDF and 324 facility radiation protection programs.
- Provided drill package review and approval for Emergency Preparedness at T Plant, Solid Waste Operations Complex (SWOC), and WESF.
- Supported informational visit by the Lawrence Livermore, California, inspector general office.
- Provided personnel data to labor relations in support of Hanford Atomic Metal Trades Council (HAMTC) worker requests.
- o Nuclear Operations Support & Compliance accomplishments:
 - Correspondence transmitted to Department Of Energy Richland Operations Office (RL):
 - Letter, CHPRC-1703977, dated September 5, 2017, *Transmittal of the Waste Encapsulation and Storage Facility Evaluation of Safety of the Situation for Secondary Accidents by Natural Events, CHPRC-03418, Revision 0.*
 - Letter, CHPRC-1704074, dated September 6, 2017, *Transmittal of the Canister Storage Building Evaluation of Safety of the Situation for Secondary Accidents by Natural Events, CHPRC-03432, Revision 0.*
 - Letter, CHPRC-1704197, dated September 13, 2017, *Request for Approval of the One-Time Request for Shipment for Sludge Transport from K West Basin to T Plant, CHPRC-03111, Revision 1.*
 - Letter, CHPRC-1703585, dated September 18, 2017, *Transmittal of the 2017 Annual Update to the Documented Safety Analysis for the 224-T Facility, CP-14641, Revision 7, the Unreviewed Safety Question Determinations Summary, and the 224-T Fire Hazards Analysis, CP-40894, Revision 1*
 - Letter, CHPRC-1704539, dated September 27, 2017, *Transmittal of the 2017 Update to the B Plant Documented Safety Analysis, HNF-14804, Revision 8; the Unreviewed Safety Question Determinations Summary; and the Fire Hazards Analysis for the B Plant Facility, CP-41843, Revision 2.*
 - Correspondence received from RL:
 - Letter, 17-NSD-0048_RL, dated September 1, 2017, *Approval of the “105KW Facility Documented Safety Analysis,” PRC-STP-00946, Revision 0 and the “105KW Facility Technical Safety Requirement,” PRC-STP-00992, Revision 0.*
 - Letter, 17-NSD-44_RL, dated September 22, 2017, *Approval for Recategorization of the 618-10 Burial Ground and Cancellation of “Documented Safety Analysis for Remediation of the 618-10 Burial Ground and the 316-4 Waste Site, Formerly WCH-459 Rev 4,” CP-59916, Revision 1.*
- o Contractor Assurance Regulatory Reporting (CARR) accomplishments:
 - 217 condition reports (CRs) were screened:
 - No significant issue identified.
 - No adverse issues identified.
 - 92 Track Until Fixed (TUF) issues identified.
 - 46 Trend Only items identified.
 - 76 Opportunity for Improvement (OFI) items identified.
 - Three Screened Out.
 - 236 CRs administratively closed.
 - 409 CRs actions administratively closed.
 - Providing full-time support to PFP Issues Management and Occurrence Reporting activities.
 - Published revisions to PRC-PRO-QA-052, *Issues Management*; PRC-PRO-EM-060, *Reporting Occurrences and Processing Operations Information*; and PRC-GD-EM-40409,

- CHPRC Occurrence Report Writer's Guide*, in support of implementing DOE O 232.2A, *Occurrence Reporting and Processing of Operations Information*.
- Provided DOE O 232.2A briefings to 77 employees.
 - Transmitted letter CHPRC-1704413, *CH2M HILL Plateau Remediation Company Quarterly Performance Analysis Report*, to RL.
 - Provided support and coordination for the Defense Nuclear Facility Safety Board (DNFSB) Onsite Review of Plutonium Uranium Extraction Plant (PUREX) Grouting.
 - Provided support and coordination for the DNFSB Onsite Review of Radiological Safety at the 324 Building.
 - Provided support for the bi-monthly DNFSB Resident Inspector Meeting.
 - Twenty-six documents were provided in response to DNFSB requests for information.
 - Provided support to the Site DNFSB Resident Inspector questions and requests.
 - One internal lessons learned was submitted to OPEXShare: 2017-KBO&PR-0002, *Vigilant Reviews & Walk Downs Needed*.
- o Performance Oversight, Assessment, and Quality Assurance accomplishments:
- Conducted in-field activities for the 10 CFR 835 Subpart L “Radioactive Contamination Control” surveillance scheduled for August through September.
 - Conducted in-field activities to support effectiveness review “Safety Related Events and Issues at PFP.”
 - Provided coaching/mentoring of Project Assessment Coordinators for FY2018 assessment planning.
 - Provided specific mentoring and feedback to assessors and responsible managers that conducted management assessments.
 - Provided assessment mentoring to 324 Building, ERDF, 618-10, KBO&PR, PC&PI, PTS, and Soil & Groundwater Remediation Project (S&GRP) organizations.
 - Completed fiscal year (FY) 2018 assessment planning for SHS&Q, PC&PI, PO, and Business Services.
 - Completed SHS&Q-2017-WSA-19207, “Review of FY2018 Contractually Required Assessments.”
 - Completed SHS&Q-2017-MA-17851, “EM Corporate QA Performance Metrics.”
 - Completed SHS&Q-2017-WSA-19495, “Subcontractor surveillances and communication.”
 - Assisted in document preparation and coordination to complete qualification of a non-OCRWM Lead Assessor for EM, a project (SHS&Q) Quality Assurance Engineer, a EM Quality Assurance Engineer, and annual recertification for an OCRMW and non-OCRWM Lead Assessor.
- o Fire Protection (FP) accomplishments:
- An analysis at WESF determined the amount of combustible materials present in G Cell exceeds the allowable quantity of 100 Kg. The facility entered the restricted mode based upon Technical Safety Requirements (TSR) requirements. The Facility Hazards Analysis (FSA)/Documented Safety Analysis (DSA)/TSR documents will need to be rewritten to resolve the issues.
 - The Fire Protection Central Group will report to the director of Nuclear Safety in October.
 - The FP procedure roll-out is in progress. Project reviews of the procedures are being addressed through PRC Procedure System (PPS).
 - The following TSR activities were completed:
 - Solid Waste Operations Complex (SWOC):
 - o 2X-17-03642/S LLBG annual fire assessment.
 - o 2X-17-03438/S LLBG quarterly combustible surveillance.
 - o W1-17-03439/S WRAP quarterly combustible surveillance.

- Facility Hazards Analysis (FHA):
 - The B Plant FHA was completed and published.
 - The SWOC and T Plant FHAs are in a minor revision based upon comments by RL.
 - 324 Building FHA was reviewed by the Hanford Fire Marshal's Office (HMFO). RL subject matter expert is currently reviewing the FHA.
 - The 402 Building FHA is at HFMO for comments.
 - The Integrated Disposal Facility (IDF) FHA is currently on hold due to funding.
 - The 1804DX FHA has been canceled after further evaluation.
- All but two of the Facility Fire Protection Assessments have been completed for 2017. The final two assessments will be completed in October.
- SHS&Q Focus Areas:
 - **Issue:** Beryllium program assessment findings from Department of Energy (DOE-HQ), Office of Safety, Health and Security Independent Oversight Inspection report.
 - **Status:** Revision 4 continues to be developed by the Hanford Beryllium Committee, and Revision 3 has been pulled back by RL. Revision 2 remains in effect.
 - **Action:** Beryllium facility assessments have been completed. There remains a combination of 61 facilities, structures, and conex boxes that have yet to be characterized and are scheduled for completion in FY2018.
 - **Issue:** Accident & Injury Reduction.
 - **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.
 - **Action:** Injury trends continue to improve across the PRC. Five October 2016 recordable injuries and three October 2016 DART cases will fall out of our 12 month rolling average next month.
 - **Issue:** PFP support.
 - **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.
 - **Action:** Continuing senior supervisory watch for PFP demolition activities based upon specific hazard activities in coordination with PFP management.
 - **Issue:** Fire Protection program improvements.
 - **Status:** CHPRC Fire Protection personnel are actively interfacing with Hanford Fire Department (HFD) and RL regarding FP program improvements related to fire hazard analyses.
 - **Action:** Weekly fire protection program status and initiatives presented each week to the SHS&Q vice president continue to show improvement. Two key FP personnel positions will be vacant in October. One position will be filled with a qualified individual.

Environmental Program and Strategic Planning (EP&SP)

- **Environmental Compliance and Quality Assurance**
 - **Assessment Status**
 - Surveillance of Off-site Analytical Laboratories Achieving Permitting Limits was completed on September 13, 2017. No issues were identified.
 - Surveillance of Clean Sweep Corrective Action Effectiveness Review was completed on September 20, 2017. The surveillance resulted in one finding.
 - Management Assessment of Hanford Analytical Services Quality Assurance Requirements Document (HASQARD) Corrective Action, Quality Improvement, and Assessments Processes was completed on September 19, 2017. The assessment resulted in three findings and six opportunities for improvement.

- **Environmental Protection**

- **Compliance Status**

- CHPRC is leading the corrective action response team and working collaboratively with RL to develop and deliver the three corrective actions required by the PUREX tunnels Administrative Order (AO). The first two corrective actions (structural integrity evaluations, and actions to ensure safe storage for PUREX Tunnels 1 and 2) were submitted to Ecology to meet the AO requirements. Ecology issued an amended AO on September 14, 2017 (17-NWP-123), adding Tunnel 2 to the scope of corrective action three (draft updates to Resource Conservation and Recovery Act of 1976 [RCRA] permit sections) and extending its due date to December 8, 2017.
- CHPRC and RL received an AO and Notice of Penalty (NOP) from the Washington Department of Ecology on September 6, 2017 (17-NWP-112, Notice of Penalty Docket 15342 and 17-NWP-113, Order Docket 15343) as a result of the April 25, 2017, inspection of the PUREX Plant and Storage Tunnels (17-NWP-114). The AO and NOP allege violations related to “white powder” observed in portions of the PUREX plant during annual surveillance activities. On October 5, 2017, RL and CHPRC jointly filed an appeal of both the AO and the NOP with the Pollution Control Hearings Board (PCHB).

Business Services

- **Supply Chain:**

- Coordinated the transfer of camera equipment from Washington River Protection Solutions, LLC (WRPS) to CHPRC and expedited several construction-oriented procurement actions that supported the PUREX Tunnel Stabilization Project, including bore scopes, specialized lights, heating blankets, and ancillary construction services to support the PUREX Tunnel Stabilization Project.
- Received consent to award the 324 Building Interference Removal construction contract. This is an \$11.7 million cost plus incentive fee (CPIF) contract with Apollo, Inc.
- Met with representatives from the Idaho National Laboratory and Fluor-Idaho to review some software tools that they use to interface with Asset Suite. Meetings were held at the Idaho locations to permit a system demonstration.
- Met with representatives from S&GRP to establish a contracting strategy for well realignment work that will start in January 2018. Identified the types of evaluation factors, the type of work scope, and the amount of funding expected to be available.
- Reviewed whether FAR 52.222-17 “Non-displacement of Qualified Workers Under Service Contracts” applied to CHPRC subcontracts. This clause was enacted by Executive Order 13495 that was issued in 2009. The clause has not been placed in the CHPRC contract and therefore does not apply.
- Met with representatives of Project Technical Services (PTS) to discuss an acquisition strategy for acquiring ground scanning and surveying services.
- Communicated with a subcontractor to emphasize the need for enhanced attention when operating a motor vehicle. Forwarded the subcontractor’s information, including company-released communications.

- **Facilities & Property Management (F&PM):**

- The FY2017 Inventory campaign continues – 99.05 percent complete through September. Balance of items to be inventoried in October.
- Move planning/execution for RL and CHPRC between the Federal Building and 2420 Stevens Center Place is nearing completion. All CHPRC moves to the Federal Building were completed in July 2017. Some CHPRC personnel remain in temporary offices. Approximately 10 environmental team members moved to final permanent offices in September. Approximately 15

- to 20 CHPRC finance and S&GRP project support members will move to final permanent offices in November. Federal Building configuration is anticipated to be complete in November 2017.
- o Support to new shower trailer for S&GRP Drilling and Sampling Operations at Waste Sampling and Characterization Facility (WSCF) continues. Electrical hookup complete. Re-routed plumbing for easier access of potable water fill and sewage pump.
 - o New five-wide trailer at WESF (MO-199) has been completed and turned over to Waste and Fuels. Occupancy is approved, and the trailer is now operational.
 - o MO-885 from 618 Project will be demobilized and returned to vendor. PTS is currently proceeding with request for a trailer return in October.
 - o MO-806 moved and set-up at PUREX facility. Occupancy is approved, furniture is installed, and the trailer is operational.
 - o Continued initial planning to relocate seven mobile trailers from PFP to be setup at REDOX.
 - o Continued planning/purchasing requirements with D&D on setup of two double-wide job trailers and one shower/restroom/change trailer that will support demolition of Research Technology Laboratory (RTL) labs. Transferred plastic shop space in Building 2101M from PFP to Central Plateau Surveillance and Maintenance (rooms 211G/211M) for use as a maintenance shop
- **Finance:**
 - o September month-end completed with no cost suspensions.
 - o All packages for the ARRA Construction Work in Progress (CWIP) reconciliation process have been completed and placed on an RL share drive.
 - o Received provisional approval from RL through email regarding the FY2018 rates.
 - o Completed fiscal year-end closing with no significant issues.
 - o Submitted the FY2017 Lease and Commitments, Deferred Maintenance and Forgone Revenue reports to RL.
 - o Continued support of the Bi-Annual Pricing Review.
 - **Human Resources (HR):**
 - o Completed self-select program for Phase 3 of the 2017 Workforce Restructuring plan, approving 82 applicants. Nine of these approved applicants will have extended release dates. Two self-select employees approved in Phase 1 were released in September.
 - o JuMP Network Community Service Committee raised more than \$500 in support of My Friends' Place. My Friends' Place is a local nonprofit organization that provides support to 13- to 17-year-old homeless teenagers.
 - o Supported the WSU-TC Career Fair to educate students on the important work being done on the Hanford Site and the many career paths available to them, as well as the immediate opportunities to get experience as they finish their degrees through our summer intern program and co-op programs.
 - o Completed another successful year of the CHPRC Intern Program. Students were hired across multiple disciplines and were able to apply valuable work experience to the degrees they are pursuing, while we in return received a great amount of help in our workforce that came with fresh ideas from our interns. Twenty-nine interns were hired this year from 13 colleges in Washington, Oregon, Idaho, Utah, Montana, and Wisconsin. We were successful in recruiting a diverse group of students with 10 minorities and one veteran. Our intern program serves as an avenue to recruit for targeted future needs and impact our affirmative action plan placement goals.
 - o A CHPRC WSU-Tri-Cities co-op student was hired into a full-time engineering position following graduation. The co-op program continues to provide our workforce with talented workers who are filling critical hiring needs upon completion of their degrees.
 - o Some former CHPRC non-bargaining, non-exempt employees were provided with "catch-up" payments for holiday pay in accordance with the Service Contract Act (SCA). Employees who terminated employment with CHPRC on or after October 1, 2015, were evaluated to determine if the number of holiday hours they accrued between their service anniversary date and their last

day worked met or exceeded the SCA vested holiday benefit. Seven former employees were identified as not having accrued enough holiday PTB to cover the SCA holidays they were entitled and were provided with these “catch-up” payments. Future analysis of potential payments required will be calculated at the time of any non-bargaining, nonexempt employee’s termination, and payment provided, if appropriate.

- o Provided the Department of Labor with documentation identifying the SCA Wage Determination Codes matched to the job titles and job codes of our current salaried non-exempt employees.

- **Labor Relations (LR):**

- o The following is the current status of grievances in the arbitration process:
 - RC-015-011 – union claiming misassignment of work in regard to respirator maintenance. Status: Arbitration scheduled for October 11, 2016, was postponed by mutual agreement as parties work to reach 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 and 26, 2018.
 - PRC-016-059 – failure to meet CHPRC pre-employment screening. Status: Arbitration scheduled for November 1, 2017.
 - PRC-017-010 – union claiming employee should have been paid between when he was ready to return to work and when he started with Mission Support Alliance, LLC (MSA), as CHPRC did not have an open position when he returned. Status: Arbitration scheduled for February 28 and March 1, 2018.
 - HAMTC requested two grievances to move to arbitration:
 - PRC-017-017 (D&D Issuance of Respiratory Equipment).
 - PRC-017-018 (Calculation of R Time in processing Payroll).
- o Labor Relations continues to support Workforce Restructuring activities for affected bargaining unit employees, working with all of the CHPRC projects and the other Hanford contractors to coordinate staffing needs and skills mix issues, and provide opportunities for affected employees. This effort has helped eliminate the need to implement an involuntary reduction of force during FY2017.

- **Procurement:**

- o Awarded/amended 269 contracts with a total value of \$40.56 million. Additionally, awarded 344 new material purchase orders (PO) valued at \$1.9 million to support ongoing project objectives.
- o At the end of the first 108 months of the CHPRC project, procurement volume has been significant; \$2.61 billion in contract activity has been recorded with approximately 55.8 percent, or \$1.46 billion, in awards to small businesses. These awards include 7,862 contract releases, 24,003 POs, and 284,007 PCard transactions.
- o Major contract awards:

Contract/Release	Award Date	Awarded To	Title	Contract Type	Value
63980	9/5/2017	Orbit Industries LLC	ION Exchange Module Fabrication, Off Site	FFU	\$ 613,200
64186	9/21/2017	Apollo Sheet Metal Inc. dba Apollo Mechanical Contractors	324 Building Interferences Removal and Structural Modifications	CPI	\$6,000,000

CPI – Cost Plus Incentive Fee FFU - Firm Fixed Unit Price

Prime Contract and Project Integration (PC&PI)

- **Prime Contract Compliance (PCC):**
 - In September, PCC received and processed 13 contract modifications (608, 609, 619, 622, 625-633) from RL.
 - The Correspondence Review Team received and determined the distribution for 82 incoming letters/documents. The PCC manager reviewed 64 outgoing correspondence packages.

- **Integrated Services**
 - **Estimating & Program Support**
 - Three Change Proposals/Request for Equitable Adjustments (CPs/REAs) were submitted to RL in September 2017:
 - REA 011 PRC 1661 - Plutonium Finishing Plant Cost and Schedule Impacts as a Result of 242Z Criticality Alarm, submitted September 27, 2017.
 - REA 011 PRC 1665 - Plutonium Finishing Plant Cost and Schedule Impacts from Unusually Severe Winter Weather, submitted September 27, 2017.
 - REA 011 PRC 1666 - Plutonium Finishing Plant Cost and Schedule Impacts Associated with Additional Asbestos Abatement, submitted September 27, 2017.
 - Thirty CPs/REAs have been submitted in FY2017, 28 on or ahead of schedule, with two CPs/REAs submitted late.
 - Began/continued development of two CPs/REAs:
 - CP 040 PRC 1658 - U Plant Demolition Deductive Proposal.
 - CP 041 PRC 1662 - 100K FY2018 Waste Site Remediation Activities.
 - Supported four Truthful Cost or Pricing Data (TCoPD) evaluations/updates for CPs/REAs:
 - CP 013 317 1631 - Compliance with Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone Change Control Form M-91-15-01, update to include M-91-40 deleted scope.
 - CP 041 319 1640 - Garnet Filter Media Removal.
 - CP 040 324 1641 - Miscellaneous Project Breakdown Structure (PBS) RL-040 Work Scope.
 - CP 041 326 1651 - 105-KW Fuel Storage Basin.
 - Supported RL requests for information (RFIs) for two CPs/REAs:
 - CP 041 305 1616 - 300-296 Waste Site Design Change, Initiate Procurements, Initiate Testing, and Initiate Removal of Debris, submitted September 11, 2017.
 - CP 040 306 1596 - 618-10 Burial Ground, submitted September 11, 2017.
 - Miscellaneous estimating support:
 - Provided Pacific Northwest National Laboratory (PNNL) the updated Radiological Technology Laboratory complex demolition estimate.
 - Continued to support the RL-directed audit of the CHPRC Change Proposals associated with the former RCCC scope transitioned to CHPRC, being performed by Cohn Reznick. The change orders (COs) associated with CHPRC's RCCC replaced Change Proposals include CO 304, *Initiate Transition of River Corridor Contract (RCC) Scope Activities into the Plateau Remediation Contract (PRC)*, CO 305, *300-296 Waste Site Design Change, Initiate Procurements, Initiate Testing, and Initiate Removal of Debris*, and CO 306, *Remainder of RCC Project Transition Activities*.
 - **Interface Management:**
 - Interfaces (Technical, Administrative, and Regulatory):
 - Communications between WRPS at 222-S and CHPRC's efforts at REDOX included communications related to the completion of the roof replacement, upcoming CHPRC work in FY2018, and project coordination while WRPS executes a pump replacement at

- 219-S. CHPRC attends bi-weekly interface/communication meetings with WRPS at 222-S.
- Attended a multi-contractor workshop (Kaizen “Blitz”), sponsored by MSA, related to Waste Site Project Planning.
 - Closed on a request from MSA Infrastructure representatives to borrow a CHPRC regulated excavator for use on a MSA Sewer System Upgrade project that will traverse several waste sites on its proposed cross-site route. Transaction was completed at the project level.
 - Facilitating transfer of the 622S Lysimeter to WRPS per direction from the PRC Contracting Officer.
 - In negotiations with WRPS regarding the requested use of the closed 207A Basin area for WRPS laydown/parking area.
 - Provided final comments and concurrence for the annual MSA Snow Removal Plan.
 - Attended multi-contractor meeting regarding the transition of the water systems in the 300 Area from MSA to PNNL, and associated changes in responsibilities for permitting, maintenance, etc.
- Annual Forecast of Services:
- Continued flow of communication/requests for MSA resources, as required by emerging project needs. Ongoing schedule changes at PFP have required increased communication with MSA service managers and a need for a more integrated approach to resource management for the other CHPRC projects.
- Inter-Contractor Issue Resolution:
- Incorporated final comments for the Administrative Interface Agreement (AIA) developed to capture concerns related to new MSA infrastructure crossing over, under, and through waste management units/sites slated for near-term remediation and the MSA actions required to cross through these sites. AIA is currently routing for final review by all parties.
- Controlling and Service Agreements:
- Coordinated a joint comment resolution meeting with MSA related to the revision of HNF-47924, Revision 1, *Administrative Interface Agreement for Hanford Site Electrical Utilities Operations and Maintenance Interface with Soil and Groundwater Remediation Project Pump and Treat Process Lines*. As a result of the meeting, two sections will be rewritten.
 - Consolidated comments related to AIA HNF-51261, Revision 2, between CHPRC and MSA for fleet maintenance on vehicles used for geophysical logging of groundwater wells. Latest version is routing for final concurrence.
 - Signed AIA HNF-52028, accident/incident/exposure/uptake/personal injury/critique point of contacts and safety issue escalation, and sent back to MSA for release.
 - Transmitted the annual CHPRC Service Level Agreement (SLA) to Wastren Advantage, Inc., at 222-S for FY2018, in response to their request.
 - Canceled AIA PRC-AIA-PNNL-00495, Revision 0, with PNNL for the demolition of MO-226 in the 300 Area. Demolition was complete making the AIA obsolete.
 - Sent six Service Delivery Documents (SDDs) out for review and comment during the month of September.
 - Completed CHPRC review of 10 SDDs and provided response to MSA.
- J.3 Table Maintenance:
- No performance level actions occurred within the month of September 2017.
- J.13 and J.14 Tables Maintenance:
- Provided MSA with a proposal to transfer 200 East Area water distribution supply components (2902HV80 Tank and 2902HV Pump) to MSA Water Utilities for future

operation and maintenance, as needed by the site. MSA responded in August that their Water Utilities organization does not have a current or future mission for these systems in providing 200 Area water distribution for the Other Hanford Contractors (OHC). CHPRC has notified WRPS of the MSA response in order to confirm no current or future need is required. WRPS has responded to MSA with their notification of a continued need. Continuation of service will continue between MSA/WRPS/PRC.

- Internal Operations:
 - Two document revisions remaining related to the RCCC scope transfer to CHPRC. Involved parties include PNNL and MSA. The 300 Area utility AIA was pulled out of routing for signature due to the pending transition of the 300 Area water/sewer systems on October 1, 2017. This change in responsibilities prompted changes in the document.
 - Facilitated internal project discussions related to resource allocation. CHPRC projects are taking a more integrated approach to covering resource needs due to schedule changes at PFP. Short-term reassignments from one project to another is an option that will be communicated with MSA as appropriate.
- o **Information Management:**
 - Processed 20,352 electronic records into the Integrated Document Management System (IDMS).
 - Implemented company-wide use of Document Review and Concurrence (DRC) workflow. The DRC is used for routing and concurrence approval of outgoing correspondence addressed to RL.
- **Project Integration**
 - o Submitted the final FY2018 Annual PMB to RL, which incorporated RL comments. The PMB outlines the work planned to be performed in FY2018, which was based on a joint CHPRC/RL Risk Based Priority List.
 - o During September, Project Integration facilitated and supported the processing of 32 baseline change requests (BCRs).
 - o The annual Earned Value Management System (EVMS) surveillance package is being compiled to demonstrate CHPRC's certification compliance. The surveillance package includes audits, assessments, and automated data testing results of Capital Asset Projects (CAPs) cost and schedule data.
 - o Participated in the U.S. Department of Energy (DOE) Office of Project Management and Assessments (PM)/Energy Facilities Contractors Group (EFCOG) monthly telecom with Paul Bosco and Mike Peek. CHPRC Vice-Chairman Rick Millikin discussed the EFCOG Project Delivery Group (PDWG) Draft FY2018 Work Plan deliverables with Mr. Bosco. One notable new item for the work plan (at DOE's request) is the "Program Management Improvement Accountability Act" under S.1550 Public Law 114-264 (12/14/2016) intended to "...enhance accountability and best practices in project and program management through the Federal government." DOE is looking to the EFCOG to support reviews and comments on PM's policy, and support training and certification.
 - o Updated the EFCOG PDWG Draft FY2018 Work Plan.
- **Program Integration**
 - o **000 Project EVM Support:**
 - Completed submittal of indirect FY2018 PMB update. Completed and processed BCR-000-17-005R0 Alignment of FY2018 Indirect Budget to implement FY2018 ETC into FY2018 PMB.
 - Prepared BCR-PRC-17-042R0 FY2017 Workforce Restructuring MR Draw to draw \$5.1 million from management reserve to fund the FY2017 WFR Program.

- Finalized and processed BCR-013-17-026R0, *RL-0013 Revise EVM Type for Be Program Support* to change EVM type for beryllium activity in RL-0013.
- Prepared and issued indirect account Work Authorization Documents (WADs) and Work Charging Authorizations (WCAs).
- Prepared and submitted August Indirect Project Review.
- o **Risk Management and Reporting:**
 - Issued the CHPRC August Monthly Performance Report to RL.
 - Conducted Internal Project Team package for August performance data.
 - Conducted Project Reviews for August performance data.
 - Provided PC&PI input into Contractor Assurance System (CAS) August Report.
 - Issued CHPRC August Corporate Program Performance report.
 - Supported development of the CHPRC August Monthly Highlights to the Nuclear Business Group.
 - CHPRC Risk Management continues to make progress toward the FY2018 Annual Update/Long Range Plan (LRP) Risk Analysis. The FY2018 Annual Update/LRP Risk Analysis Report is on-track to complete October 30, 2017.
- o **Strategic Management:**
 - In September, Strategic Management led an extensive effort to lead a DOE Headquarter Integrated Project Team (IPT) visit on the aging structures, specifically focused on the Excess Hazard Category I/II facilities. To prepare, extensive information for the Extent of Conditions (EOC), including background information, was assembled. Presentations were also drafted for the two-day visit, with positive feedback from RL on the overall preparation and execution.
 - Continued partnering with RL strategy to reduce risks from aging infrastructure. Strategic management took the lead in preparing for a workshop on aging infrastructure and near-term/long-term priorities, including working with the project to identify specific FY2018-beyond scope.
 - Updated and had numerous meetings on a joint RL-CHPRC Integrated Priority List (IPL) that will outline the FY2018 priorities. As part of this effort, extensive work was done to update estimated incremental work costs based on the September PMB submittal, as well as FY2019 costs. Proactively identified and solved issues on the IPL and provided updates to CHPRC projects.
 - Continued the LRP effort as part of the PMB deliverable for this year. During September, strategic management supported the final PMB deliverable, which included the LRP detailed scope through FY2020 and a higher-level scope through FY2022. Numerous support to the projects were provided, and specific issues coordinated, including priority of work scope, changes to IPL, etc. A mechanism to document LRP changes was developed and implemented track changes to the LRP to ensure accurate accounting as FY2018 begins.
 - Held a Productivity Tracking Log meeting with the projects in September. Discussed company-level metrics, and the projects briefed their metrics of productivity delays and efficiencies. Continued an improvement initiative to ensure the process provides key data and decision-making information back to project stakeholders, including meeting with S&GRP.
 - Continued to update CHPRC project 2-, 5-, and 10-year goals to support ongoing priority discussions between CHPRC and RL, and provided support to various high-level discussions, on site priorities, and strategies.

PTS

- Engineering Services
 - Reviewed statement of work (SOW), functional requirements, and performance specifications associated with designing and building helium vacancy cluster (HVC) Grout Dams and Snorkels. These are to be installed into the 324 Building hot cells to ensure air flow is maintained during cell filling and grouting.
 - Facilitated the evaluation of fuse parameters in transmission and distribution power lines with regard to the impacts on released arc flash analyses.
- Training and Procedures
 - Published a Training Information Bulletin for training specialists to guide them to incorporate lessons learned into training materials.
 - Performed Hanford Integrated Training and Procedures (HITS) program rollout testing.
- Operations Program
 - Conduct of Operations/Work Control/Conduct of Work
 - Attended Facility Manager's Forum and provided overview of Conduct of Work-related issues.
 - Supporting revision of DOE-0336, Hanford Site lockout/tagout (LOTO) procedure committee meeting.
 - Presented Conduct of Work Site Management Plan program review to the Executive Safety Review Board on September 25, 2017.

Emergency Preparedness (EP)

- Completed third and fourth Quarterly Assessments.
- Updating Building Emergency Plan/Facility Response Plans for RL-directed RCRA Permit change.

Communications:

- Communications supported RL in proactive and reactive media interest in topics including:
 - PUREX Tunnel 1 grouting preparations and the start of grouting.
 - PFP demolition and corrective action implementation.
 - 324 Building Disposition Project progress.
- Communications supported RL in the development of social media posts featuring:
 - 324 Building airlock waste removal.
 - Upgrades at the groundwater treatment plant.
 - Demolition beginning on the main processing facility at PFP.
 - VPP Star of Excellence.
 - Sludge Treatment Project final phase of acceptance testing.
 - Union Gospel Mission golf tournament.
- Communications assisted RL in a public meeting on September 21, 2017, on the Notice of Intent (NOI) on the proposed construction of the Capsule Storage Area (CSA) on the Hanford Site.

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	0.3	0.0	0.0%	(0.1)	-60.2%
Internal Audit	0.1	0.1	0.1	0.0	0.0%	(0.0)	-4.0%
General Counsel	0.2	0.2	0.1	0.0	0.0%	0.0	20.9%
Communications	0.1	0.1	0.2	0.0	0.0%	(0.0)	-39.6%
Safety, Health, Security, and Quality	1.8	1.8	1.4	0.0	1.6%	0.4	20.7%
Environmental Program and Strategic Planning	0.7	0.7	0.6	0.0	0.0%	0.1	12.3%
Business Services	2.8	2.8	3.1	0.0	0.0%	(0.4)	-13.4%
Prime Contract and Project Integration	2.8	2.8	3.2	0.0	0.0%	(0.4)	-16.1%
Project Technical Services	0.9	0.9	0.9	0.0	-0.1%	(0.0)	-3.0%
Indirect WBS 000 Total	9.5	9.5	10.0	0.0	0.3%	(0.5)	-5.5%

Numbers are rounded to the nearest \$0.1 million.

Indirect WBS 000

CM Schedule Performance: (+\$0.0M/+0.3%)

The variance is within reporting thresholds.

CM Cost Performance: (-\$0.5M/-5.5%)

The CM negative cost variance is primarily due to the purchase of computer equipment in FY2017 in support of the Windows 10 conversion. Additionally, a negative labor rate variance was realized, which was built up throughout the fiscal year. The variance is partially offset by a current month MSA rate pass back based on the true-up of full-year rates in one fiscal month.

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

WBS 000 Project Services and Support	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)
Office of the President	1.8	1.8	2.1	0.0	0.0%	(0.2)	-12.2%	1.8
Internal Audit	1.2	1.2	0.9	0.0	0.0%	0.3	23.1%	1.2
General Counsel	1.5	1.5	1.2	0.0	0.0%	0.3	20.5%	1.5
Communications	1.1	1.1	1.3	0.0	0.0%	(0.2)	-21.1%	1.1
Safety, Health, Security and Quality	15.7	15.8	13.1	0.0	0.2%	2.7	17.0%	15.7
Environmental Program and Strategic Planning	5.9	5.9	4.7	0.0	0.0%	1.2	20.6%	5.9
Business Services	24.1	24.1	24.9	0.0	0.0%	(0.8)	-3.4%	24.1
Prime Contract and Project Integration	24.5	24.5	22.5	0.0	0.0%	2.0	8.1%	24.5
Project Technical Services	7.5	7.6	7.3	0.0	0.3%	0.3	3.6%	7.5
Indirect WBS 000 Total	83.4	83.4	77.9	0.0	0.1%	5.5	6.6%	83.4

Numbers are rounded to the nearest \$0.1 million.

Indirect WBS 000

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

The variance is within reporting thresholds.

FYTD Cost Performance: (+\$5.5M/+6.6%)

The FYTD positive cost variance is primarily due to continued lower-than-planned on-demand services for information resource and technology management support, as well as lower-than-planned subcontractor cost for document control support. Also contributing to the positive cost variance is open vacancies in the SHS&Q and Environmental Program & Strategic Planning organizations. Additionally, the National Beryllium Program has experienced a decrease in activity as the Beryllium Corrective Action Plan has concluded and the awareness group meetings are required less frequently. The positive variance is offset by the year-end purchase of computer equipment to support the site upgrade to Windows 10.

MAJOR ISSUES

None currently identified.

RISK MANAGEMENT STATUS

No key risks currently identified.

MILESTONE STATUS

None currently identified.

GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

Appendix C

Capital Asset Projects



September 2017
CHPRC-2017-09, 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)



T. E. Bratvold
Vice President for
Plutonium Finishing
Plant Closure
Project

September 2017
CHPRC-2017-09, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress continued to work toward critical decision (CD)-4 closure as teams completed preparation of the glovebox/hoods for extraction during demolition. Remaining gloveboxes (5 each) have been staged until the area of the 234-5Z facility is demolished where they currently reside. The total number of gloveboxes removed to date is 97 percent complete.

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

<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	-	1	174	169
COMPLETE KPP Rooms/Areas Ready for Demo	-	12	72	72 rooms/areas

KEY ACCOMPLISHMENTS

RL-0011_C1 Accomplishments

- Removed glovebox 145-1
- Readied the remaining 12 rooms associated with RL-011.C1 KPP for demolition.

MAJOR ISSUES

None currently identified.

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 monthly spotlight chart in the month of September .						
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 the month of September .						
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)						
PFP-DEMO-21: Glovebox/Equipment Removal/Demolition Material Handling Event	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 FY2017.		
				Mitigation action(s)	FC Date	%
				None identified at this time.	N/A	N/A
Mitigation Assessment: 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.						
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)						
No high threat value risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in the month of September .						
Unassigned Risks (Pending ownership of identified risks/opportunities)						
No unassigned risks identified for RL-0011/WBS-011.05.01.01.06 (CAP.1) in the month of September .						

CRITICAL PATH SCHEDULE

The Plutonium Finishing Plan (PFP) C1 Critical Path schedule begins with the continuation of demolition on the A-labs in 234-5Z. After A-labs is complete, the 234-5Z front side will be demolished. After the front side is complete, the Backside Rooms/Plutonium Process Support Laboratories (PPSL), Remote Mechanical A (RMA) Process Line, and RMC Process Line. Finally, the demolition of the Radioactive Acid Digestion Test Unit (RADTU) (when the last gloveboxes will be removed from 234-5Z) and basement areas completes the 234-5Z Facility. Completion of the removal of the final gloveboxes is followed by performing CD-4 closeout activities.

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	2/16/2018	Progress continued to work toward CD-4 closure as teams continued to prep glovebox/hoods for extraction during demolition. Final preparations for the removal have been completed. Remaining gloveboxes have been staged until demolition of 234-5Z commences and completion of CAP.1 discrete scope will be completed. There was a 47 day loss, since August month end as a result of impacts from a stop work associated with the June Plutonium Reclamation Facility (PRF) contamination event. The total gloveboxes removed to date is at 97 percent complete. Completion of CD-4 closure by November 30, 2017 will not be achieved.

*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, will not be 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



September 2017
CHPRC-2017-09, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE													FORM APPROVED OMB No. 0704-0188						
1. CONTRACTOR			2. CONTRACT				3. PROGRAM			4. REPORT PERIOD			DOLLARS IN Thousands of \$						
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) 2017 / 08 / 21									
b. LOCATION (Address and ZIP Code) Richland, WA			b. NUMBER RL14788				b. PHASE			b. TO (YYYYMMDD) 2017 / 09 / 30									
c. TYPE CPAF			d. SHARE RATIO				c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES (YYYYMMDD) 2009 / 09 / 18												
5. CONTRACT DATA																			
a. QUANTITY 1		b. NEGOTIATED COST 317,545		c. ESTIMATED COST OF AUTHORIZED UNPRICED WORK 0		d. TARGET PROFIT/FEE 9,878		e. TARGET PRICE 327,423		f. ESTIMATED PRICE 344,965		g. CONTRACT CEILING 327,423		h. ESTIMATED CONTRACT CEILING 344,965		i. DATE OF OTB/OTS (YYYYMMDD)			
6. ESTIMATED COST AT COMPLETION																			
			MANAGEMENT ESTIMATE AT COMPLETION (1)		CONTRACT BUDGET BASE (2)		VARIANCE (3)		7. AUTHORIZED CONTRACTOR REPRESENTATIVE			b. TITLE							
a. BEST CASE 332,694			332,694						a. NAME (Last, First, Middle Initial) Dickerson, Kala K			Prime Contract Compliance Manager							
b. WORST CASE 335,212			335,212						c. SIGNATURE			d. DATE SIGNED (YYYYMMDD)							
c. MOST LIKELY 335,087			335,087		317,545		-17,542												
8. PERFORMANCE DATA																			
CAPN-PBS Control Account-PARS 2 WBS (2)		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)
ITEM (1)		WORK SCHEDULED (2)	WORK PERFORMED (3)	ACTUAL COST WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)	ACTUAL COST WORK PERFORMED (9)	SCHEDULE (10)	COST (11)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)		
RL-0011 Nuclear Mat Stab & Disp PFP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
RL_0011_C1.02 Maintain Safe & Compliant PFP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
RL_0011_C1.05 Disposition PFP Facility		0	19	21	19	-2	235,514	235,244	259,761	-270	-24,517	0	0	0	235,514	259,907	-24,393		
RL_0011_C1.06 Project Management & Support		0	0	0	0	0	11,990	11,990	12,477	0	-487	0	0	0	11,990	12,477	-487		
RL_0011_C1.90 Usage Based Services Distributions -PBS RL-11		0	0	0	0	0	7,221	7,221	7,731	0	-510	0	0	0	7,221	7,731	-510		
RL_0011_C1.98 Ramp-up and transition		0	0	0	0	0	19,399	19,399	19,253	0	147	0	0	0	19,399	19,253	147		
RL_0011_C1.99 PBS RL-11 UBS, G-n-A, Direct Distrib		0	0	0	0	0	41,028	41,028	33,328	0	7,700	0	0	0	41,028	33,328	7,700		
b. COST OF MONEY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
c. GENERAL AND ADMINISTRATIVE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
d. UNDISTRIBUTED BUDGET		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
e. SUBTOTAL		0	19	21	19	-2	315,152	314,882	332,548	-270	-17,667	0	0	0	315,152	332,694	-17,542		
f. MANAGEMENT RESERVE		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
g. TOTAL		0	19	21	19	-2	315,152	314,882	332,548	-270	-17,667	0	0	0	317,545	332,694	-15,149		
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																			
a. VARIANCE ADJUSTMENT																			
b. TOTAL CONTRACT VARIANCE													-270	-17,667	0	0	317,545	332,694	-15,149

*CPR Format 1 displays fully burdened dollars which includes indirect G&A that is distributed to each Project

CLASSIFICATION (When Filled In)

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

DOLLARS IN Thousands of \$

FORM APPROVED
OMB No. 0704-0188

1. CONTRACTOR		2. CONTRACT		3. PROGRAM			4. REPORT PERIOD		
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME RL_0011_C1 - PFP D&D (ARRA/Base)			a. FROM (YYYYMMDD) 2017 / 08 / 21		
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE			b. TO (YYYYMMDD) 2017 / 09 / 30		
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <input checked="" type="checkbox"/> YES (YYYYMMDD) 2009 / 09 / 18					

5. PERFORMANCE DATA

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE						REPROGRAMMING			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		ADJUSTMENTS			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)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)					
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	19	21	19	-2	254,725	254,455	279,968	-270	-25,513	0	0	0	254,725	280,114	-25,389		
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	19	21	19	-2	315,152	314,882	332,548	-270	-17,667	0	0	0	315,152	332,694	-17,542		
f. MANAGEMENT RESERVE														2,393				
g. TOTAL	0	19	21	19	-2	315,152	314,882	332,548	-270	-17,667	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) 2017 / 08 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30	
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE <input type="checkbox"/> NO <input checked="" type="checkbox"/> X <input 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 OCT 2017 (4)	+2 NOV 2017 (5)	+3 DEC 2017 (6)	+4 JAN 2018 (7)	+5 FEB 2018 (8)	+6 MAR 2018 (9)	3rd Qtr FY18 (10)	FY18 (11)	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	1	15441	1	2	7	0	0	0	0	0	0	0	0	0	15451
g. TOTAL DIRECT	1	15457	1	2	7	0	0	0	0	0	0	0	0	0	15468

CLASSIFICATION (When Filled In)

**CONTRACT PERFORMANCE REPORT
FORMAT 5 - Explanations and Problem Analysis**

**FORM APPROVED
OMB No. 0704-0188**

1. CONTRACTOR	2. CONTRACT	3. PROGRAM		4. REPORT PERIOD
a. NAME CH2M HILL Plateau Remediation Company	a. NAME Plateau Remediation Contract	a. NAME MPB - RL_0011_C1 - PFP D&D (ARRA/Base)		a. FROM (YYYYMMDD) 2017/08/21
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788	b. PHASE		b. TO (YYYYMMDD) 2017/09/30
	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	19	21	19	-	-2	-10%	-	0.91
Cumulative:	315,152	314,882	332,548	-270	-0.1%	-17,667	-5.6%	1.00	0.95
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	315,152	332,694	-17,542	-5.6%	-	1.85			

Explanation of Variance/Description of Problem:
 Current Period:
 Schedule Variance: The schedule variance is due to working historical BCWS associated with Glovebox removal of the 145-1 glovebox from the 234-5Z facility.
 Cost Variance: The current month cost variance is associated with more resources required to support removal and loading of the 145-1 glovebox for shipment to PermaFix Northwest for final size reduction that originally planned in the baseline. The work scope originally assumed that the work would not need to be executed in a radiologically posted area and because of radiological issues encountered during demolition of the 236-Z facility, increased radiologically requirements are being adhered to for safety of the worker.

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

Impact:
 Impact: The RL-011.C1 project baseline completion date is November 16, 2016. The current schedule now reflects a completion date of February 16, 2018. There was a 47 day loss, since September month end as a result of impacts from a stop work associated with the June Plutonium Reclamation Facility (PRF) contamination event.

The current RL-11 performance schedule indicates that the PFP project will achieve slab-on-grade by December 18, 2017. During the month of September, there was a 23 day loss as a result of impacts from a stop work associated with recovery actions on the June Plutonium Reclamation Facility (PRF) contamination event. Efficiencies have previously been identified in readying the 234-5Z facility for demolition wherein NDA and characterization data supports leaving more piping and ducting in place for demolition. In addition, efficiencies were recognized in 236-Z (PRF) wherein work was performed on filter boxes in parallel with the gallery gloveboxes which allowed for acceleration of the start of 236-Z demolition. This is turn accelerated when additional field team resources were reallocated from 236-Z to 234-5Z to get the facility ready for demolition. This is partially offset by delay in readying the 234-5Z facility for demolition as a result of lack of RCT resources. 234-5Z contains the gloveboxes requiring removal to meet the end state of the KPP and TPA milestone. The project expects to increase progress in the 234-5Z facility as all resources have been reassigned to complete the demo preparations in this facility. The regulators have been notified that the PFP Project will not meet to meet the re-negotiated TPA milestone M-083-00A due date of 9/30/17 for achieving slab-on-grade. In addition, the November 30, 2017 CD-4 date will not be achieved.

Cost Impact: The historical negative cost variance of ~\$17.5M and 5.6%, and CPI of .95 reflect impacts of the safety pauses, stop works, contamination events, and increased complexity of the HA-9A/HC-9B size reduction efforts and preparations and removal of the HA-7A, HC18M and HC-7C and 227S and 227T gloveboxes. This is partially offset by recognized efficiencies in cleaning up the RMA/RMC control rooms after completion of the size reduction efforts of the 9A/9B gloveboxes.

Cost variance is not considered recoverable as there is only a small amount of scope remaining to complete the KPP. As efficiencies continue to be recognized, the EAC will be adjusted.

Corrective Action:
 None at this time

No Corrective Actions Required

- Schedule Margin Analysis: There is no schedule margin associated with the RL-011.C1 capital asset account.
- IMS Data dictionary Changes: None in the month of September.
- Forecast Schedule with No Baseline: None in the month of September.
- UB Balance: None in the month of September.
- Negative ACWP: None in the month of September.
- EAC Analysis: Best Case = \$332,694; Most Likely = \$335,087; Worst Case = \$335,212
- Negative CV > VAC: Scope to perform size reduction efforts on the high gram glovebox removal efforts was estimated to be completed in a much shorter time frame with much fewer resources than originally planned causing the large Cost Variance. The EAC is reflective of the current approach to perform the remaining work scope.
- MR Transactions: BCR-011C-17-010R0 moved \$2,393.0K of unused FY2017 MR associated with PFP CAP1 Project scope to FY2018 for a net zero change to MR by PBS
- Freeze Period Changes: None in the month of September.
- Retroactive Changes: None in the month of September.
- EVT Changes: None in the month of September.

*During the Month of September CHPRC submitted the final FY18 Annual Comprehensive EAC.

Prepared by: _____ Date: _____ Approved by: _____ Date: _____

Appendix C.2

Capital Asset Project

RL-0011.C2 - Demolition of PFP Facilities



T. E. Bratvold
Vice President for
Plutonium Finishing
Plant Closure
Project

September 2017
CHPRC-2017-09, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Progress continued to work toward critical decision (CD)-4 closure as teams continued to ready the Plutonium Finishing Plant (PFP) facilities for demolition. Demolition on the Plutonium Reclamation Facility (PRF) began on November 8, 2016. Demolition of 291-Z commenced on June 30, 2017. The 291-Z stack was demolished on July 15, 2017, and loadout has been completed. Completed demolition of the 234-5ZA facility. Completed demolition of 2735Z. Completed demolition of 2734ZA, ZB, ZC, ZD, and ZL facilities. Initiated demolition of 234-5Z. Completion of all demolition activities are scheduled to occur in late December, 2017.

The following are key metrics associated with this CAP.

<i>Key Metrics</i>	<i>Current Month Plan</i>	<i>Current Month Actuals</i>	<i>Cumulative Plan</i>	<i>Cumulative Actuals</i>
COMPLETE Complete Cold and Dark/Demo Ready activities for 234-5Z	-	1	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	-	9	15	12
Complete Demolition of 234-5Z	-	-	1	-
Complete Demolition of 236-Z	-	-	1	-
COMPLETE Demolition of 242-Z	-	-	1	1
COMPLETE Complete Demolition of 291-Z	-	1	1	1
Complete Demolition of PFP Ancillary Facilities	-	7	15	10
Turnover Facility to Long Term Surveillance & Maintenance	-	-	-	-

KEY ACCOMPLISHMENTS

RL-0011_C2 Accomplishments

- Completed waste loadout of 291-Z.
- Completed demolition on the 234-5ZA facility.
- Completed demolition of 2735Z.
- Completed demolition of 2734ZA, ZB, ZC, ZD, and ZL.
- Initiated demolition of 234-5Z.

MAJOR ISSUES

Nothing to report at this time.

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 spotlight chart: No major changes to the monthly spotlight chart in the month of September .												
Realized Risks (Risks that are currently impacting project cost/schedule)												
PFP-DEMO-05: Inclement Weather	Inclement weather, including moderate winds, low or high temperatures, and thunderstorms will impact the demolition of PFP. Risk Handling Strategy: Accept Probability: Medium (26% to 74%) Worst Case Impacts: \$0K, 32 days *Cost increase will result in cost per day impacts from crews and hotel load.	●	↔	Risk Event: This risk was realized during the month of May due to high winds and lightening, limiting demolition activities. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk Recovery Action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Implement "tropical" shift and 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;">100%</td> </tr> </tbody> </table> Recovery Assessment: During the month of September , no impacts have occurred as a result of weather. However, the risk remains critical due to upcoming high-wind and projected winter conditions, which have the ability to impact the planned demolition. The PFP project will continue to adjust the daily work scope to plan for projected weather impacts.	Risk Recovery Action(s)	FC Date	%	Implement "tropical" shift and overtime (OT) shifts as necessary to mitigate further impacts associated with weather.	Ongoing	100%		
Risk Recovery Action(s)	FC Date	%										
Implement "tropical" shift and overtime (OT) shifts as necessary to mitigate further impacts associated with weather.	Ongoing	100%										
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	●	↑	Risk Event: A Continuous Air Monitoring (CAM) alarm sounded while crews were removing and packaging the third section of GB3 at the PRF on Thursday, June 8, 2017. Demolition activities were stopped, and RCTs began surveys in preparation to egress personnel. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="text-align: center;">Risk Recovery action(s)</th> <th style="text-align: center;">Risk Date</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td> 1. Add caution to work package direction to not apply a focused beam of water to high materials at risk (MAR) components that have been breached. 2. Evaluate the use of the foggers. 3. Revise or incorporate additional controls into the work package as appropriate. 4. Evaluate the boundaries to incorporate available radiological data. 5. Evaluate the fixative concentration. 6. Incorporate case-by-case consideration when handling items of accessible gram values during adverse weather conditions into the work package. 7. Evaluate the method for determining acceptable wind speed. 8. PFP provides real-time data from the event to Dr. Napier (PNNL) for consideration with future models. </td> <td style="text-align: center; vertical-align: middle;">6/8/17</td> <td style="text-align: center; vertical-align: middle;">11/2/17</td> <td style="text-align: center; vertical-align: middle; color: red;">25%</td> </tr> </tbody> </table> Recovery Actions Assessment: No change in the month of September . The work package for the remaining activities for the 236-Z demolition work has been revised to incorporate corrective actions 1 and 3. The remaining corrective actions continue to be evaluated, with implementation forthcoming.	Risk Recovery action(s)	Risk Date	FC Date	%	1. Add caution to work package direction to not apply a focused beam of water to high materials at risk (MAR) components that have been breached. 2. Evaluate the use of the foggers. 3. Revise or incorporate additional controls into the work package as appropriate. 4. Evaluate the boundaries to incorporate available radiological data. 5. Evaluate the fixative concentration. 6. Incorporate case-by-case consideration when handling items of accessible gram values during adverse weather conditions into the work package. 7. Evaluate the method for determining acceptable wind speed. 8. PFP provides real-time data from the event to Dr. Napier (PNNL) for consideration with future models.	6/8/17	11/2/17	25%
Risk Recovery action(s)	Risk Date	FC Date	%									
1. Add caution to work package direction to not apply a focused beam of water to high materials at risk (MAR) components that have been breached. 2. Evaluate the use of the foggers. 3. Revise or incorporate additional controls into the work package as appropriate. 4. Evaluate the boundaries to incorporate available radiological data. 5. Evaluate the fixative concentration. 6. Incorporate case-by-case consideration when handling items of accessible gram values during adverse weather conditions into the work package. 7. Evaluate the method for determining acceptable wind speed. 8. PFP provides real-time data from the event to Dr. Napier (PNNL) for consideration with future models.	6/8/17	11/2/17	25%									

Risk Title Risk Owner	Unmitigated Risk Impacts	Assessment		Comments					
		Month	Trend						
RL-0011/WBS-011.05.C3 (CAP.2)									
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)									
No critical risks identified in the month of September .									
FY2017 Risk Triggers (Risk could be realized in FY2017)									
PFP-DEMO-21: Glovebox/Equipment Removal/Demolition Material Handling Event	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) 2017.					
				<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: 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 needed.</p>	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							
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: Likely (75% to 90%) Worst Case Impacts: \$3 million, 60 days	●	↔	Risk Trigger: During pre-demolition/demolition activities in FY2017. Dates tracked in the field execution schedule (FES).					
				<table border="1"> <thead> <tr> <th>Mitigation action(s)</th> <th>FC Date</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Identify and pre-rig equipment with lifting slings.</td> <td>Complete</td> <td>100</td> </tr> <tr> <td>Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.</td> <td>Complete</td> <td>100</td> </tr> </tbody> </table> <p>Mitigation Assessment: No major changes in the month of September. Efforts have been completed to create a removal path for several of the gloveboxes to meet Criticality Incredibility. The HC-7C and 227T glovebox was slated for removal during demolition but has been removed during pre-demolition as risk mitigation strategy. At this time, no alternative course of actions are needed.</p>	Mitigation action(s)	FC Date	%	Identify and pre-rig equipment with lifting slings.	Complete
Mitigation action(s)	FC Date	%							
Identify and pre-rig equipment with lifting slings.	Complete	100							
Initiate discussions early in the demo planning of the equipment being left in place for removal during demolish.	Complete	100							
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)									
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	●	↔	Risk Trigger: During pre-demolition/demolition activities in FY2017. Dates tracked in the FES.					
				<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 the month of September. At the end of January 2017, contamination was discovered outside the HCA/ARA/RA Zone established for demolition of the Plutonium Reclamation Facility (PRF) after a CAM alarm sounded just outside the HCA/ARA/RA during relocation of the debris pile. The alarm resulted in the evaluation of employees from the zone and could have resulted in contamination of PFP personnel. As a result of this event, lessons learned have been incorporated in the future demolition work packages to ensure the suppression of misting instructions are stated clearly with no subjective verbiage. In addition, in-process monitoring of the pile/bucket has been incorporated during movement of the debris pile.</p>	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 the month of September .									

CRITICAL PATH SCHEDULE

The PFP Critical Path schedule begins with the continuation of demolition on the A-labs in 234-5Z. After A-labs is complete, the 234-5Z front side will be demolished. After the front side is complete, the gallery gloveboxes and 236-Z Canyon demolition will run in parallel with the Backside Rooms/Plutonium Process Support Laboratories (PPSL), Remote Mechanical A (RMA) Process Line, and RMC Process Line, and RADTU of 234-5Z demolition. The 236-Z canyon demolition completes on 12/18/17 meeting the requirements for the Tri-Party Agreement Milestone – M-083-00A – *PFP Facility Transition and Selection Disposition Activities*. After demolition is complete, site stabilization and demobilization and CD-4 closeout activities are completed.

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 Demolition of all PFP Facilities.	8/31/18	4/25/18	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 2017. 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 with loadout of waste completed in the month of September. There was 41 days of schedule loss for the month of September primarily as a result of impacts from a stop work associated the June PRF contamination event.

*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



September 2017
CHPRC-2017-09, 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) 2017 / 08 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30	
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			AT COMPLETION		
	BUDGETED COST		ACTUAL	VARIANCE		BUDGETED COST		ACTUAL	VARIANCE		ADJUSTMENTS			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)	COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	(14)	(15)	(16)	
3B - PFP Closure Project	5,967	7,712	4,414	1,745	3,298	54,679	33,375	36,201	-21,304	-2,826	0	0	0	55,307	53,199	2,108	
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)	5,967	7,712	4,414	1,745	3,298	54,679	33,375	36,201	-21,304	-2,826	0	0	0	55,307	53,199	2,108	
f. MANAGEMENT RESERVE														3,434			
g. TOTAL	5,967	7,712	4,414	1,745	3,298	54,679	33,375	36,201	-21,304	-2,826	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) 2017 / 08 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30	
		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 (15)	
WBS.Resp Org Group	ACTUAL CURRENT PERIOD (2)	ACTUAL END OF CURRENT PERIOD (Cumulative) (3)	SIX MONTH FORECAST BY MONTH (Enter names of months)						ENTER SPECIFIED PERIODS						
			+1 OCT 2017 (4)	+2 NOV 2017 (5)	+3 DEC 2017 (6)	+4 JAN 2018 (7)	+5 FEB 2018 (8)	+6 MAR 2018 (9)	3rd Qtr FY18 (10)	FY18 (11)	FY19 (12)	FY19-LC (13)	ATCOMPLETE (14)		
3B - PFP Closure Project	77	606	148	110	107	42	36	6	6	6	0	0	0	0	1061
g. TOTAL DIRECT	77	606	148	110	107	42	36	6	6	6	0	0	0	0	1061

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) 2017/08/21			
b. LOCATION (Address and ZIP Code) Richland, WA	b. NUMBER RL14788			b. PHASE			b. TO (YYYYMMDD) 2017/09/30			
	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:		5,967.5	7,712.1	4,413.7	1,744.6	29.2%	3,298.3	42.8%	1.29	1.75
Cumulative:		54,679.3	33,375.1	36,200.6	-21,304.2	-39.0%	-2,825.5	-8.5%	0.61	0.92
		BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:		55,306.9	53,198.9	2,108.0	3.8%	1.15	1.29			
Explanation of Variance/Description of Problem:										
Current Month:										
Schedule Variance: The schedule variance for the current month is due to working historical BCWS on discrete demolition activities (apportioned). Initiation of demolition of the 234-5Z and completion of demolition of 2735Z, 2734ZA, ZB, ZC, ZD, and ZL, demolition and waste loadout of the 234-5ZA facility and demolition of the 291-Z facility are also contributing to this positive variance. 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. This is partially offset by an adjustment to the G&A Rate for FY2017 and resulted in a reduction to the PMB of \$463K. Demolition of 234-5Z and 236-Z is currently scheduled to complete in December 2017. The TPC for the capital asset project remains unchanged.										
Cost Variance: The cost variance relates to implementation of a BCR that 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. In addition recognized efficiencies associated with the demolition activities as identified in the above schedule variance are also contributing to this variance.										
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 September 11, 2017 "associated with to concerns over events both inside and outside of the facility;" primarily, the main issue involved employee proximity to demolition radiological boundary areas in place at that time are also contributing to this variance. Radiological boundary areas are being reconfigured, and any impacted employees are being relocated. As a result of delays in the ready for demolition activities, the C2 CD-4 has been delayed but not 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. Finally, an adjustment to the G&A Rate for FY2017 resulted in a reduction to the PMB of \$463K. This is partially offset by the completion of demolition of the 2729-Z, and 2727-Z facilities, removal of gloveboxes, the completion of demolition activities for the 2nd, 3rd, 4th, 5th, and 6th floors, South Canyon Airlock of 236-Z, removal of three sections of gallery gloveboxes from 236-Z, demolition of 242-ZA, completion of demolition activities in the 242-Z facility, completion of demolition and waste loadout on the 291-Z demolition, completion of demolition and waste loadout activities associated with the 291-Z stack, demolition of the 234-5ZA and 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. Because the project is behind schedule in initiating demolition activities, and because the decision was made not to execute demolition activities for the 236-Z/242-Z facilities on P/Q shift, these resources currently have limited work to support which contributes to inability to take performance until the ready for demolition work scope is completed. To ensure that the project is able to continue demolition activities as identified in the current schedule, these costs will continue to be realized resulting in a potential unrecoverable cost variance. 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. In addition, 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. Further, 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 the contributing factor, as a result of the weather impacts and an unexpected contamination events in the PRF demolition zone. In addition unplanned Management Assessment efforts for the 234-5Z and 291-Z facilities took longer than originally assumed. Finally, impacts associated with the Stop Work that was initiated by the Hanford Atomic Metals Trade Council (HAMTC) union leadership on September 11, 2017 "associated with to concerns over events both inside and outside of the facility;" primarily, the main issue involved employee proximity to demolition radiological boundary areas in place at that time are also contributing to this variance. Radiological boundary areas are being reconfigured, and any impacted employees are being relocated. As										
Impact:										
Schedule Impact: Work efforts in getting 234-5Z ready for Cold & Dark and recovery efforts from a Stop Work associated with the June 8, 2017 PRF Contamination event, resulted in a loss of 41 days for the month of September. As the PFP Project continues to make progress on the behind schedule critical path work scope being performed, it is expected that continued efficiencies will be recognized, evaluated, and implemented as schedule delays occur. The baseline completion date is not considered recoverable. The TPA Milestone TPA-083-00A, complete PFP facility transition and selected disposition activities of September 30, 2017 will not be 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 the field work to ready 234-5Z, 236-Z, 242-Z, and 291-Z for demolition. 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 and June 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 and 2735Z, 2734ZA, ZB, ZC, ZD, and ZL facilities.										
The positive VAC is reflective of working one shift during demolition of 236-Z, 242-Z and 291-Z building and stack rather than two as planned in the PMB. In addition, the duration for demolition of 234-5Z has been adjusted as it has been determined that due to the time of year demolition will occur, the number of days to demolish the facility will be less than originally planned. This reduces the amount of demolition and supervision labor resources needed, resulting in the reduction of EAC to BCWS values.										

Corrective Action:

P/Q shift will be initiated and maintained until 234-5Z has been demolished and the completion of the PRF (236-Z Facility) will complete on dayshift only. - Action Tim Trevis ECD 11/30/17

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-011.C2 capital asset project were previously addressed in the Operations project corrective action plan.

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 September 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 September
3. Forecast Schedule with No Baseline: No change in the month of September
4. UB Balance: No change in the month of September
5. Negative ACWP: No change in the month of September
6. EAC Analysis: Best Case = \$53,199; Most Likely = \$56,633; Worst Case = \$62,920
7. Negative CV > VAC: No change in the month of September
8. MR Transactions: BCR-011C-17-014R0 was generated in September, 2017 which resulted in an adjustment to the G&A Rate for FY2017 and resulted in a reduction to the PMB and increase in the value of MR by \$463K. New Value of MR is \$3,434.5K. This BCR did not change the value of the TPC. BCR-011C-17-011R0 moved \$2,791.4K of unused FY2017 MR associated with PFP CAP2 Project scope to FY2018 for a net zero change to MR by PBS.
9. Freeze Period Changes: BCR-011C-17-014R0 reduced the BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33% applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58% was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool.
10. Retroactive Changes: BCR-011C-17-014R0 reduced the BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33% applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58% was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool.
11. EVT Changes: No change in the month of September

*During the Month of September CHPRC submitted the final FY18 Annual Comprehensive EAC.

Prepared by:

Date:

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

September 2017
CHPRC-2017-09, 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 project completed the final two fiscal year (FY) 2017 Performance Measures during the month of September. The receipt of the first production run of 12 Sludge Transport and Storage Container (STSC) Assemblies was completed on August 21, 2017 (PM-12-1-17), and implementation of the approved integrated KW Basin Documented Safety Analysis (DSA)/Technical Safety Requirements (TSR) was completed on September 21, 2017 (PM-12-3-17).

The K Basin Pre-operational Acceptance Testing (KPAT) continued through September with the test team initiating integrated testing between the 105KW Basin and the KW Annex during the fiscal month. Testing fieldwork is approximately 90 percent complete and forecast to complete by October 31, 2017. Following KPAT completion, the Construction Completion Document (CCD) will be signed, and Operational Acceptance Testing (OAT) will commence.

CHPRC personnel are finalizing Sludge Removal Project (SRP) training materials, operating/maintenance procedures, and readiness preparation activities prior to the Operational Readiness Reviews (ORRs) authorizing full-up Engineered Container Retrieval and Transfer System (ECRTS) Operation.

Based upon discussions between RL and CHPRC senior management, the Sludge Treatment Project (STP) team has modified the field execution schedule (FES) to implement acceleration opportunities, which could facilitate the transfer of all sludge to T Plant in FY2018. On March 27, 2017, CHPRC formally submitted letter CHPRC-1701045 R1 - *Contract Number DE-AC06-08RL14788 – Change Proposal CP 012 PRC 1646, Revision 0, Sludge Removal Project Acceleration of 105K and T Plant* for RL approval. In order to meet the accelerated schedule, support from CHPRC and RL is required for the following assumptions:

- Significant overtime/weekend work is required to reduce the schedule duration (overtime/weekend work expected to continue through ORR).
- Approval of the integrated 105KW DSA must not affect the project's critical path. This integrated DSA/TSR includes as-built information from installation activities, and therefore, a subsequent "as-built" DSA/TSR submittal is not required (DSA/TSR became project critical path on July 1, 2017, and delayed the start of implementation activities until it was approved on September 1, 2017. CHPRC personnel are working to mitigate impacts to the SRP critical path).
- SRP CD-4 approval must occur concurrently with commencing sludge retrieval operations (this is being worked through RL).
- Approval of the T Plant safety documentation must be completed within 120 days of submittal (approved July 31, 2017).

To demonstrate the current forecast date of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) M-016-175, *Begin Sludge Removal From 105-KW Fuel Storage Basin*, the milestone has been disconnected from the risk analysis schedule margin. The current non-risk adjusted forecast date to begin sludge removal is February 17, 2018.

The effort to retrieve and containerize the sludge pile in the KW Basin Center Bay discovered during debris mapping continued. Work is forecast to be completed prior to the start of sludge retrieval (Tri-Party Agreement M-016-175).

Project breakdown structure (PBS) RL-0012 scope is 94.3 percent complete, with a cumulative Schedule Performance Index (SPI) of 1.00 and a Cost Performance Index (CPI) of 1.05.

KEY ACCOMPLISHMENTS

RL-0012 C1 1 Accomplishments

KW Basin Sludge Removal Capital Asset Project

- **KPAT**
 - The KPAT test team initiated integrated testing during the month; as of September month-end, the overall test is approximately 90 percent complete.
 - Completed the Management Assessment (MA) that authorizes work activities leading to the transfer of water from the 105KW Basin to the Annex and back.
 - Testing of the Overfill Recovery Tool (ORT) was successfully completed, demonstrating functionality of the system designed to remove sludge from an overfilled STSC and move that material back to an engineered container in the 105KW Basin. Water was transferred from an STSC in the Annex back to the 105KW Basin.
 - The KPAT test team completed the Annual Sludge Transportation System (STS) Cask 1 Leak Test. This was a significant accomplishment, as it was the first time this leak test had been executed on a production STS Cask Assembly.
- 17-NSD-0034_RL/Contract Number DE-AC06-08RL14788 - *Approval of the One-Time Request for Shipment (OTRS) for Sludge Transport from K West Basin to T Plant, CHPRC-03111, Revision 0* was approved on July 21, 2017, and was transmitted to CHPRC on July 24, 2017. CHPRC transportation safety personnel are focused on finalizing the OTRS formal implementation activities.
- **ECRTS Procurement:** Installation of STSC Instrumentation & Appurtenances continued through the fiscal month. The project received the first 12 STSC assemblies, completing PM-12-1-17. The remaining 11 STSC assemblies are forecast for completion in early spring 2018.
- American Boiler Works (ABW) personnel have completed fabrication of eight of 11 STSC shells, with the final three scheduled to be delivered to HiLine by October 31, 2017.
- **Development of the Operations and Maintenance Procedures supporting sludge removal and packaging operations continues.** Status of procedures required to declare readiness for the 105KW Facility Sludge Removal Project:
 - Seventeen of 25 operation procedures have had their initial reviews completed, two are currently in the review process, and six are being developed.
 - Four of four alarm response procedures have been drafted and are in the final comment incorporation phase.
 - Ten of 13 maintenance procedures have been reviewed, with the remaining three being drafted or considered for post start.
 - Two of five administration procedures have been published, one is in the review process, and two are being drafted.

MAJOR ISSUES

Sludge Removal Project Issue: 105KW Facility Documented Safety Analysis/Technical Safety Requirements (DSA/TSR) Approval.

Issue Closed: No further action anticipated or required.

The schedule for receipt and implementation of the integrated DSA/TSR for Sludge Removal Operations is impacting the SRP critical path.

Corrective Action:

CHPRC updated the DSA/TSR to incorporate RL comments and retransmitted the document sent to RL for approval. Approval of these documents precedes preparation of SRP training material, procedures,

formal safety basis implementation, and completion of readiness preparation activities prior to the ORR authorizing full-up ECRTS operation.

Status: Closed

The Safety Evaluation Report (SER) was approved by RL September 1, 2017. The DSA/TSR was implemented by CHPRC on September 21, 2017.

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-067A <i>Safety Classification of SSCs - DSA/TSR</i> was removed from the spotlight chart in the month of September, as it no longer poses a threat to the project.																			
Realized Risks (Risks that are currently impacting project cost/schedule)																			
No realized risks identified in the month of September.																			
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)																			
No critical risks identified in the month of September.																			
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)																			
FY2017 Risk Triggers (Risk could be realized in FY2017)																			
STP-103: K Basin Pre-Operational Acceptance Testing (KPAT) & ECRTS Startup	The ECRTS equipment does not operate as expected, requiring increased engineering, startup, operations, and construction. Firm Fixed Price contractor support; as well as equipment replacement, procurement, and retesting. Realization of this risk would also require additional training, procedure revision, and design modifications because of construction testing and/or Lines of Inquiry for Readiness Review resulting in cost impacts and schedule delays. Risk Handling Strategy: Control Probability: Medium (26% to 74%) Worst Case Impacts: \$4.5 million, 90 days	●		Risk Trigger: 1) The ECRTS equipment does not operate as expected. 2) Unexpected attrition of critical testing personnel. <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="text-align: center;">Mitigation action(s)</th> <th style="text-align: center;">FC Date</th> <th style="text-align: center;">%</th> </tr> </thead> <tbody> <tr> <td>Develop and refine procedures based on feedback from testing and operations personnel.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.</td> <td style="text-align: center;">Complete</td> <td style="text-align: center;">100</td> </tr> <tr> <td>Utilize overtime to offset schedule impacts.</td> <td style="text-align: center;">As Needed</td> <td style="text-align: center;">N/A</td> </tr> <tr> <td>Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.</td> <td style="text-align: center;">As Needed</td> <td style="text-align: center;">N/A</td> </tr> </tbody> </table> Mitigation Assessment: No major changes in the month of September. KPAT testing is in progress. No significant equipment failures as of September 30, 2017.	Mitigation action(s)	FC Date	%	Develop and refine procedures based on feedback from testing and operations personnel.	Complete	100	Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.	Complete	100	Utilize overtime to offset schedule impacts.	As Needed	N/A	Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.	As Needed	N/A
Mitigation action(s)	FC Date	%																	
Develop and refine procedures based on feedback from testing and operations personnel.	Complete	100																	
Develop streamline strategy (work packages and procedures) to perform in-basin/annex integrated testing and troubleshooting.	Complete	100																	
Utilize overtime to offset schedule impacts.	As Needed	N/A																	
Closely monitor employee satisfaction and consider employee incentive to retain key test personnel.	As Needed	N/A																	
Unassigned Risks (Pending ownership of identified threats/opportunities)																			
No unassigned risks identified in the month of September.																			

CRITICAL PATH SCHEDULE

The critical path is being driven by completion of testing, updating of technical documentation, development/delivery of staff training, development/approval of procedures, and final readiness preparations. Following a successful contractor and DOE ORR, RL will provide authorization to commence retrieval operations in parallel with the DOE-HQ review/approval of CD-4. Completing retrieval operations, including the filling of STSCs with sludge and transporting them to T Plant, to complete Tri-Party Agreement Milestone M-016-176, *Complete Sludge Removal from 105-KW Fuels Storage Basin* (September, 2019); however, the STP team has modified the FES to implement acceleration opportunities, which could facilitate the transfer of all sludge to T Plant by September 30, 2018.

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	4/28/2018	The forecast date includes schedule margin from the project's risk analysis. 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 Prepare KW Facility DSA/TSR SER	4/11/17(A)	8/29/17(A)
RL SRB Review of KW Facility DSA/TSR	4/11/17(A)	8/29/17(A)
RL Issue SER for KW Facility DSA/TSR	4/11/17(A)	9/01/17(A)
RL Review & Comment on Emergency Planning Hazard Assessment (EPHA)	5/22/17(A)	9/19/17(A)
RL Approve IKPAT SNR	8/14/17(A)	8/22/17(A)
RL Final Approval of POA - K Basins	9/13/17(A)	10/28/17
RL POA Issued and Distributed	11/29/17	12/08/17
RL IP Issued	12/09/17	12/18/17

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



September 2017
CHPRC-2017-09, 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 15_D_401 KW Basin Sludge Removal Project		a. FROM (YYYYMMDD)	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		2017 / 08 / 21	
		c. TYPE CPAF		d. SHARE RATIO		b. TO (YYYYMMDD)	
				c. EVMS ACCEPTANCE NO <input type="checkbox"/> X YES (YYYYMMDD) 2009 / 09 / 18		2017 / 09 / 30	

WBS.Resp Org Group ITEM (1)	CURRENT PERIOD						CUMULATIVE TO DATE						REPROGRAMMING ADJUSTMENTS			AT COMPLETION		
	BUDGETED COST		ACTUAL COST WORK PERFORMED (4)	VARIANCE		ACTUAL COST WORK PERFORMED (9)	BUDGETED COST		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	2,757	4,492	2,988	1,735	1,504	280,416	280,190	268,614	-226	11,576	0	0	0	289,242	280,412	8,829		
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
d. UNDISTRIBUTED BUDGET																		
e. SUBTOTAL (Performance Measurement Baseline)	2,757	4,492	2,988	1,735	1,504	280,416	280,190	268,614	-226	11,576	0	0	0	289,242	280,412	8,829		
f. MANAGEMENT RESERVE														6,461				
g. TOTAL	2,757	4,492	2,988	1,735	1,504	280,416	280,190	268,614	-226	11,576	0	0	0	295,703				

CLASSIFICATION (When Filled In)

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE													DOLLARS IN THOUSANDS		Form Approved OMB No. 0704-0188							
1. CONTRACTOR CH2M HILL Plateau Remediation Company b. LOCATION: Richland, WA			2. CONTRACT a. NAME: Plateau Remediation Contract b. NUMBER: RL14788 c. TYPE: CPAF d. SHARE RATIO:			3. PROGRAM RL_0012_15_D_401 KW Basin Sludge Removal Project a. NAME: Plateau Remediation Contract b. PHASE c. EVMS ACCEPTANCE NO YES X 9/18/2009			4. REPORT PERIOD a. FROM: 2017/08/21 b. TO: 2017/09/30													
5. CONTRACT DATA																						
a. ORIGINAL NEGOTIATED COST 295,873			b. NEGOTIATED CONTRACT CHANGE \$0		c. CURRENT NEGOTIATED COST (A + B) \$295,873		d. ESTIMATED COST AUTH UNPRICED WORK \$0		e. CONTRACT BUDGET BASE (C + D) \$295,873		f. TOTAL ALLOCATED BUDGET \$295,703		g. DIFFERENCE (E - F) \$170									
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						FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)	UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)						
			+1 Oct-17 (4)	+2 Nov-17 (5)	+3 Dec-17 (6)	+4 Jan-18 (7)	+5 Feb-18 (8)	+6 Mar-18 (9)														
a. PM BASELINE (BEGIN OF PERIOD)	277,659	3,694	1,944	2,794	1,511	853	1,350	338	94,574	27,547	50,942	67,673	40,617	8,826	0	290,179						
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																						
BCR-012C-17-018R0, FY2017 G&A Rate Adjustment -SRP CAP																						
BCR-012C-17-015R0, Convert LOE Activities to 7-Day Calendar -SRP CAP																						
BCR-012C-17-014R0, Move Balance of FY2017 RL-012 Management Reserve to FY2018 - SRP CAP																						
c. PM BASELINE (END OF PERIOD)																						
7. MANAGEMENT RESERVE																						
8. TOTAL																						

CONTRACT PERFORMANCE REPORT

FORMAT 4 - STAFFING

Dollars in: FTE

FORM APPROVED

OMB No. 0704-0188

1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD									
a. NAME CH2M HILL Plateau Remediation Company		a. NAME Plateau Remediation Contract		a. NAME 15_D_401 KW Basin Sludge Removal Project		a. FROM (YYYYMMDD) 2017 / 08 / 21									
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30									
		c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (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 OCT 2017 (4)	+2 NOV 2017 (5)	+3 DEC 2017 (6)	+4 JAN 2018 (7)	+5 FEB 2018 (8)	+6 MAR 2018 (9)	3rd Qtr FY18 (10)	FY18 (11)	FY19 (12)	FY19-LC (13)	ATCOMPLETE (14)		
3G - K Basin Oper & Plateau Remediation Project	67	7110	121	69	76	51	61	15	10	0	0	0	0	0	7513
g. TOTAL DIRECT	67	7110	121	69	76	51	61	15	10	0	0	0	0	0	7513

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 012- RL-12 SNF Stabilization and Disposition				a. FROM (YYYYMMDD) 2017/08/21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE				b. TO (YYYYMMDD) 2017/09/30	
		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:	2,757.0	4,492.3	2,988.0	1,735.3	62.9%	1,504.2	33.5%	1.63	1.50
Cumulative:	280,416.1	280,190.3	268,613.8	-225.8	-0.1%	11,576.5	4.1%	1.00	1.04
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	289,241.6	280,412.5	8,829.2	3.1%	0.44	0.77			
Explanation of Variance/Description of Problem:									
Current Period: Schedule Variance: Within Threshold.									
Cost Variance: The current month positive cost variance is due to efforts in Nuclear Safety and KPAT scopes of work. The resubmittal of the 105KW Facility Documented Safety Analysis and Technical Safety Requirements (DSA/TSR) in April 2017 included the "as-built" and annual updates. Due to acceleration efforts on the installation of the ECRTS production equipment, the DSA/TSR was updated with the "as-built" design information as of April 2017 as documented in the Construction Completion Document (CCD). The DSA/TSR scope for this control account was later completed with the issuance of the Safety Evaluation Report (SER) by DOE-RL on 9/1/17 and subsequent implementation of the DSA/TSR on 9/21/17 – resulting in a positive cost variance in the current month. No further updates to the DSA/TSR are required prior to project startup. In addition to the DSA TSR completion the KPAT test team (exempt staff and testing subcontractor Apollo Sheet-Metal Company), have worked substantial overtime in an attempt to recover schedule.									
Cumulative To Date: Schedule Variance: Within Threshold.									
Impact: Schedule Impact: None identified at this time - project is within threshold . However, as a result of delays in approval of the Documented Safety Analysis/Technical Safety Requirements (DSA/TSR), forecast to be approved on 9/1/2018, the project has assumed additional risk to readiness activities, including training and procedure development which are dependent on the final, approved safety documents.									
The current non-risk adjusted forecast date to begin sludge removal is February 16, 2018. The Project implemented recovery methods to initiate sludge removal in February, 2018. The project completed TPA milestones M-016-177 "Complete 105-KW Sludge Transfer Equipment Installation" on 4/19/17 and is on schedule to complete M-016-175 "Begin Sludge Removal from 105-KW Fuel Storage Basin" by 9/30/2018.									
KPAT was initiated in April, 2017 and is expected to complete in October, 2017									
Cost Impact: Within Threshold									
The current ETC reflects the expected overall costs and further ETC adjustments will be considered as needed. KPAT testing commenced on April 20, 2017 and is scheduled to complete in October, 2017. Currently, the EAC provided at the end of September is \$280.4M overall for the project, against a life-cycle budget of \$290.2M (excluding management reserve and contingency).									
Corrective Action: Schedule: N/A Cost: N/A									
The revised 105KW Facility DSA and TSR is scheduled to be re-submitted August 21 to allow sufficient time to support training, procedure development, formal safety basis implementation, and completion of readiness preparations prior to the Operational Readiness Review (ORR) that will authorize full-up ECRTS Operation. The Project is working closely with DOE-RL to address concerns and issues to allow issuance of the Safety Evaluation Report (SER) by 9/1/2017.									
Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):									
1. Schedule Margin Analysis: There were no baseline changes in the month of September which affected the schedule margin. Project schedule margin is 123 days. As a result of schedule acceleration efforts to enable the retrieval of all sludge by 9/30/18, the Project has accepted all project risk and schedule margin is assumed to be zero. Project continues to evaluate schedule for efficiencies.									
2. IMS Data dictionary Changes: None in the month of September.									
3. Forecast Schedule with No Baseline: None in the month of September.									
4. UB Balance: None in the month of September.									
5. Negative ACWP: Control Account 012.17.02.05 has negative costs in the month of September was the result of a reduction of BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33% applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58% was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool. A variance distribution of the G&A over-liquidation occurred in June 2017 and September 2017, resulting in a negative CM CV due to the effective G&A rate adjustment for the entire year compared to the variance distribution for the value from June thru September. Additional impact to the CV results from the variance distribution was calculated on actual costs compared to the BCWS/BCWP reduction for the effective G&A rate calculated based on the budgeted value.									
Negative ACWP in Control Account 012.17.01.20 was the result of a reduction of BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33% applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58% was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool. There was a variance distribution of the G&A over-liquidation based on actual costs for the G&A rate, this WBS had minimal actual costs for the year resulting in the CV when the BCWS was reduced to the effective G&A rate.									
6. EAC Analysis: Best Case = \$280.4M; Most likely = \$286.9M; Worst Case = \$288.7M.									
7. Negative CV > VAC: 012.17.01.10/012.17.01.11 - due to schedule acceleration it is anticipated the turnover from Construction to Operations will occur in October 2017 rather than December 2017 resulting in recovery of a portion of the negative cost variance.									
8. MR Transactions: BCR-012C-17-018R0 was generated in September, 2017 which resulted in an adjustment to the G&A Rate for FY2017 and resulted in a reduction to the PMB and increase in the value of MR by \$937K. BCR-012C-17-014R0 moved \$3,812.7K of unused FY2017 MR associated with SRP CAP Project scope to FY2018 for a net zero change to MR by PBS.									
9. Freeze Period Changes: BCR-012C-17-018R0 reduced the BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33% applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58% was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool.									
10. Retroactive Changes: BCR-012C-17-018R0 reduced the BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33% applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58% was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool.									
11. EVT Changes: None in the month of September.									
*During the Month of September CHPRC submitted the final FY18 Annual Comprehensive EAC.									
Prepared by: M. Thompson			Date: 10/19/17			Approved by:			Date:

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

September 2017
CHPRC-2017-09, Rev. 0
Contract DE-AC06-08RL14788
Deliverable C.3.1.3.1 - 1

PROJECT SUMMARY

Workers at the 618-10 Burial Ground Complex continued successful remediation activities in the month of September. Pending verification sampling analytical results, source term contamination removal was completed at the 618-10 Burial Ground. The 618-10 Burial Ground Complex received approval to downgrade the 618-10 Burial Ground and 316-4 Waste Site to less than hazard category 3 radiological sites. Backfill at the 316-4 Waste Site and 600-63 Waste Site was completed ahead of schedule and under budget. The project continued to disposition excess materials and supplies.

KEY ACCOMPLISHMENTS

618-10 Burial Ground Mass Excavation

- Pending verification sampling results, the project completed source term contamination removal on September 13, 2017.
- A total of 160,875 tons of contaminated soil was sent to the Environmental Restoration Disposal Facility (ERDF) during mass excavation efforts.
- RL directed the project to meet shallow zone levels as dictated in the record of decision (ROD) in the deep zone. Load out of soil from the 618-10 Burial Ground continued after mass excavation activities were complete to comply with the direction from RL. RL rescinded this direction on September 27, 2017.
- An additional 6,573 tons were excavated under RL's excavation direction.

618-10 Burial Ground Backfill (1 percent complete - baseline)

- The site was divided into decision units for verification sampling. Each decision unit receives a backfill concurrence if the sampling results meet the ROD requirements.
- Backfill activities began on September 12, 2017.

316-4 Waste Site Backfill (100 percent complete)

- Backfill activities completed at the 316-4 Waste Site on September 19, 2017, ahead of schedule and under budget.

600-63 Waste Site Backfill (100 percent complete)

- Backfill activities began on August 31, 2017, and completed on September 12, 2017, ahead of schedule and under budget.

618-10 Burial Ground Complex Demobilization

- Drum Punch 2 was shipped off project to be re-used at another Hanford project.
- Crews continued consolidating and dispositioning miscellaneous materials/supplies to send off-site.

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 the month of September .										
Realized Risks (Risks that are currently impacting project cost/schedule)										
No realized risks identified in the month of September .										
Critical Risks (Severe impact to ultimate goals/objectives. Enforceable or incentivized milestone completion missed)										
No critical risks identified in the month of September .										
High Risk Threat Value (Recoverable slip to enforceable or incentivized milestone)										
Lifecycle Risk Triggers (Risk could be realized at any point of the project)										
RCC-618-10-07: Contamination Event at 618-10 Waste Site	During fieldwork activities, a contamination event occurs that requires corrective actions, resulting in schedule and cost impacts. Risk Handling Strategy: Accept Probability: Low (10% to 25%) Worst Case Impacts: \$1,288K, 64 days	●	↔	Risk Trigger Metric: The risk could be triggered by high winds or operational upsets (i.e. spills or airborne release). <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 5px;"> <thead> <tr> <th style="width: 80%;">Mitigation action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>Enhanced radiological controls implemented on project.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No changes in the month of September . Much of the 618-10 work is performed in hazardous and radioactive environments. By its nature, the work can be dangerous. Although CHPRC procedures, safety programs, and training programs are designed to minimize the potential loss of control of hazardous/radioactive substances, such an occurrence could be deemed to be significant enough to warrant corrective actions outside of the baseline (i.e. a prolonged work shutdown).	Mitigation action(s)	FC Date	%	Enhanced radiological controls implemented on project.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Enhanced radiological controls implemented on project.	Ongoing	N/A								
RCC-618-10-09: Discovery of Unexpected Waste/Contamination	Discovery of unexpected waste/contamination, waste/contamination quantities above what is assumed, waste/contamination that is above and beyond COCs or waste profile, or waste/contamination is found in the assumed clean area of the design. Resulting in greater than planned RAD controls resulting in cost and schedule impacts. Risk Handling Strategy: Accept Probability: Very Low (<10%) Worst Case Impacts: \$1,280K, 64 days	●	↓	Risk Trigger Metric: Baseline assumed contamination are is limited to design. This risk has the potential to occur again during mass excavation if additional waste/contamination is discovered. <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 5px;"> <thead> <tr> <th style="width: 80%;">Mitigation action(s)</th> <th style="width: 10%;">FC Date</th> <th style="width: 10%;">%</th> </tr> </thead> <tbody> <tr> <td>Closely managing waste inventories and discoveries, and making adjustments as required.</td> <td>Ongoing</td> <td>N/A</td> </tr> </tbody> </table> Mitigation Assessment: No changes in the month of September . The estimate for the remediation of the 618-10 Waste Site included an assumed amount of additional drums still to be remediated. The project identified unexpected additional drums that were not planned or estimated. The project will continue to closely monitor and manage waste inventories and any new discoveries.	Mitigation action(s)	FC Date	%	Closely managing waste inventories and discoveries, and making adjustments as required.	Ongoing	N/A
Mitigation action(s)	FC Date	%								
Closely managing waste inventories and discoveries, and making adjustments as required.	Ongoing	N/A								
Unassigned Risks (Pending ownership of identified threats/opportunities)										
No unassigned risks identified in the month of September .										

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	51.1	55.0	37.9	3.9	7.6%	17.1	31.1%	68.9	51.5	13.6	17.4

Numbers are rounded to the nearest \$0.1 million

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

CRITICAL PATH SCHEDULE

The critical path flows through 618-10 Burial Ground closeout sampling and analysis to support preparing calculations for backfill concurrence. Following receipt of backfill concurrence from RL/ Environmental Protection Agency (EPA), the project will begin backfill fieldwork activities. After successful completion of backfill, the project will finish infrastructure demobilization.

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 MILESTONE STATUS

Number	Title	Due Date	Forecast Date	Status/ Comment
KPG #1	Complete 618-10 Trench remediation and retrieval of remaining 94 vertical pipe units	9/30/2017	9/13/2017 (A)	Completion of source term contamination removal was declared complete; the project is awaiting verification sampling results confirm.
KPG #2	Complete 316-4 Waste Site and lysimeter facility remediation	9/30/2017	7/24/2017 (A)	Completion Criteria: Complete remediation and remove waste from 316-4 Waste Site and 600-63 Lysimeter Waste Site.
KPP #1	Complete the 618-10 Burial Ground Remediation	1/31/2020	5/17/2018	Completion Criteria: Complete remediation, closeout sampling, 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	11/21/2017	Completion Criteria: Complete remediation, closeout sampling, and backfill of the 316-4 Waste Site and 600-63 Lysimeter Waste Site.
	CD-4 Closeout	1/31/2020	TBD	CD-4 closeout pending contract definitization.

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 #8	8/17/17 (A)	9/5/17 (A)
RL and Regulator Review of CVP and Waste Site Reclassification Form for 600-63 Waste Site	8/17/17 (A)	8/30/17 (A)
RL and Regulator Review of CVP and Waste Site Reclassification Form for 316-4 Waste Site	8/21/17 (A)	10/4/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #2	9/7/17 (A)	9/11/17 (A)
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #7	9/18/17 (A)	9/22/17 (A)
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #1	9/21/17 (A)	10/2/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #6	9/28/17 (A)	10/2/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #11	10/19/17	10/25/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #5	10/20/17	10/26/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #3	11/8/17	11/14/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #4	11/8/17	11/14/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #10	12/1/17	12/7/17
RL/EPA Review & Approve Interim Backfill Concurrence for 618-10 Decision Unit #9	12/12/17	12/18/17
RL and Regulator Review of CVP and Waste Site Reclassification Form for 618-10 Burial Ground	3/20/18	5/3/18

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



September 2017
CHPRC-2017-09, 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) 2017 / 08 / 21							
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		c. EVMS ACCEPTANCE NO X YES (YYYYMMDD) 2009 / 09 / 18				b. TO (YYYYMMDD) 2017 / 09 / 30							
c. TYPE CPAF		d. SHARE RATIO															
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 51,537	g. CONTRACT CEILING 0	h. ESTIMATED CONTRACT CEILING 51,537	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		51,537			c. SIGNATURE			d. DATE SIGNED (YYYYMMDD)									
b. WORST CASE		52,051															
c. MOST LIKELY		51,537	70,486	18,949													
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 COST WORK PERFORMED (4)	VARIANCE		BUDGETED COST		ACTUAL COST WORK PERFORMED (9)	VARIANCE		COST VARIANCE (12a)	SCHEDULE VARIANCE (12b)	BUDGET (13)	BUDGETED (14)	ESTIMATED (15)	VARIANCE (16)	
	WORK SCHEDULED (2)	WORK PERFORMED (3)		SCHEDULE (5)	COST (6)	WORK SCHEDULED (7)	WORK PERFORMED (8)		SCHEDULE (10)	COST (11)							
RL-0041 Nuc Fac D&D - RC Closure Proj																	
RL_0041_C1.05.02 618-10 Burial Ground	1,508	2,245	3,519	737	-1,274	43,281	43,024	33,222	-257	9,802	0	0	0	56,127	46,749	9,378	
RL_0041_C1.05.03 316-4 Waste Site	776	2,304	299	1,528	2,005	7,430	10,750	4,220	3,321	6,531	0	0	0	11,183	4,335	6,848	
RL_0041_C1.05.04 600-63 Waste Site	333	251	55	-82	196	378	1,190	452	812	739	0	0	0	1,611	453	1,159	
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	2,617	4,800	3,873	2,183	927	51,088	54,964	37,893	3,876	17,072	0	0	0	68,921	51,537	17,384	
f. MANAGEMENT RESERVE														0			
g. TOTAL	2,617	4,800	3,873	2,183	927	51,088	54,964	37,893	3,876	17,072	0	0	0	68,921			
9. RECONCILIATION TO CONTRACT BUDGET BASELINE																	
a. VARIANCE ADJUSTMENT																	
b. TOTAL CONTRACT VARIANCE													3,876	17,072	68,921	51,537	17,384

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) 2017 / 08 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30	
		c. TYPE CPAF	d. SHARE RATIO	c. EVMS ACCEPTANCE NO <input type="checkbox"/> X <input checked="" type="checkbox"/> 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 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)						
041.6 - 618 10 Projects																
RL_0041_C1.05.02 618-10 Burial Ground	1,508	2,245	3,519	737	-1,274	43,281	43,024	33,222	-257	9,802	0	0	0	56,127	46,749	9,378
RL_0041_C1.05.03 316-4 Waste Site	776	2,304	299	1,528	2,005	7,430	10,750	4,220	3,321	6,531	0	0	0	11,183	4,335	6,848
RL_0041_C1.05.04 600-63 Waste Site	333	251	55	-82	196	378	1,190	452	812	739	0	0	0	1,611	453	1,159
b. COST OF MONEY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. GENERAL AND ADMINISTRATIVE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
d. UNDISTRIBUTED BUDGET																
e. SUBTOTAL (Performance Measurement Baseline)	2,617	4,800	3,873	2,183	927	51,088	54,964	37,893	3,876	17,072	0	0	0	68,921	51,537	17,384
f. MANAGEMENT RESERVE																
g. TOTAL	2,617	4,800	3,873	2,183	927	51,088	54,964	37,893	3,876	17,072	0	0	0	68,921		

CONTRACT PERFORMANCE REPORT													Form Approved			
FORMAT 3 - BASELINE											DOLLARS IN THOUSANDS		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 PARS II - RL-0041.C1 Base Funded Nuc Fact D&D River Corr			a. FROM: 2017/08/21 b. TO: 2017/09/30			4. REPORT PERIOD			
b. LOCATION: Richland, WA							a. NAME: Plateau Remediation Contract									
							b. PHASE c. EVMS ACCEPTANCE			NO YES X 9/18/2009						
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						FY09-13 (10)	FY14 (11)	FY15 (12)	FY16 (13)	FY17 (14)	FY18 (15)	UNDISTRIB BUDGET (16)	TOTAL BUDGET (17)
			+1 Oct-17 (4)	+2 Nov-17 (5)	+3 Dec-17 (6)	+4 Jan-18 (7)	+5 Feb-18 (8)	+6 Mar-18 (9)								
a. PM BASELINE (BEGIN OF PERIOD)	48,471	4,182	1,457	1,742	1,741	1,413	1,868	1,711	0	0	0	3,497	49,156	17,833	0	70,486
b. BASELINE CHANGES AUTH DURING REPORT PERIOD																
RL_0041_C1.05.02 618-10 Burial Ground																
BCR-041C-17-043R0, FY2017 G&A Rate Adjustment -RL-0041 CAP																
RL_0041_C1.05.03 316-4 Waste Site																
BCR-041C-17-043R0, FY2017 G&A Rate Adjustment -RL-0041 CAP																
RL_0041_C1.05.04 600-63 Waste Site																
BCR-041C-17-043R0, FY2017 G&A Rate Adjustment -RL-0041 CAP																
c. PM BASELINE (END OF PERIOD)																
	51,088	2,617	1,477	1,738	1,738	1,410	1,864	1,708	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) 2017 / 08 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30	
		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 OCT 2017 (4)	+2 NOV 2017 (5)	+3 DEC 2017 (6)	+4 JAN 2018 (7)	+5 FEB 2018 (8)	+6 MAR 2018 (9)	3rd Qtr FY18 (10)	FY18 (11)	FY19 (12)	FY19-LC (13)	ATCOMPLETE (14)		
041.6 - 618 10 Projects															
RL_0041_C1.05.02 618-10 Burial Ground	55	995	48	51	50	49	42	40	113	3	0	0	0	0	1391
RL_0041_C1.05.03 316-4 Waste Site	2	69	6	2	0	0	0	0	0	0	0	0	0	0	76
RL_0041_C1.05.04 600-63 Waste Site	1	13	0	0	0	0	0	0	0	0	0	0	0	0	13
g. TOTAL DIRECT	57	1078	54	53	50	49	42	40	113	3	0	0	0	0	1481

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 - RL-41 Nuclear Facility D&D - River Corridor		a. FROM (YYYYMMDD) 2017 / 08 / 21	
b. LOCATION (Address and ZIP Code) Richland, WA		b. NUMBER RL14788		b. PHASE		b. TO (YYYYMMDD) 2017 / 09 / 30	
c. TYPE CPAF		d. SHARE RATIO		c. EVMS ACCEPTANCE No X Yes (YYYYMMDI 2009 / 09 / 18)			

5. Evaluation

Direct Projects

	Budget	Earned	Actuals	SV in \$	SV in %	CV in \$	CV in %	SPI	CPI
Current:	2,617.4	4,800.1	3,873.0	2,182.7	83.4%	927.1	19.3%	1.83	1.24
Cumulative:	51,088.4	54,964.3	37,892.6	3,875.9	7.6%	17,071.7	31.1%	1.08	1.45
	BAC	EAC	VAC in \$	VAC in %	TCPI to BAC	TCPI to EAC			
At Complete:	68,920.9	51,536.7	17,384.2	25.2%	0.45	1.02			

Explanation of Variance/Description of Problem:

CURRENT MONTH
The current month favorable schedule variance is primarily due to backfill activities at the 316-4 Waste Site completing ahead of schedule. Additionally, the project received drum waste returns from an off-site waste processing subcontractor that had been planned to be returned earlier in FY2017.
The current month favorable cost variance is primarily due to 316-4 Waste Site backfill activities that utilized design efficiencies and were self-performed with existing crews and equipment, which resulted in a significant underrun.

CONTRACT TO DATE
The cumulative favorable schedule variance is within threshold.
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 on time with the resources left. Additionally, excavation efficiencies at the 316-4 Waste Site reduced the total volume of soil to be removed, and the availability of crews to self-perform backfill scope 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 Complex projects. Attrition has also led to a reduction in staffing and in cost with work still being completed on time with the resources left. Excavation efficiencies and self-performing backfill instead of hiring a separate subcontractor at the 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 September.
- Forecast Schedule with No Baseline: None in the month of September.
- UB Balance: N/A
- Negative ACWP: There was negative ACWP in numerous accounts across the 618-10 Project this month due to an over-liquidation of the G&A Pool in FY2017 that led to a pass-back of indirect costs across the project.
- EAC Analysis: Best Case: \$51,537; Most Likely: \$51,537; Worst Case: \$52,051
- Negative CV > VAC: N/A
- MR Transactions: BCR-041C-17-043R0 was generated in September, 2017 which resulted in an adjustment to the G&A Rate for FY2017 and resulted in a reduction to the PMB and increase in the value of MR by \$1,638K.
- Freeze Period Changes: BCR-041C-17-043R0 reduced the BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33% applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58% was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool.
- Retroactive Changes: BCR-041C-17-043R0 reduced the BCWS and corresponding BCWP due to a baseline adjustment to the FY2017 effective G&A rate. The FY2017 G&A rate of 19.33% applied to the direct budget over-liquidated G&A costs. The effective G&A rate for FY2017 of 16.58% was used to reduce BCWS and corresponding BCWP to align the PMB to balance the liquidation of the G&A pool.
- EVT Changes: None in the month of September.

*During the Month of September CHPRC submitted the final FY18 Annual Comprehensive EAC.